

# START-UP COMPENDIUM



## EXECUTIVE SUMMARY

Biotechnology plays a critical role in the growth of Indian knowledge economy. Biotech sector has a direct impact on the well-being of mankind and has the potential to transform as many lives as possible, create opportunities and ensure holistic development for all. Biotechnology sector – the sunrise sector is recognized as one of the key drivers for contributing to India's economy target of USD 5 Trillion by 2025, and poised to grow exponentially over the next decade. Policy initiatives of Government of India such as Make-in-India scheme are aimed to develop India as a world-class Bio-manufacturing hub. India is among the top 12 destinations for biotechnology in the world and 3rd in Asia-Pacific. With Global Innovation Index improving to 46th rank in the backdrop, India's bioeconomy is growing in double digits Year on Year, from \$51 Bn in 2018 to \$81 Bn in 2021. BIRAC has been nurturing the biotech ecosystem in the country over these 10 years aligning with the National Missions of Startup India and Make-in-India. Today, there are 5000+ biotech start-ups in the country i.e., a 10x growth from 2012. This compendium is a compilation of some of the BIRAC supported innovations, products and technologies and brings to you an insight into the innovative products and technologies supported by BIRAC and how these innovations have come a long way in solving problems in varied sectors. This rich repository provides insights into key biotechnological innovations supported and closely mentored by BIRAC and its partners. This vibrant ecosystem gives us the confidence that our innovators will be recognized globally for developing solutions addressing major societal problems.

We wish the innovators a successful path ahead!

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## Startup Name

**Abonics India Private Limited**

## Product/Technology

**Smart Educational laboratory Equipment & Apparatus**

**Unique Selling Point:** : Easy to Use and transport, Light in weight, cost effective, Transparent from the top of product to give good visibility for the experiment being carried out

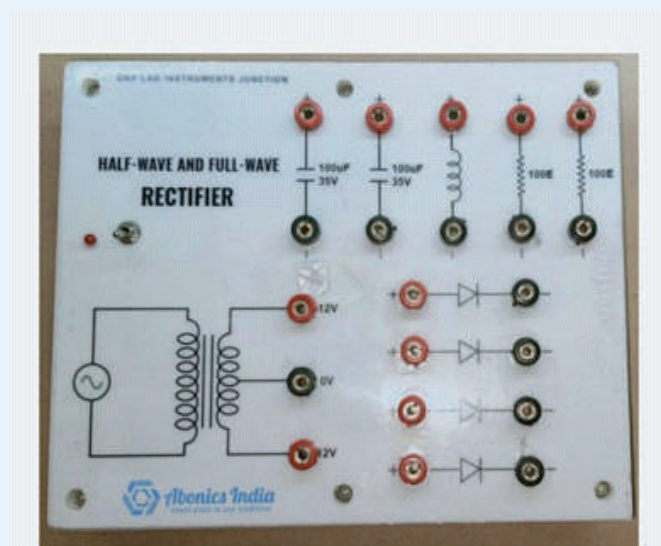
**Product Positioning:** NA

**National/Societal relevance:** IRural/urban inequalities are also a major obstacle to sustainable development. Our startup has played a major impact on rural economy as we know poverty is mainly a rural phenomenon since 70% of the world's poor are rural (IFAD, 2001).As our startup belongs to edtech category ,we have launched various skill & personality development programs and workshops for the rural students so that they can learn and grow themselves both via online and offline mode. We are also providing practical training to rural students for the subjects like physics, chemistry, biology, electronics from primary education to higher education. As we know rural economy contributes 46% towards the national income and 25-30% of India's GDP, So edtech industry is playing a major role in rural development, Our startup is boosting the rural economy by providing better education and facility to the students

**Import Substitution:** Yes

**Export Potential:** Per Month 1000 Units.

## Product Picture



## Present stage of Development

Minimum Viable Product

## Geographical Region Targeted:

Uttar Pradesh & Delhi

## Cost:

Rs. 500 to Rs. 3000

## Units sold:

60

## IP Status:

Under Processed

## Major Achievements (including awards):

- Recognized by Department of Promotion Industries and Trade (DPIIT), Startup India and Start in UP and
- Awarded by 105th Indian Science Congress, India International Science Festival, National Educational Society, National Children's Science Congress, Regional Science and Technology Center,
- Winner of IIC REGIONAL MEET 2022 organized by AKTU Lucknow

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## Startup Name

**Abyom SpaceTech and Defence Private Limited**

## Product/Technology

**Abyom Mobile Engine Testing Facility, Low-Cost Reusable Launch Vehicles**

**Unique Selling Point:** India's First Space Tech Company developing Re-Ignitable & Throttleable Cryogenic Rocket Engine, reusable for multi launch within no time and affordable cost.

**Product Positioning:** The cost to launch a satellite has declined to about \$60 million, from \$200 million, via reusable rockets to dropping to as low as \$15 million.

**National/Societal relevance:** Our company provides reusable rocket launch services, reusable launch services market is associated with the activities carried out by space launch service providers.

### Product Pictures:



### Present stage of Development

Prototype Development Stage

### Geographical Region Targeted:

Globally

### IP Status:

Applied for a trademark application number by No.5658565 for the company name. Registration of the trademark is in process.

### Major Achievements (including awards):

- 1) Chief Minister Award by CM Shri Yogi Adityanath, Govt. of Uttar Pradesh.
- 2) Officially collaborated with ISRO
- 3) Featured in national Media like Your Story, ABP News, The Hindu, Inc42, Times of India, Dainik Jagran, Daily hunt, Hindustan, Amar Ujala etc.
- 4) Recommendation from Hon'ble MoS (IC) S&T Minister Dr Jitendra Singh
- 5) Abyom in the top "30 Start-upsto Watch" list by INC42
- 6) Recommendation from honourable ISRO's Chairman and DoS Secretary Somanath S

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### Website:

www.abym.com

## Startup Name

**Adit Bioscience private Limited**

## Product/Technology

**1. Bull fertility screening device,  
2. Dead sperm removal kit**

**Unique Selling Point:** These are affordable point-of-care device/kit with high accuracy. These will enhance the artificial insemination success rate by ~ 10-15%

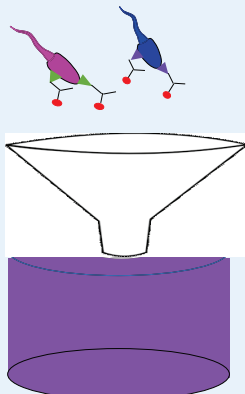
**Product Positioning:** Higher quality of semen production and pricing

**National/Societal relevance:** Current artificial insemination (AI) coverage is less than 50% of the total cattle population with only ~35% success rate. These two assisted reproductive technologies will increase the success rate by at least 10%.

**Import Substitution:** Yes

**Export Potential:** South Asian market

**Product Pictures:** We have schematic so far



**Present stage of Development**  
Prototype development undergoing

**Geographical Region Targeted:**  
Madhya Pradesh and Odisha

**Cost:**  
At least 1/5th of the cost of imported products.

**Units sold:**  
Not applicable

**IP Status:**  
Indian patent filed for Bull fertility screening device

**Major Achievements (including awards):**

1. Grants (BIRAC-BIG, Start-up Odisha, BPCL)
2. Patents (1)
3. Emerging Woman Entrepreneur of Odisha, Startup India, Startup Odisha & KIIT-TBI, 2020

**Contact detail**

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## Startup Name

**Agropeeper Technologies Private Limited**

## Product/Technology

**AI based Quality Assessment and Shelf-Life Evaluation of Fruits**

**Unique Selling Point:** Our system is automatic, based on external and internal characteristics (damages and maturity) of fruits with handy device; whereas competitive systems presently available are mostly based on the external parameters of produce and requires a lot of human intervention.

### Product Positioning:

- Non-invasive, non-destructive and contactless technique adopted for fruit assessment
- Applicability of our product assessing the fruits as well as vegetables
- Pre-assessment reports available on the device itself

### National/Societal relevance:

- Environmental value: Preserving the environment due to reduction in post-harvest losses/wastes
- Social value: Contributing to the Doubling Farm Income strategy due to reduction in post-harvest losses/wastes
- Economic value: Improves product quality, increases export efficiency thus ultimately increasing farmers economy.

**Import Substitution:** Yes

**Export Potential:** Yes

### Product Picture



## Present stage of Development

Developing a prototype (Validation)

## Geographical Region Targeted:

Initially Maharashtra

## Cost:

Rs 75,000/- ( minimum 3 units required per hospital)

## Units sold:

30

## IP Status:

- Indian Patent Granted on Dec 2020
- International Patent Status
  1. US Patent Filed
  2. Europe Patent Filed

## Major Achievements (including awards):

- Winner MSME Idea Hackathon 2022
- BIRAC BIG-20 grantee 2022
- RKVY-RAFTAAR grantee supported by Ministry of Agriculture & Farmer Welfare
- Selected by Women Entrepreneurship Cell (WEC), Maharashtra State Innovation Society (MSInS) to get incubation support from StartupNexus

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## Startup Name

**AIRR ORGANICS AND BIOFERTILIZERS  
PVT LTD**

## Product/Technology

**AIRR AISHWARYA ARKA MICROBIAL CONSORTIUM (AMC)**

**Unique Selling Point:** Product is powered by technology, jointly developed & researched by Indian Institute of Horticultural Research (IIHR) & ICAR-Delhi.

Technology is tested on varied crops under varied climatic conditions.

**Product Positioning:** Applicable to all horticultural crops such as vegetables, fruits, flowers, Ornamental plants, spices & plantation crops

**National/Societal relevance:** The technology created job opportunities & young entrepreneurs Increased income of farmers by reducing cost of cultivation Will improve food security

**Import Substitution:** The technology reduces the import of inorganic fertilizers, like Urea & DAP etc., in agricultural sector

**Export Potential:** The product can be exported to developing countries subjected to necessary approvals from competent authority.

## Present stage of Development

Commercialization & Marketing

## Geographical Region Targeted:

Currently, Southern Parts of India (Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Kerala & Maharashtra). Further, targeting Pan India

## Cost:

Liquid Rs 273/Liter

Solid Rs 147/Liter

## Units sold:

Liquid approximately 10,000 liters

Solid approximately 14 tons

## Product Picture



AIRR AISHWARYA Liquid 5L/1L



AIRR AISHWARYA Solid 5Kg/1Kg

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## Startup Name

Aodh Lifesciences Pvt Ltd

## Product/Technology

Nebulization suspension for Pneumonia to fight Anti-microbial Resistance (AMR)

**Unique Selling Point:** Targeted delivery at site, rapid clinical response and combat AMR

**Product Positioning:** Critical care and ICU

**National/Societal relevance:** India is on top list with Drug Resistance Index at 79

**Import Substitution:** N/A

**Export Potential:** To USA & European countries

## Product Picture



## Present stage of Development

TRL-6; Progressing to Clinical trial phase 3

## Geographical Region Targeted:

India

## Cost:

INR 150

## Units sold:

N/A

## IP Status:

Filed 7 patents and granted 3 patents

## Major Achievements (including awards):

Best Innovation Award from Government of Telangana. Among top 20 in Stanford Seed Spark Cohort-04 offered by Stanford Graduate School of Business, USA

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## Website

www.aodhlifesciences.in



## Startup Name

**Apramitha Innovations Private Limited, Hyderabad**

## Product/Technology

**PDE4i topical dosage forms to treat chronic diseases like psoriasis & dry eye disease**

**Unique Selling Point:** Long-term safe treatment option for chronic diseases.

**Product Positioning:** Safe long-term treatment option for a chronic disease like psoriasis.

**National/Societal relevance:** More than 2-3% of the population is affected by psoriasis and about 70% among them are mild to moderate. The prevalence of DED in India is higher than the global prevalence and ranges from 18.4% to 54.3%

**Export Potential:** Significant potential in emerging markets and US/EU.

**Product Picture:**



Figure 1: Improvement in disease before and after treatment with proposed PDE4i topical dosage forms.

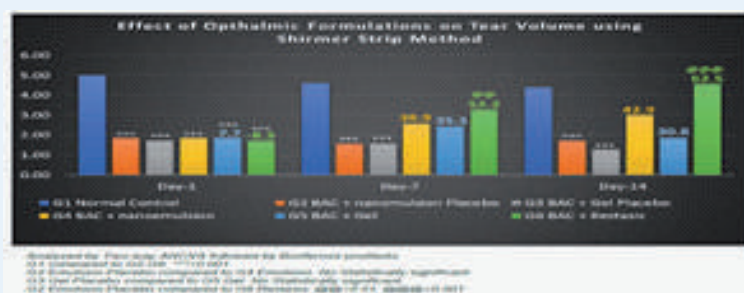


Figure 2: Comparison of tear volume of the proposed PDE4i topical dosage forms with the commercially approved product before and after treatment

## Present stage of Development

Formulation and analytical method development completed, positive pre-clinical efficacy results and safety data for 90 days, promising prototype clinical data, DCGI approval for the conduct of phase 3 clinical study, more than 50% of patient screening completed.

## Geographical Region Targeted:

India and subsequently emerging markets.

## Cost:

About INR 400 per unit. Approximately INR 5000 for total treatment.

## Units sold:

Under Phase 3 clinical study and targeted to launch during the second half of 2023. Year 1: 3,00,000 units, Year 2: 5,00,000 units, Year 3: 10,00,000 units

## IP Status:

Patent filled : 202041053550, Patent Granted IN301416

## Major Achievements (including awards):

Granted fund under BIG scheme from BIRAC.

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## Startup Name

**Ardor Biomed India PVT LTD**

## Product/Technology

**Bacterial Cellulose based advanced wound patch**

**Unique Selling Point:** Employs agro waste matured coconut water for synthesizing the patch and incorporates coconut derivatives for anti-microbial properties

**Product Positioning:** Product is intended for diabetic patients in low-income regions.

**National/Societal relevance:** Our product will help to offset reliance of imported products for similar usage. Will also help in bringing in a source of income for rural communities engaged in the coconut processing industry.

**Import Substitution:** Will help to substitute import of similar wound care products for diabetic patients

**Export Potential:** Has huge potential for export specifically to several East Asian and African countries as diabetic ulcers is a major issue and a relatively cheap alternative is non-existent.

## Product Picture



## Present stage of Development

Product is in advanced Human Trials stage

## Geographical Region Targeted:

Product has a global target audience. Specifically developing countries for cost effective wound care solution

## Cost:

Rs.200 per 10X10 patch

## Units sold:

NA

## IP Status:

IP filed, Free to Operate assured

## Major Achievements (including awards):

- SEED grant by DPIIT to the tune of 10 lakhs
- BIG grant by BIRAC to the tune of 50 lakhs
- Recognized as one among top 75 startups in India to celebrate 75 years of Indian Independence and scientific development with our products displayed in Vigyan Bhavan
- Only Indian company to be shortlisted for Hello Tomorrow Asia-Pacific deep tech challenge held at Singapore
- Winner of Ramaiah Evolute "Star Startup Awards" for the year 2022
- Products patented and trademarked
- Traction already received from a global wound care brand
- Several allied products have been conceived in Cosmeceutical and food supplement segments. These products have been scientifically validated through 3rd party and entering commercialization within very soon. Patent applied.
- Nasscom t4g - Technology for good - Finalists 2019

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## Startup Name

**ARISTA VAULT (Arivation Fashiontech Pvt Ltd)**

## Product/Technology

**IOT | NBIOT | 5G**

**Unique Selling Point:** Smart tech gadget with power button

**Product Positioning:** India's First Smart Wallet/Luggage | Vault safety series | Consumer tech.

**National/Societal relevance:** Safety security of people's Wealth, Data, belonging, & near ones.

**Export Potential:** Exported to US, UAE, potential UK & Germany.

## Product Picture



## Present stage of Development

Scaling up

## Geographical Region Targeted:

Indian Urban, City, Metros, Tier2

## Cost:

5500/- per unit)

## Units sold:

20,000

## IP Status:

5 patent filed 1 international patent, pending

## Major Achievements (including awards):

YourStory recognition 2023 as India's First Smart Luggage Brand, Star Awards for most innovative product, Amazon's award for Emerging brand of India. 3.59crore revenue generated. F.Y. 21-22

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## Startup Name

**Asadel Technologies Pvt Ltd**

## Product/Technology

**ML/DL based AI platform to aid (a) clinical screening & assessment of neuro- degenerative conditions in elderly population, (b) vocal bio-markers for detection of dementia stages, (c) FRS for criminal tracking & forensic**

**Unique Selling Point:** Fast, light-weight, scalable & affordable

**Product Positioning:** Primarily in secondary & tertiary health centres

**National/Societal relevance:** With increasing number of elderly populations, early detection & assessment of dementia would help control the condition. It will also help/assist paramedics (Asha workers) at remote corners (where availability of doctors is thin) to sensitize patients/subjects.

**Import Substitution:** Import of Walking Strips

**Export Potential:** High in MENA, Nepal (initial discussions).

## Product Picture



## Present stage of Development

PoC to Early revenue

## Geographical Region Targeted:

Currently pan India

## Cost:

Software License Fee per user starting from INR 50,000

## Units sold:

40+

## IP Status:

Under Process

## Major Achievements (including awards):

IHW Digital Health Award 2021, Nominated to present solutions at 10th & 11th International IT Forum, SCO & BAARC Summit, Khanty Mansiysk, Russia

## Contact detail

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<https://www.asadeltech.com>



## Startup Name

**Aspartika Biotech**

## Product/Technology

**A Zero Waste discharge technology for large scale production of Omega 3 Fatty Acids, Designer Eggs & Protein Supplement from Discarded Silkworm Pupa Waste**

**Unique Selling Point:** Novel source of omega and protein (Insect protein), Novel and zero waste discharge process of extraction (Supercritical extraction).

**Product Positioning:** For Silkworm industry, Aspartika Biotech is market leader who have developed a novel technology to utilize silkworm pupa to products like insect protein and omega rich oil, thus generating income for the silk reeling farmers and reducing environmental pollution.

For poultry feed manufacturers, Aspartika Biotech are innovative feed manufacturers, have provide novel feed supplement, silkworm pupa oil and protein which will replace soya meal and thus reducing their dependency of soya meal.

**National/Societal relevance:** We have successfully trained women farmers in collection and primary processing of silkworm pupa thus generating income for them. This process has reduced waste discharge and improved the lives of people in the area. The primary processing of silkworm pupa is a scalable process and can be trained to an unskilled person which in turn decentralizes the process and makes it resilient for the farmers.

Around 1,00,000 MT of silkworm pupa waste is generated in India, and it is an environmental hazard, which has foul odour and attracts other pests. If completely collected and processed, it can cater to 29 million Children's Omega-3 needs for an entire year in India.

**Import Substitution:** Omega rich oils like fish oil, soyabean meal and fish meal

**Export Potential:** Market potential in Bangladesh, Japan, China and European markets.

## Product Picture



## Present stage of Development

Commercialization

## Geographical Region Targeted:

South India

## Cost:

5500

## Units sold:

2500

## IP Status:

Patent filed: 3965/CHE/2015

## Major Achievements (including awards):

1. Biotech Product, Process Development & Commercialization Award-2020 in the Private Organization Category, On the event of BIRAC's 9th Foundation Day Presided by Dr. Harsh Vardhan, Hon'ble Union Minister for Science & Technology, Earth Science & Health.
2. 2022 Meaningful Business 100, which celebrates leaders combining profit and purpose to help achieve the United Nations Global goals.
3. Global Winners under the Waste Beneficiation category in the Global CleanTech Innovation Program conducted by United Nations Industry Development Organization (UNIDO), CleanTech Global and IDEMI.
4. Smart Bio Award for the Year 2019 for the outstanding contribution in Bio-industrial Category, conferred by Department of IT, BT and S&T-GoK
5. National Entrepreneurship Award 2019 Under Renewable Energy and Waste Management Category by the Minister of Skill Development and Entrepreneurship (MSDE).

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[www.aspartika.com](http://www.aspartika.com)

## Startup Name

ATATRI Design

## Product/Technology

Powered Air Purifying Respirator

**Unique Selling Point:** Biologically Targeted Active Purification Technology

**Product Positioning:** Medical Device, Military equipment.

**National/Societal relevance:** Indigenisation makes it affordable and ensuring healthcare workers safety.

**Import Substitution:** Yes

**Export Potential:** Yes

## Product Picture



## Present stage of Development

Market Testing

## Geographical Region Targeted:

India Initially

## Cost:

12,000/unit

## Units sold:

12

## IP Status:

Filed

## Major Achievements (including awards):

NA

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## Startup Name

**Auflows CardioTech Pvt Ltd**

## Product/Technology

**Pulmonary Circulation Assist Implant**

**Unique Selling Point:** The implant is a passive device and does not have any battery-operated moving component hence it is maintenance-free.

**Product Positioning:** There is no product available in the market. The competitors are working on various types of miniature pumps

**National/Societal relevance:** Children born with univentricular heart have no treatment available for preventing Fontan circulation and hence pulmonary AV malformation

**Import Substitution:** NAs

**Export Potential:** NA

## Present stage of Development

The prototype has been designed which needs to be constructed out of hemocompatible (PTFE) material for animal trials

## Geographical Region Targeted:

India and other countries (global)

## Cost:

NA

## Units sold:

NA

## IP Status:

Full specification submitted for the US patent application

## Major Achievements (including awards):

NA

## Contact detail

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## Startup Name

**Aumeesh Tech Pvt Ltd**

## Product/Technology

**MSO (Mechanically Stable Orthosis) KAFO**

**Unique Selling Point:** Dynamic KAFO with advance feature at affordable price

**Product Positioning:** India's First Mechanical Dynamic KAFO

**National/Societal relevance:** Over 16 million in India people suffer from various locomotor disabilities. The present conventional KAFOs provide stability during walking by locking the knee joint in a fully extended position during both stance and swing phases. This results in excessive energy consumption and induces abnormal gait events, limited mobility, pain, and a decreased range of motion ROM in lower limb joints. Due to the above factors, the rejection rate of using KAFOs in patients with muscular weakness of the lower limb have been reported as being between 60 and 100.

MSO is a unique solution that addresses the basic need for locking and unlocking of the mechanism according to the stance of the user. It includes force transmitters which provide an extra boost to straighten the leg as the person walks. The solution –Orthotic brace is light weight, comfortable and intuitive to operate.

**Import Substitution:** ottobock , becker , drop-lock, (stance controlled mechanical joints)

**Export Potential:** Yes

## Present stage of Development

Pre-Commercialization

## Geographical Region Targeted:

All over India and later international

## Cost:

20,000/- 49,000/- & 89,000/-

## IP Status:

Filed, not published yet

## Major Achievements (including awards):

- IITK – Techkriti
- BIG Grant 14th Call
- Big ideas summit award
- NCPEDP – MPHASIS award
- Infosys Social Innovation Aarohan Award – Silver Category
- News Nation Interview

## Contact details

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## Startup Name

**Aves Foodtech Private Limited, Pune**

## Product/Technology

**PHYTOFIT: A novel functional food technology to reduce abdominal fat**

### Unique Selling Point:

- 1) Chemical/preservative free functional food.
- 2) 1 year shelf life.
- 3) Bio-efficacy is preserved compare to other products in market.
- 4) Phytofit has multiple targets with Increased natural polyphenols and organic acids.

**Product Positioning:** Healthy beverages/culinary/functional foods

**National/Societal relevance:** The increase of overweight and obesity in India is faster than the world average (Luhar et al., 2020). Majority Indians are suffering from abdominal obesity. Therefore, scientifically validated, multi-targeted and easily acceptable solution is required for real and lasting impact on individuals, communities and on nation. Phytofit is a functional food concentrate which has easy daily acceptance, Indias second most preferred taste, and easy to have consistency for Indian population which helps to reduce conversion of extra energy into fat. This solution can help to reduce the burden of increasing overweight, obesity and related secondary diseases in the society.

**Import Substitution:** Not available.

**Export Potential:** Obesity is major pandemic worldwide, therefore acceptance and selling demand in overseas markets is high for the product. Due to awareness of preservatives, side effects in the society, this product may have great demand since it is chemical free with maximum shelf life. Food intervention need less compliance clearances and therefore acceptance in world market can be easy with more demand.

### Present stage of Development

Validation & scale up

### Geographical Region Targeted:

South and Western India

### Cost:

Rs. 200/100g

### Units sold:

Nil

### IP Status:

India Patent filled in Dec 2022  
(Ref no. E-2/1959/2022/MUM)

### Major Achievements (including awards):

- 1) Recipient of BIRAC-Social Innovation Immersion (SIIP) Fund and fellowship 2020.
- 2) Recipient of BIRAC-Biotechnology Ignition Grant (BIG) Fund 2022.

### Contact detail

Dr. Mahesh Mansing Patil  
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### Email

mahesh@avesfoodtech.com

### Website:

www.avesfoodtech.com

## Startup Name

**Bagmo Private Limited**

## Product/Technology

**IoT based blood bag monitoring solution**

**Unique Selling Point:** No unsafe blood reaches the patient ; Increase availability and reduction in wastage ; Traceability & accountability ; Quality Assurance & Hemovigilance

**Product Positioning:** Our solution monitors the storage conditions of blood bags while it is transported and stored through RFID technology. Using our solution we will be able to provide data regarding vein to vein that is from donor to patient along with end to end tracking and traceability that is made available for Public and Private Hospitals to ensure safe and quality blood.

**National/Societal relevance:** In India almost 70% of the population live in rural areas and availability of blood in rural areas is very low. Chances of dying is one in 6 due to pregnancy related cases in the poorest part of the world which are preventable. Our solution will increase the availability of blood and hence referrals can be reduced from community health centers and primary health centers.

**Import Substitution:** Yes

**Export Potential:** Studies found that blood supply chain complexities in developing countries like : expiry time, temperature and transportation requirements, supply and demand gap etc. Many low income countries still practice unbanked directed blood transfusion which can be avoided by having effective blood supply chain monitoring solutions.

## Product Picture



## Present stage of Development

Pre-commercialization (TRL - 7)

## Geographical Region Targeted:

India and other developing countries

## Cost:

Rs 75,000/- ( minimum 3 units required per hospital)

## Units sold:

30

## IP Status:

Two Patents Applied

## Major Achievements (including awards):

- PATH - selected as one of the 12 startups for improving primary healthcare in LMIC.
- Finalists in Qualcomm Design India Challenge 2020
- Nasscom t4g - Technology for good - Finalists 2019

## Contact details

Ashfaq Ashraf  
Mobile No : +91 9961948748

## Website

[www.bagmo.in](http://www.bagmo.in)

## Startup Name

BarifloLabs Pvt Ltd

## Product/Technology

Integrated Sediment Aeration System, Intelligent Monitoring System

**Unique Selling Point:** Cost effective, Intellectual Property

**Product Positioning:** for Urban and Rural municipal waterbody rejuvenation, Aquafarming

**National/Societal relevance:** Relevance under this schemes & programs. Green India Mission, Pradhan Mantri Jhanij Kshetra Kalyan Yojana (PMKKKY) , Pradhan Mantri Krishi Shinchai Yojana (PMKSY), Pradhan Mantri Matsya Sampad Yojana (PMMSY), National Action Program to Combat Desertification, National Afforestation and Eco-Development, Natural Resources Management, Rainfed Farming System, Horticulture, "Integrated Nutrient Management Sustainable agriculture , national Scheme on "Welfare of Fishermen" and "Development of Inland Fisheries" , Swachh Bharat Mission, NPCA, National Mission on Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD), Development of Inland Fisheries and Aquaculture through NFDB scheme.

**Export Potential:** Very High

## Product Picture

## Present stage of Development

TRL 7-8

## Geographical Region Targeted

Odisha, Tamilnadu, Telengana, Andhrapradesh, Maharashtra

## Cost:

INR 250000

## Units sold

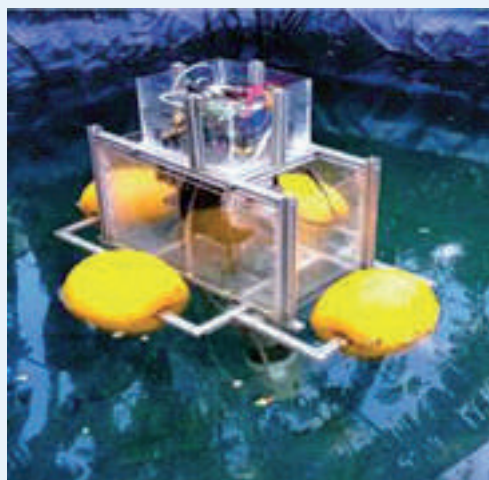
15 Units

## IP Status

22 Patents granted

## Major Achievements (including awards):

MANAGE, NAARM, VIT TBI, T-HUB, Ministry of Housing and urban Affairs



## Contact details

Vicky Vikram Das  
Mobile No: 8249058532

## Website

[www.bariflolabs.com](http://www.bariflolabs.com)

## Startup Name

**BhoomiCam Private Limited**

## Product/Technology

**Precision agriculture monitoring services using imaging sensors, UAVs, and AI techniques**

**Unique Selling Point:** They agricultural start-up aims to revolutionize the way farmers manage their crops by utilizing cutting-edge technology such as artificial intelligence, drones, satellite remote sensing data, and crop yield and health identification. By leveraging these tools, our goal is to increase crop yields, reduce costs, and improve the overall efficiency of the agricultural industry.

**Product Positioning:** National/Societal relevance: This start-up serves as a representative for the AgriTech sector of the economy. Our fledgling business is working to improve agricultural output in India by creating a service that is reasonably priced, widely available, and simple to operate. They will tailor AI and satellite based digital agricultural solutions to meet the specific requirements of each individual farm. Using AI in conjunction with data from satellites and cameras, the major goal is to compile digital "health cards" for each farm, which will include information on the farmers and their crops quality on a seasonal basis. With the use of they android application, our company's main purpose is to provide low-cost technology-based solutions to farmers and connect with them private insurance and seed companies along with government organizations and NGOs directly, with the end goal of empowering those persons to make timely decisions on their farms, even if they lack any prior scientific experience.

**National/Societal relevance:** In India almost 70% of the population live in rural areas and availability of blood in rural areas is very low. Chances of dying is one in 6 due to pregnancy related cases in the poorest part of the world which are preventable. Their solution will increase the availability of blood and hence referrals can be reduced from community health centers and primary health centers.

**Export Potential:** To improve the technology further for commercialization, the following steps can be taken

- Conduct more field trials to gather more data and test the technology under different conditions
- Develop and integrate more advanced AI algorithms to improve the accuracy and efficiency of the analysis
- Collaborate with other companies and organizations in the agriculture industry to gain access to their data and expertise
- Invest in R&D to improve the durability and reliability of the sensors and UAVs used in the system
- Develop partnerships with farmers and other stakeholders in the agriculture industry to gain insights into their needs and requirements

## Present stage of Development

They are in the pre-seed STAGE (Early stage, Pre-product) . They received a small funding of 7 Lakh to develop a prototype from TIDES Business incubator of IIT Roorkee.

## Geographical Region Targeted:

Entire India

## Cost:

Not decided yet

## Units sold:

Not sold anything yet

## IP Status:

Not applied yet

## Major Achievements (including awards):

The prototype of my start-up won two National award this year. Our idea has been selected among top 3 ideas at India's biggest Geospatial Geosmart 2022 conclave held at HICC Hyderabad. They were selected for Bronze Award Winner for I-CON Contest 2022 and received this award from former ISRO chairman Dr. A.S. Kiran Kumar. Our start-up has won another competition and secured first rank in AABTonics National level Geospatial Competition organized by leading GIS multinational company AABSys IT. As a winning team, we received Rs. 50000/- as a prize money, and invitation to pitch in front of investors.

## Contact details

**Dr. Siddhartha Khare**

## Website

**www.bhoomicam.com**



**Startup Name**

**Billion Carbon Solutions  
Private Limited**

**Product/Technology**

"Zero Bio-waste to Landfill" is their mission statement. Using Black Soldier flies, they have created a low-cost solution. Municipal waste is collected and treated in facilities, yielding two beneficial by products that support a circular economy. Utilizing the power of nature without using any extra energy. Units are filled with waste and BSF eggs are introduced. Eggs hatch, consume organic matter, and produce both liquid and solid fertilizer throughout. Larvae are harvested after two weeks and used as fish and animal feed in their place. Through a tech platform, the achieved emission reduction is monitored, confirmed, and converted to Carbon Credits.

**Unique Selling Point:** In comparison to the conventional time frame of three to six months for producing compost, 3-day composting technology (BSF) boosts waste processing capacity and has a compounding effect on the climate impact. They can scale using specially created, reasonably priced units. By securing Project Supply lock-in to maintain market position, they get an advantage. To do this, Billion Carbon is consolidating decentralized bio-waste projects under the Billion Carbon banner through fresh setup and acquisitions.

**Product Positioning:** Municipalities are their first clients (Urban Local Bodies). In the first year, Gujarat, Andhra Pradesh, Telangana, and Rajasthan in India will serve as our target markets.

**National/Societal relevance:** They aim to create 100,000 climate jobs. SDG 8 (Decent Work and Economic Growth), SDG 5 (Gender Equality) SDG 12 (Responsible Consumption & Production), SDG 11 (Sustainable cities & communities): Unsustainable patterns of Consumption and production are the root cause of triple planetary crisis. They plan to move Climate finance to the grassroots – decentralised bio-waste management projects making massive contributions to fighting the climate fight, by reducing GHG (Methane) emissions SDG 15 (Life on Land), SDG 6-Clean Water & sanitation.

**Import Substitution:** Organic liquid Fertilizer, Animal Feed

**Export Potential:** Animal feed

**Product Pictures:**

**Present stage of Development**

Proof of Concept – ready to scale.

**Geographical Region Targeted:**

India

**Cost:**

Rs. 10 Lakh to setup 1 Ton per Day capacity

**Units sold:**

Current capacity of 5TPD

**Major Achievements  
(including awards):**

Top 5 finalists among the 150 start-ups who went through a rigorous 3-month selection and pitching process at BITS Pilani Shark Tank at BITSAA Global Meet 2023 Jaipur; National Winners at Climate Launchpad'22 out of 177 teams; APAC Winners; Global Finalists among the top 9 in the 'NextBigThing' category, from 2000 start-ups across the world

**Contact detail**

Mobile No: 9971524022

**Website:**

<https://www.billioncarbon.com/>

## Startup Name

**Biodimension Technology Pvt Ltd**

## Product/Technology

**"Lab-made human tissues" as an alternative testing method to animal experiments**

### Unique Selling Point:

1. Biodimension's novel formulation and development process provides faster tissue growth and maturation, thereby reducing the supply time to customers and superior advantages in terms of uniform tissue architecture and less batch variability. Also Biodimension brings in product shipment at room temperature, which eliminates the cold chain dependency to ship the tissue across the globe - a major supply chain advantage.

**Product Positioning:** Human tissue models and methods are an alternative to animal experiments, it will be supplied directly to customers (B2B), cosmetic companies, and testing labs, they use tissue models for testing the safety and toxicity. As per the regulations, Pharma companies procure their tissue models for screening the drugs and testing their efficacy.

**National/Societal relevance:** Aligning with the global mission, ensuring the lives of human and saving the animal lives with our improvised non-animal testing on lab made human tissues.

**Import Substitution:** 100% from France and the USA

**Export Potential:** The market available for non-animal alternative testing was valued at \$1.1 billion in 2019. The non-animal alternative testing market is estimated to grow at a CAGR of 10.40% during 2019 – 2025. India is a developing market and has a market size of USD 70 million (INR 560 Crore), which is 100% import market. Europe and north America are the two major markets for the non-animal testing, where US has \$ 328 million market and EU has \$ 300 million market size.

### Present stage of Development

Testing & Validation stage

### Geographical Region Targeted:

Indian market

### Cost:

Average - 10,000 INR/tissue (depends on the surface area)

### Units sold:

20 tissues are processed as a pre-order for customer validation

### IP Status:

1 provisional patent for our formulation and 2 other patents are in-process of filing

### Major Achievements (including awards):

1. Awarded grant-in-aid support from the Department of Biotechnology (DBT-BIRAC) under Biotechnology Ignition Grant (BIG);
2. Letter of Intents from potential customers; 15 customers in sales pipeline
4. Tissue engineering R&D facility;
7. Winner of Ambedkar Youth Entrepreneurship League 2022 by the Ministry of Social Justice.
8. Part of 22 promising India deep-tech startups mentored by Atal Innovation Mission under the PRIME program.

### Contact details

**Ranjith Kumar Velusamy**  
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### Email

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[www.biodimension.in](http://www.biodimension.in)

## Startup Name

**Biopioneer Pvt. Ltd**

## Product/Technology

**NexGen HM Protease Inhibitor: 1st Made in India protease Inhibitor**

### Unique Selling Point:

1. It is a single material having multiple protease inhibition ability.
2. It has strong efficiency to inhibit proteinase K.
3. Stable at ambient temperature and even at high temperatures(95°C).
4. Compatible with different buffer conditions.
5. Stable in a wide range of pH.
6. Non Toxic
7. Water-soluble
8. EDTA Free
9. It is also 2-10 times less expensive.

**Product Positioning:** NexGen HM is a next generation protease inhibitor that bridges the gaps that other protease inhibitors currently available in the market consists. Our product is highly stable, non-toxic, thermally stable and most importantly is very affordable. All these benefits that are being offered by NexGen HM makes it a highly potential product to be positioned globally. Being the first protease inhibitor being manufactured in India it also has a great potential to replace other imported protease inhibitors in the market

**National/Societal relevance:** Today almost all the protease inhibitors being used in laboratories across our nation are imported and none of them is manufactured here. This system adds to the cost of the product and ultimately affects the affordability of protein research. Therefore, to alleviate this problem Biopioneer pvt. ltd. came up with the NexGen HM protease inhibitor which is the first made in India protease inhibitor and is almost ten times more cost effective than the existing protease inhibitors in the market. As India is hub of protein-based vaccine production, and this newly developed protease inhibitor could be used as an ingredient during process of manufacturing. If indigenous proteinase inhibitor is used in this sector, it could help to reduce the dependency on import.

**Import Substitution:** NexGen HM Protease Inhibitor has the potential to substitute the existing protease inhibitors being imported in our country as our product fills the market gaps that these products have.

**Export Potential:** NexGen HM protease inhibitor is highly efficient and cost-effective protease inhibitor consisting of several USPs making it a unique product globally. In addition thermal stability is an added advantage which eliminates cold chain transport ultimately increasing export potential.

### Product Picture



### Present stage of Development

The product is market ready

### Geographical Region Targeted:

As protease inhibitors are widely used in every Biotech research facility, Vaccine, enzyme, recombinant DNA protein company, around the globe, so, initially we are targeting to get our product in every laboratory in India and eventually sell the product globally

### Cost:

15,108+ Tax /- for 15ml vial which is 50X concentrated

### Units sold:

30

### IP Status:

Patent Publishedt

### Major Achievements (including awards):

- Recognized among the top 20 biotech start-up in Odisha by Government of Odisha.
- Biopioneer has been recognized among the top 10 biotech start-ups 2021 by Industrial Outlook
- NexGen HM protease inhibitor has been highlighted by Contentwire India, a reputed magazine entiteled as An Emerging Next-gen Protease Inhibitor Innovation Start-up

### Contact detail

Mobile No : +91 7991084428

### Email

info@biopioneer.in

### Website

www.biopioneer.in

## Startup Name

**Bioscan Research Pvt. Ltd**

## Product/Technology

**Cerebo: A handheld device to detect asymptomatic intracranial bleed non invasively within a minute**

**Unique Selling Point:** Rapid detection, Non invasive (no harmful radiation), portable, Easy to learn and use

**Product Positioning:** Objective triaging of asymptomatic/mild TBI patients. Best placed in Trauma centers, ER, ambulances, hospitals, clinics, defense, sports etc.

**National/Societal relevance:** Every minute in India, 3 people either die or become disabled because of traumatic brain injury. If we diagnose these cases, we can potentially save 180 lives per hour from dying or becoming disabled for life.

**Import Substitution:** Make-in-India product

**Export Potential:** High Globally.

## Product Picture



## Present stage of Development

Fully developed

## Geographical Region Targeted:

Global

## IP Status:

US patent application: 1 granted, 2 pending, Indian Patent: 2 granted, 3-pending, PCT - 5, Design patent granted: 3, Trademarks Granted: 11

## Major Achievements (including awards):

Completed multicenter trial on more than 590 subjects with more than 91 percent accuracy. Have won more than 30 national and international awards including ASME ISHOW India 2020 Winner in healthcare, Best healthcare startup of India by India Israel Innovation Challenge 2018, Best Incubatee company in healthcare by ISBA 2019, BIRAC Ignite, Next Big Idea Canada, CII-Infosys Starpreneur award

## Contact details

### Email

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### Website

www.bioscanresearch.com

## Startup Name

**Blackfrog Technologies Pvt.Ltd**

## Product/Technology

**Emvolio - Portable Medical Grade Battery Operated Refrigerator**

**Unique Selling Point:** Active cooling device with battery backup of 15+ hours, continuous temperature monitoring, location tracking, state-of-charge indication

**Product Positioning:** Health Centers, R&D Laboratories, Pharma & Diagnostic, Eye Bank & Medical & Research Institute

**National/Societal relevance:** Emvolio strictly maintains the pre-set temperature for up to 12 hours which is used for transportation of vaccines and other biologicals. Emvolio as a solar-powered battery-operated device provides a critical health energy nexus much required in remote regions with intermittent power supply and can operate as a stand-alone refrigerator at lower power consumption.

**Export Potential:** Can be sold to all across the world as there is currently no ready to market product available.

## Present stage of Development

Ready for commercialisation

## Geographical Region Targeted

Rs.1,27,000 + GST = Rs.1,55,000/-  
(MRP)

## Cost:

500+ units, we are in 12+cities domestic  
& 3 Countries international level

## Units sold

15 Units

## IP Status

3 product patents and 7 design patents

1. 328026 : 'Portable Biomedical Refrigerator'
2. 325697 : 'Refrigeration device for regulating temperature of small volume loads'
3. 363430 : 'Computing device for traceability and delivery of pharmaceutical drugs to patients'

## Major Achievements (including awards):

1. Bengaluru Tech Summit Blackfrog won the "Best product against COVID-19"
2. NIDHI - Grant from DST, Govt. of India
3. BIRAC- Biotechnology Ignition Grant
4. India Innovation Growth Programme 2.0
5. National Conference for Social Innovation 2019
6. National Bio-Entrepreneurship Competition 2019- 3 awards
7. Qualcomm Design in India Challenge (QDIC-2020)
8. Confederation of Indian Industries (CII) Startuppreneur awards 2020 : Blackfrog won the Forbes-Marshall Manufacturing award.

## Contact details

Mayur Shetty  
Mobile No: 9916452021

## Website

[www.blackfrog.in](http://www.blackfrog.in)

## Startup Name

**BoviEdge Research LLP**

## Product/Technology

**Small RNA based Early Pregnancy Detection Kit**

**Unique Selling Point:** The product has the ability to pick up the pregnancy as early as day 25 post artificial insemination. It has the efficiency to detect the pregnancy even at the low concentration of miRNA. Since the result is seen as a color change with naked eye, it excludes the use of expensive laboratory equipment and expertise of handling the equipment. It is easy to use.

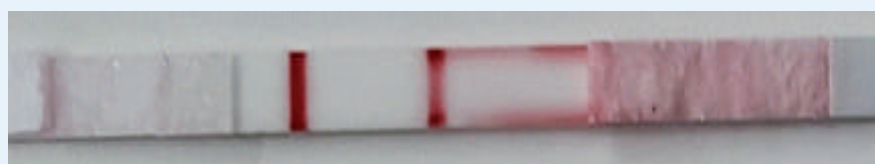
**Product Positioning:** A field friendly test kit with ability to detect pregnancy as early as day 25 of AI in bovines – thus offering additional income generation for farmers by increased lactation.

**National/Societal relevance:** It has been estimated that over 73 million artificial inseminations are performed in bovine annually (NDDDB). Also, traditional pregnancy detection assays for livestock have a detection limit of 35-40 days post artificial insemination with poor sensitivity causing significant economic loss to Indian farmers. Therefore, an early pregnancy detection kit with an ability of detecting pregnancy as early as day 25 of AI, can be a game changer in India's dairy industry with product revenue potential of > INR 1000 Cr Per Annum thus indicating promising future of the business.

**Import Substitution:** It is exclusively trying to produce the innovation with the material purchased from the companies established in India. In fact, BoviEdge is synthesizing the nanoparticles using Neem leaves in our laboratory for developing the chemistry of our product

**Export Potential:** The target Market includes Small to Marginal Dairy Farmers (Millions in number); Medium Class; Rural; Primary to Middle class income group including Livestock Farmers, Veterinary Doctors, Veterinary Research Institutes, Livestock companies within the country.

## Product Picture



## Present stage of Development

The technology has been progressing from TRL5 to TRL6 and is proven to work in a laboratory environment. We are currently testing it on the blood samples of pregnant animals collected from National Dairy Research Institute. Further, in order to test the sensitivity and specificity of the product, they have cross validated the technology based results with another laboratory based detection method called Q-PCR amplification. Based on the outcomes, The LLP is now planning to test our technology in the field samples in order to gain the confidence on its robustness

## Geographical Region Targeted:

Haryana, Rajasthan, Uttar Pradesh, Uttarakhand

## Cost:

INR 100

## Units sold:

Not Applicable.

## IP Status:

Application for Patent Filing is under preparatory phase.

## Major Achievements (including awards):

Recipient of Fulbright-Nehru Doctoral Fellowship, Received first Prize at International Conference on Proteomics for System Integrated Bio-Omics, One Health and Food Safety for the discovery of pregnancy related biomarker. Received BIRAC-BIG Grant of INR 5 million in support of technology development. Attended WRCB summit on Next Generation therapeutics at IIT- Bombay

## Contact detail

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## Email

boviedgeresearch@gmail.com

## Website

www.boviedge.com



## Startup Name

**Bramhansh Technologies Pvt Ltd**

## Product/Technology

**Migraelief- A drug-free wearable solution for instantaneous migraine and tension headache pain relief**

**Unique Selling Point:** Clinically Proven Technology, Drug free

**Product Positioning:** Healthcare Medical Device

**National/Societal relevance:** Apart from serving the millions of patients suffering from Migraine, Bramhansh is also helping women from rural India with employment and upgrading their stitching skills which is final stage of assembling our product. The plastic enclosure of the product is covered with soft premium fabric which is specifically designed and stitched on the product with the help of our partner women NGOs from Chhattisgarh. This helped to serve a huge national cause by empowering basic skills of women and helping them run their households and send their children to schools.

**Import Substitution:** Currently only foreign products are available in market and our product is completely "Make in India".

**Export Potential:** More than 500 million individuals are diagnosed with chronic migraine pain globally. And only three major competitors are available in the global market who are serving this market. The competitors in the foreign market are available at 2.5 times our price and have the same features and results. In the past 5 years, these 3 major players have served 0.1% of the total market globally and have generated a revenue of Rs 125 Crores.

## Product Picture



## Present stage of Development

Product Developed, Clinical Trials are undergoing

## Geographical Region Targeted:

Bangalore, Mumbai

## Cost:

Rs 10000/-

## Units sold:

40

## IP Status:

Patent Granted, Patent No-355889

## Major Achievements (including awards):

- a) Technology Patent Granted
- b) Product Developed
- c) Pilot Efficacy Trials done
- d) Onboarded Hospitals and Clinics for initial Sales
- e) Manufacturing Certificates Obtained
- f) Revenue of Rs 3Lakhs Generated

## Contact details

**Ashfaq Ashraf**  
Mobile No: : +91 7828881732

## Website

[www.bramhansh.com](http://www.bramhansh.com)

## Startup Name

**Chem Life Innovations**

## Product/Technology

**Farm animal nutraceuticals through  
Accelerated Natural Biotransformation**

**Unique Selling Point:** Productivity enhancing bioactive formulations with maximized activity

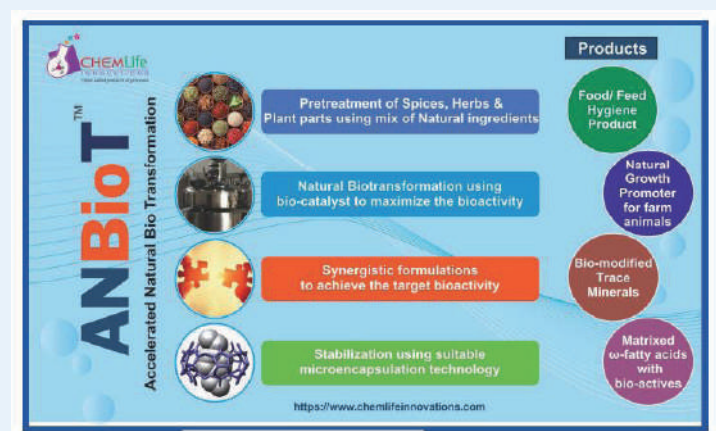
**Product Positioning:** Productivity enhancers

**National/Societal relevance:** Value enhancement of herbs, agri by-products & waste

**Import Substitution:** Essential Amino acids, Organic acids

**Export Potential:** As poultry, dairy & swine value added feed additives

## Product Picture



## Present stage of Development

TRL6

## Geographical Region Targeted:

Domestic & South East Asia

## Cost:

Rs. 105 per unit

## Units sold:

20000+

## IP Status:

Patent applied

## Major Achievements (including awards):

- Recognized as one among the top 5 finalists in Animal Husbandry Grand Challenge, 2019
- Winner at Regional Finals Hosted by climate Launchpad, the entrepreneurship offering of EIT Climate-KIC
- Recognized as one among the top 75 entrepreneurs in India

## Contact detail

**Email** [innovate@chemlifeinnovations.com](mailto:innovate@chemlifeinnovations.com)

**Website** [www.chemlifeinnovations.com](http://www.chemlifeinnovations.com)

## Startup Name

**Cleome Innovations**

## Product/Technology

**Ultra-Portable Nucleic Acid Amplification System**

**Unique Selling Point:** Affordable, Highly Customizable, Nucleic Acid Amplification with a Turnaround Time of less than 30 minutes.

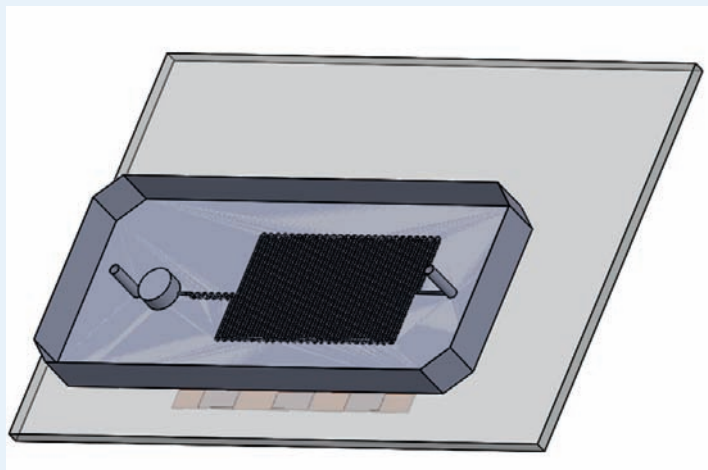
**Product Positioning:** The Ultra-Portable Nucleic Acid Amplification System is being developed to enable resource limited settings with the capability of PCR based disease diagnostics. Cleome Innovations is focusing on developing this affordable solution by leveraging microfluidics technology to achieve the vision of affordable diagnostics for all!

**National/Societal relevance:** In the current framework, PCR based diagnostics are limited to large diagnostic facilities in the country, limiting accessibility to timely diagnosis in resource deprived settings. This technology aims to take PCR based diagnostics to remote settings for improved diagnostic turnaround time with minimal skill and resource requirement.

**Import Substitution:** Identifying substitution for SMD electronic components currently being imported.

**Export Potential:** Potential export possibilities to Regions with a High Disease Diagnostic Testing Burden for Bacterial & Viral Ailments.

### Product Pictures:



### Present stage of Development

Beta Prototype Development

### Geographical Region Targeted:

India (with a focus on Tier-2 & Tier-3 Regions) & Globally (with a focus on High Diagnostic Testing Burden Regions)

### Cost:

₹30,000 (Estimated)

### Units sold:

Commercial Product Under Development

### IP Status:

Technology IP Documentation under Development.

### Major Achievements

(including awards):

Recipient of BIRAC Biotechnology Ignition Grant (BIG) in the 20th Call.

### Contact detail

Mobile No: 9009000036

**Email** hi@cleome.in/ sohan@cleome.in

**Website:** www.cleome.in

## Startup Name

**CoderFarm Private Limited**

## Product/Technology

**DigitalProduct**

**Unique Selling Point:** It is a one stop solution for all IT related

**Product Positioning:** The mission of Farm is to empower startups at every stage by providing them with an integrated ecosystem of products that streamlines planning, decision-making, team management, Scrum management, Communication, Meetings and hiring, making the entrepreneurial journey easier and more efficient.

**National/Societal relevance:** As we serve the nation and society by providing employment, hands-on training, Education on IT latest and greatest technology. Partnering with Incubation centers and providing services to their incubators.

**Product Pictures:**

### Present stage of Development

MVP

### Geographical Region Targeted:

Across the globe

### Cost:

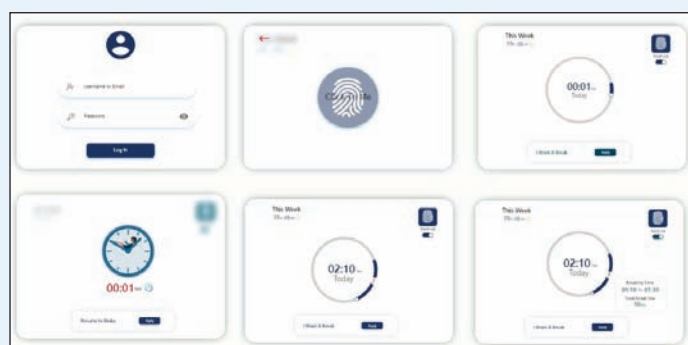
At MVP stage our product will be free of cost

### Units sold:

The product is a digital product and also is in MVP stage so we will be free of cost afterwards and will have subscription costs.



Farm Ecosystem



Desktop Tracker

### Contact detail

Mobile No:  
9926061666, 8602644301

### Website:

[www.coderfarm.in](http://www.coderfarm.in)

## Startup Name

**Coexin Technologies Healthcare  
Private Limited**

## Product/Technology

Startup is focused in Research and Building products in the field of Psychology and Physiotherapy. Currently, Four Tools named CCTA, CCET, GMC DT and GMC ET are deployed in Psychology clinics, Physiotherapy Clinics and Hospital. The products are built in microcontroller technology and Plan to convert to AI and exercise tool to IoT going ahead.

**Unique Selling Point:** Handy electronic diagnostic apparatus for assessment of concentration and coordination among existing testing instruments to wide range of potential customers to enhance cognitive skills with evidence-based exercise tools.

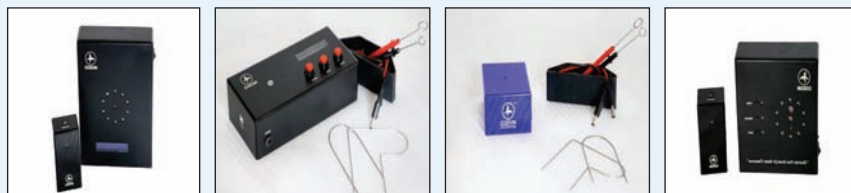
**Product Positioning:** Currently establishing the product in market and approaching growth stage.

**National/Societal relevance:** This tool is meant for people affected with mental health disorders, Hand deficiencies and Dementia. We target to make impact on each of their lives.

**Import Substitution:** Currently there are no Import substitution.

**Export Potential:** Highly export potential product.

**Product Pictures:**



## Present stage of Development

4 Commercialized products with One product CRTT under development stage.

## Geographical Region Targeted:

Concentration to sell Pan India

## Cost:

CCTA and GMC DT is available with each costing 22,500/- and CCET costing 2,999/- and GMC ET 3,499/-

## Units sold:

250+

## IP Status:

One Patent for "Concentration and co-ordination Testing and exercise tool" published in journal. While application for the other patent "Grose motor diagnostic and exercise tool" has been filed.

## Major Achievements (including awards):

Best Health Tech StartUp Award 2022, Finalist Award in Medical Chennai.

## Contact detail

Mobile No: 8593007647

## Email

ceo@coexintech.com

## Website:

http://coexintech.com



## Startup Name

**Craste**

## Product/Technology

**High green value-added green products made from agri-crop waste using circular fiber technology.**

### Unique Selling Point: Two Product Portfolios :

- Tree free packaging solutions: 1. 62.5% better in CO2e emissions, 2. 48.9 % cheaper as compared to virgin pulp - 3. Home compostable, 4. Food Grade 5. Customizable according to clients' requirements
- Engineered Green Boards: 100% E0 Formaldehyde free, 2. 2x stronger as compared to particle board, 3. moisture resistant (7x better water absorption capacity than particle board), 4. versatile applications in furniture and construction domains

**Product Positioning:** The tree free packaging solutions are positioned to companies who are looking for sustainable packaging over plastic based/tree-based packaging. The product will reach out to sustainable teams/CSO of MNCs directly. We do look out for specific challenges proposed by these companies and offer them packaging solutions. In the Engineered Green Boards segment, our customers include furniture designers, architects, end customers of furniture and construction applications.

**National/Societal relevance:** The startup aims to solve the issue of crop burning and deforestation. Around 500 million Tonnes of crop residue is generated in India alone, out of which 90 MT is burnt on fields as crop stubble waste. Crop burning releases around 150 million Tonnes of CO2 into the atmosphere, resulting in serious air pollution challenges in our cities. We solve this issue by preventing crop burning, providing extra income for farmers, generating rural employment and delivering eco-friendly packaging options to consumers and societies.

**Import Substitution:** India is dependent on imports of virgin pulp and recycled paper which has resulted in volatility and an acute shortage of pulp in the Indian market leading to soaring prices. Furthermore, India imports timber annually in large amount (> 450 billion INR in FY 2022), using crop waste as an alternative will save precious foreign reserves in a volatile global world order and will help towards building Aatmanirbhar Bharat.

**Export Potential:** They have worked with global MNCs and we have already supplied sample products to international players in various countries. The traction we have received so far, especially from ASEAN countries is encouraging. We are planning to export our products in the next quarter.

### Present stage of Development

Pilot stage (Our first factory is setting up in Madhya Pradesh).

### Geographical Region Targeted:

PAN India

### Cost:

Depends on the products and customer requirements.

### Units sold:

Different units sold in different SKU categories.

### IP Status:

Patent pending on our circular fiber technology.

### Major Achievements (including awards):

Social Innovation Immersion Programme Fellowship – May 2017, Top 500 Global Startups - Hello Tomorrow – October 2017, AIT Swissnex India Finalist – November 2017, Runner up Ipreneur - Tata Institute of Social Sciences – December 2017, BIRAC SOCH Award – March 2018, Winner - National Conference on Social Innovation – November 2018, Stanley Techstars Accelerator – June 2019, Biotech Ignition Grant – June 2019, Millennium Alliance Award – July 2020, Sustainability leaders in the world - Sustainability Awards 2021, 100+ Remote Accelerator Program

### Product Picture



### Contact details

#### Email

shubham@craste.co

#### Website

https://craste.co/

## Startup Name

**Cuor Stem Cellutions Pvt Ltd**

## Product/Technology

**Easy testing for drug for Alzheimer's disease using human stem cell derived disease model**

**Unique Selling Point:** The technology uses human stem cells in which the read out time is 1/10th of the time that is used by other technologies. Our technology is developed as an accurate alternate to animal testing.

**Product Positioning:** We develop highly predictive human disease model assay systems for efficacy testing aiming to accelerate drug candidate selection, reduce costs and ultimately increase drug discovery & development efficiency. Our technology is developed as an accurate alternate to animal testing. Drug testing without the use of animals has been recently approved FDA and we believe our product is positioned well to flourish in this enormous market

**National/Societal relevance:** We believe that stem cell technology fast-tracks the delivery of better medicines to patients by improving the drug discovery process in age related diseases such as Alzheimer's disease. We develop highly predictive human disease model assay systems for efficacy testing aiming to accelerate drug candidate selection, reduce costs and ultimately increase drug discovery & development efficiency. This is especially relevant in India from where no new effective drugs for Alzheimer's have yet been discovered.

**Import Substitution:** Our technologies can replace animal models of Alzheimer's disease which has been developed outside India

**Export Potential:** The drug testing services platform can be marketed to drug manufacturers to test their drugs in-house.

## Present stage of Development

Technology has been developed, beta tested and patent obtained

## Geographical Region Targeted:

India, Europe, USA, Australia, Singapore

## Cost:

USD 3000 per drug testing

## Units sold:

10 units

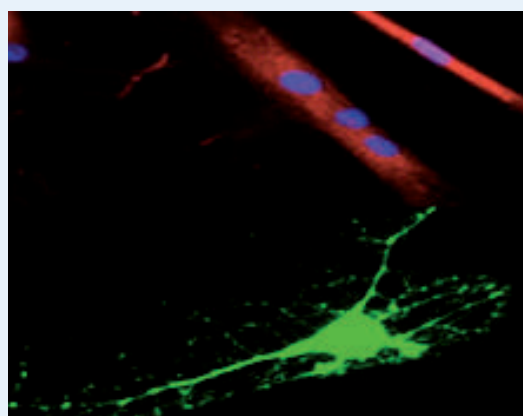
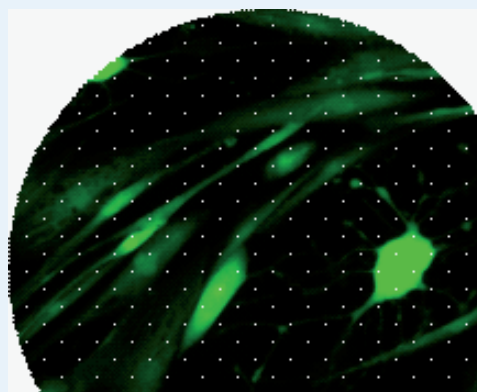
## IP Status:

Complete specification of the patent has been obtained in India

## Major Achievements (including awards):

- Selected among the 75 Women Entrepreneurs in 2022
- Used the testing platform for services in India and Australia
- Patent granted in India

## Product Picture



## Contact detail

**Dr Sudha Warriar**  
Mobile No : +91 9731218409

## Email

sudhawarrier@cuorstem.com

## Website

www.cuorstemcellutions.com

## Startup Name

**Cutting Edge Medical Devices Pvt. Ltd.**

## Product/Technology

**SCINTIGLO – A smart point-of-care urinary micro-albumin / micro-protein estimation device.**

**Unique Selling Point:** Instant, Non-Dipstick based, Quantitative, Stable reagent, with long shelf life without refrigeration, Extremely easy to use & portable device, Data Storage & Telemedicine ready

**Product Positioning:** The Private healthcare market – small & medium size pathology labs, Clinics & Hospitals.

Public Healthcare - State governments and NGOs and Philanthropic organizations.

### National/Societal relevance:

1. The device will be extremely useful for the National Maternal & Child Health Program
2. The Non Communicable diseases control program
3. Pradhanmantri Free dialysis program.

**Import Substitution:** Yes, and in addition to this it is a novel device solving a global need.

**Export Potential:** Enormous, to developed and developing countries alike.

### Product Picture



Reagent dropper bottle      A disposable Cuvette

Set of Consumables with the Device

### Present stage of Development

TRL – 9 – Product already in the market.

### Geographical Region Targeted:

Initially India. Later it to Africa & other Developing countries and to developed countries for home healthcare

### Cost:

Device – Offered a Device as a Service & Consumables @ Rs. 150/test

### Units sold:

10000 units of consumables

### IP Status:

Patent filed & Pending – 2278/ MUM/2015

### Major Achievements (including awards):

30 National & International Awards and Also featured on Shark Tank India Season 1

### Contact details

Mobile No: : +91 9873275305

### Email

info@cemd.in

### Website

https://cemd.in

## Startup Name

**DNA Nano biosensor for TB detection**

## Product/Technology

**DNA Nano biosensor for TB Detection**

### Unique Selling Point:

- Affordable Product and Service, User-friendly, Quick response,
- Low-cost TB device
- DNA probe base nano technology

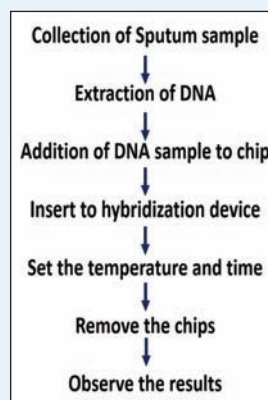
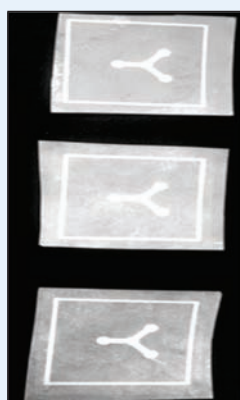
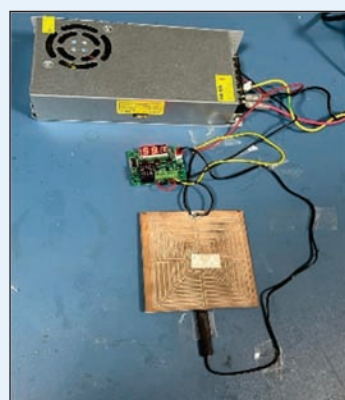
**Product Positioning:** Collaboration with Indian start-ups to promote the 'Make-In-India' initiative.

**National/Societal relevance:** The government of India already declare TB free nation up to 2025.

**Import Substitution:** Only Indigenous nanotechnology Universal fabrication of Nano biosensor with Cost Feasibility and Ease of Service

**Export Potential:** Yes

**Product Pictures:** TBD device



### Present stage of Development

Paper sensor ready with detection and sample zones

### Geographical Region Targeted:

Target Market - Health Care  
Industry – Clinics, Hospitals,  
Diagnostic Centre's, Rural & Urban  
Health Centre's, private OPD,  
tertiary health care centers

### Cost:

INR 750 per test

### Major Achievements

#### (including awards):

Maharashtra start-up Award 2018:  
Innovation in Healthcare  
National Innovation Award NIC 2020  
Indian Brainiac Innovation Competition  
Award 2022

### Contact detail

Dr Deepak Sawant  
Mobile No: 9404987030

### Email

sawantlab@gmail.com

### Website:

www.vijayalab.com



## Startup Name

**Drone Adda**

## Product/Technology

**Avionics subsystem for Drones**

**Unique Selling Point:** Robust and reliable supply chain for drone businesses, customization service, the better quality of products with warranty and repair services

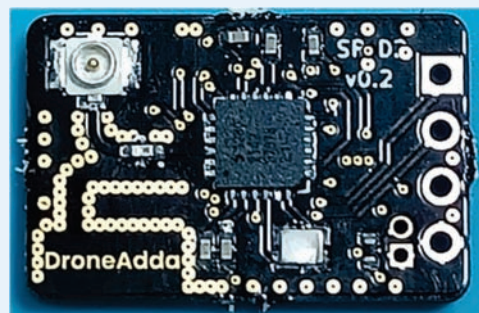
**Product Positioning:** Local and global drone startups and businesses can use our electronic components

**National/Societal relevance:** India a global drone hub by 2030 and manufacturing the core components plays an important role

**Import Substitution:** Indian drone industry is heavily dependent on external made parts

**Export Potential:** Our products have a huge potential to replace manufacturers at the global level

### Product Pictures:



Receiver



Electronic Speed controller

### Present stage of Development

Minimum viable product (MVP)

### Geographical Region Targeted:

India and Global

### Cost:

INR 2000 – INR 1 million

### IP Status:

In the process

### Contact detail

Mobile No: 8208242893

### Website:

[www.thedroneadda.com](http://www.thedroneadda.com)



## Startup Name

**Duosis Bio-Innovations Pvt Ltd**

## Product/Technology

**Jellnex**

**Unique Selling Point:** Utilisation of tamarind seeds as a novel, cost-effective & sustainable source of potential bio-polymer "Jellnex"

**National/Societal relevance:** We envisage giving employment to local community and tribes with our work.

**Import Substitution:** Yes

**Export Potential:** Yes

## Product Picture



## Present stage of Development

We have developed MVP of our product

## Geographical Region Targeted:

Jharkhand

## Cost:

500rs/kg

## Units sold:

30

## IP Status:

Trade Mark filed

## Major Achievements (including awards):

- NIDHI-EIR Fellowship
- BIRAC-Biotechnology Ignition Grant
- Atal Bihari Vajpayee Innovation Lab (Start-up Jharkhand funding)
- BIRAC-TiE WInER Award
- MCX CSR Fund

## Contact detail

Mobile No: : +91 7992499157

## Website

[www.duosisbio@gmail.com](mailto:www.duosisbio@gmail.com)

## Startup Name

Earthtech Innovations Pvt Ltd.

## Product/Technology

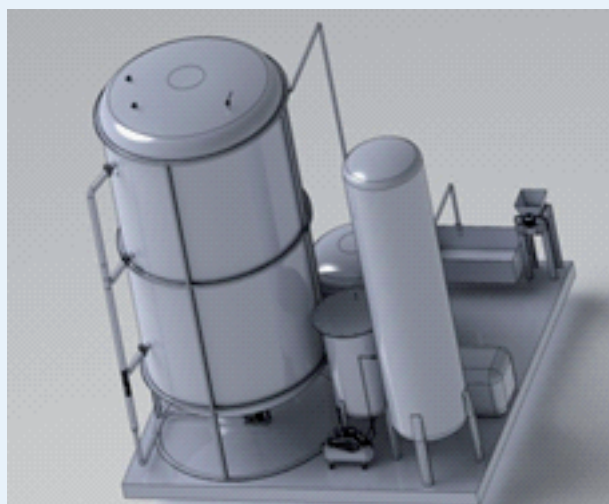
Smart Biogas Plant with AI and IoT for Best Efficiency

**Unique Selling Point:** Modular and scalable design, Fully Automated Plant. Requires 30% to 50% less space. Consumes 80% less water. Up to 60% more efficient due to IoT and AI Technology. All season stable and boosted gas output. Committed to safety.

**National/Societal relevance:** There will be a huge reduction of methane 25X potent greenhouse gas directly to the atmosphere due to OFMSW dumping as all this waste will be converted to green and efficient fuel. Moreover, the reduction of transport costs of waste to dump sites that are far away from the city will save fuel and money. The technology proposed can replace fossil fuel-based LPG and coal-based electricity at a meaningful scale to be a viable urban fuel source. Doing so provide ready-to-use and organically rich and ready to-use fertilizers.

**Export Potential:** Technology has a huge potential. Can be exported to any tropical country that wants to rely on organic farming as well as sustainable clean cooking. The innovation has a very wide scope of industrial applications. Primarily it can be used anywhere where the organic waste is generated. Also, it can be used in ceramic industries, dairy industries, and in industries where all this process takes place waste treatment and incineration, metals preheating particularly for iron and steel, drying and dehumidification, glass melting, food processing, and fueling industrial boilers, etc. The Scope of organic fertilizer in form of slurry has various applications.

## Product Picture



## Present stage of Development

Pre-commercialization

## Geographical Region Targeted:

Pan-India

## Cost:

2500000 for 1TPD plant

## Units sold:

Pre-Order received from customers

## IP Status:

The IP is generated in form of a patent. Moreover, through this project, some new IPs will be filed in form of Industrial Design, and Patent within nearby future.

## Major Achievements (including awards):

WINNER of BIRAC-SoCH Challenge 2021. Supported by BIRAC & Social Alpha

## Contact details

Mobile No: : +91 9429442569,  
7990726622

## Website

[www.earthtechrenewables.com](http://www.earthtechrenewables.com)

## Startup Name

**Embright Infotech Private Limited**

## Product/Technology

**AUTICARE – Immersive Tech and HCI**

**Unique Selling Point:** AT based Inclusive Learning platform for Learning Disabilities and Autism.

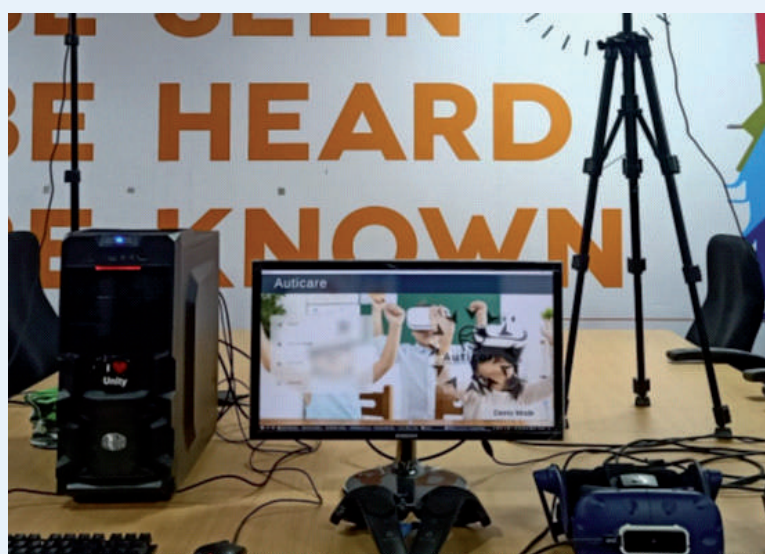
**Product Positioning:** Auticare uses Immersive tech.

**National/Societal relevance:** Inclusive Learning Platform for Learning Disabilities.

**Import Substitution:** Auticare Ver 2.0 uses Eye tracking and BCI sensor in house developed.

**Export Potential:** The Product support multilingual- Middle East, Europe, Canada and US.

## Product Picture



## Present stage of Development

Ver 1.0 is commercialized.  
And Ver 2.0 is in TRL7

## Geographical Region Targeted:

Pan India

## Cost:

15 Units

## Units sold:

30

## IP Status:

Two Patents Applied

## Major Achievements (including awards):

- 2019 Best start up award by TMA & ADANI Group
- 2020- BIRAC by Department of Science & Technology, Government India.
- 2021-Emplanelled in GEM Portal by Government of India.
- 2021- Finalist in Gitex Supernova Challenge, Dubai

## Contact details

Mobile No: : +91 8792975982

## Website

[www.embrightinfotech.com](http://www.embrightinfotech.com)

## Startup Name

**Ensect Farm Pvt Ltd**

## Product/Technology

**IoT based blood bag monitoring solution**

**Unique Selling Point:** Efficient Waste management - High mass volume reduction (50-90%) in 10-12 days, Low GHG emission Alternative Protein: Sustainable, Nutritional properties match fishmeal, Highly Palatable

### Product Positioning:

Waste Management - B2G;

Alternative protein -B2B & B2C (Poultry, Aqua & Pet food)

**National/Societal relevance:** Efficient technology for waste management & sustainable protein for the feed industry.

**Import Substitution:** Soymeal, Krill Meal, Palm Oil & Fish meal

**Export Potential:** Yes - Sustainable Alternative Protein - Insect protein

### Product Picture



## Present stage of Development

TRL 7

## Geographical Region Targeted:

South India, Pan India

## Cost:

Rs. 120 per Kg

## Units sold:

500 Kg produced for trial run

## IP Status:

NA

## Major Achievements (including awards):

- India's First PPP Model showcasing Entomo Composting - Vellore, Tamilnadu
- BIRAC BIG
- BIRAC SEED
- DST Nidhi Prayas
- Carbon Zero Challenge -IIT Madras

## Contact detail

Anup TV  
Mobile No: : +91 9894408020

## Email

anuptv@ymail.com

## Website

www.ensectfarm.com

## Startup Name

Epanipurii kartz

## Product/Technology

Automatic Dispenser IoT based with E-Nose Application

**Unique Selling Point:** Remote operating by Mobile App

**Product Positioning:** Food Vendors

**National/Societal relevance:** Automation of Street Food Vendors

**Import Substitution:** Yes

**Export Potential:** Yes

## Present stage of Development

Prototype

## Geographical Region Targeted

Global

## Cost:

7-8 k

## IP Status

Patent under process

## Major Achievements (including awards):

BIG Grant & Design Innovation

## Contact details

Harish Neotia  
Mobile No: 7366904004

## Email

ceo@epanipuricart.com

## Website

www.epanipuricart.com



## Startup Name

**Epygen Biotech PVT LTD**

## Product/Technology

**Development of Receptor Binding Protein (RBD) antigen based advanced Vaccine candidate against SARS-CoV-2 Variants**

**Unique Selling Point:** When compared to other vaccine host cells like the insect (Baculovirus) cells, yeast cells or the Mammalian Cell lines (CHO Cells), the C1 platform demonstrated several times greater productivity in antigen expression levels and showed safety, efficacy, and potency. Additionally, the C1-cells impart much closer to human glycan forms onto the RBD than yeast cells which are hyper glycosylated. The plug and play host design to rapidly express antigen against variants like OMICRON, unprecedented high expression levels and simple process requirements offer a perfect solution to fight a virus that causes pandemic and mutates aggressively.

**Product Positioning:** The project is aimed to develop & quickly express antigens against pandemic causing Viruses, utilizing the unique expression host and drastically reduce production costs and ensure that the vaccines be affordable and available in hundreds of millions dosages to the masses.

**National/Societal relevance:** The accelerated development of RBD antigen vaccines from high yielding C1 expression system will benefit the national and global initiative of mass vaccination at an affordable cost. The Platform allows quick cloning of Covid Variant RBD and produces Variant Vaccine timely. The project is aimed to drastically reduce production costs and ensure that the vaccine be affordable and available in hundreds of millions dosages required to enable rapid delivery into clinical development and mass vaccination.

**Import Substitution:** When compared to imported vaccines and technologies using hosts like the insect (Baculovirus) cells, yeast cells or the Mammalian Cell lines (CHO Cells), this platform demonstrates several times greater productivity in antigen expression levels and showed safety, efficacy, and potency

**Export Potential:** This vaccine will be suitable for exports to semi regulated and regulated markets of South Asia, Africa and Latin America due to the expected low cost of this vaccine. Limited Clinical trials may be required for some regulated markets.

## Present stage of Development

Pre-Clinical and clinical Trials level

## Geographical Region Targeted:

India & Indian Subcontinent, Sri Lanka, Bangladesh, Nepal, Bhutan.

## Cost:

Target Price is INR 150

## Units sold:

Under Development

## IP Status:

Patent of C1 Expression Technology belongs to Dyadic International INC. USA has been licensed to Epygen Biotech PVT LTD for expression and production of COVID Vaccine. Epygen Biotech India has the full rights to the EpyCoV Covid Variant Vaccine, a multivalent vaccine against Omicon.

## Major Achievements (including awards):

- Received BIRAC grant to manufacture C 1- RBD Vaccine and conduct clinical trials Phase I and Phase II after evaluation and recognition of the potential of this technology for quick development of RBD vaccine against SARS- CoV-2 Variants.
- International news coverage of Epygen Vaccine Technology with BIRAC support in Bloomberg, Yahoo Finance and Global Wire.
- The potential of Epygen vaccine technology received coverage by all major Indian media houses e.g. TOI, The Business Standard, The Outlook, The Week, CNBC TV18 etc.

## Contact details

Rishi

## Email

rishi@epypgen.com

## Website

www.epypgenbiotech.com

## Startup Name

**Exsure Pvt Ltd**

## Product/Technology

**A guided exosome-based drug-delivery vehicle, ExoDS, to specifically target and eliminate cancer cells and also cancer stem cells which are responsible for tumor relapse and metastasis.**

**Unique Selling Point:** This vehicle will have a multi-pronged beneficial effect whereby first it will reduce the toxicity of chemotherapeutic drugs by more than 30%, secondly, as the drugs will be specifically targeted to the tumor cells it will also reduce the effective drug concentration by 400 times than what is required to achieve a similar reduction in tumor volume by the free drug, thus reducing the treatment cost as well as physical and psychological effect on the patients, third as exosomes are clathrin coated they are very stable thus increasing their longevity after infusion, fourth as our ExoDS platform will target cancer stem cells, it will increase the post-treatment relapse-free survival (RFS) period.

**Product Positioning:** World first bio-engineered exosome-based targeted drug-delivery platform to target cancer stem cells and tumor cells.

**National/Societal relevance:** Need of the hour is a targeted delivery vehicle that can precisely deliver the chemotherapy drugs to the cancer cells and cancer stem cells, thereby sparing the healthy cells and reducing the toxic effects of chemotherapy drugs.

**Import Substitution:** In India, this product can compete with immunotherapy drugs and cell therapy products that are imported.

**Export Potential:** Worldwide there is no product that can target cancer stem cells. This product has a huge worldwide potential. They have preliminary interest from J&J.

## Present stage of Development

TRL 4

## Geographical Region Targeted:

India, Africa, Southeast Asia

## Cost:

Approx ₹ 15,000 per ml

## Units sold:

NA

## IP Status:

Patent filed

## Major Achievements (including awards):

Winner LSM, organized by IIT Kharagpur.  
2nd position HST 2022 organized by IIT Mandi  
Top 20 premium startup by Startup Odisha

## Contact detail

Mobile No: 9836956514

## Website:

<https://exsure.in>

## Startup Name

Farm Gulp Pvt. Ltd.

## Product/Technology

**Polyphenols:** Catechin family of antioxidants-  
Epigallocatechin, Epicatechin, EGCG, Syringic Acid  
**Alkaloids:** Arecoline, Arecaidine, Guvacine

**Unique Selling Point:** Areca Polyphenols which has application in various Industries and areca alkaloids which has a potential API used in the treatment of alzheimers and other CNS related disorders which is naturally available only in the Areca.

**Polyphenols:** Low value high Volume

**Alkaloids:** High value low volume

**National/Societal relevance:** Reduce the dependency of import of such molecules and support the indigenous startup exploring alternate natural sources and innovative separation process

**Import Substitution:** Green tea polyphenols, Green tea catechins. These molecules have been imported by various countries from China.

**Export Potential:** Areca Polyphenols, Arecoline, Caffeine free EGC and EGCG polyphenols. These molecules are novel and have a great export potential.

## Product Picture



## Present stage of Development

Proof of Concept established and  
Process Validation & Scaleup

## Geographical Region Targeted:

Domestic market as well as  
international market

## Cost:

INR 4000 to 5000 per Kg of  
Polyphenols with 90% Catechin

## Units sold:

Product samples given for trials in  
various industries

## IP Status:

Complete Specification: 202041044653  
submitted on 14th Jan 2022 for  
the process patent. WIPO PCT: PCT/  
IB2022/050287 submitted  
on 14th Jan 2022.

## Major Achievements (including awards):

- Winner of Unnati prize money of 15L under the category
- of social innovation from Department of Social welfare, Government of Karnataka.
- One of the 12 startups selected for the Karnataka startup advancement programme (KSAP BIO-50) conducted by C-CAMP along with the Government of Karnataka.
- Won 15 Lakhs from the MSME Idea hackathon, monitored by Bangalore Bioinnovation Centre with the Government of India.

## Contact details

Nagendra Prakash  
Mobile No: : +91 7795618099

## Email

nagendra@farmgulp.com

## Website

www.farmgulp.com

## Startup Name

**Fermentech Labs Pvt. Ltd**

## Product/Technology

**High titer industrial enzymes, prebiotics and high calorific value fuel pellet using Solid State Fermentation Technology**

**Unique Selling Point:** Complete valorization of agricultural as well as industrial wastes to produce value added products (Enzymes, Prebiotics, Simple sugars and high CV fuel pellets) from a single process.

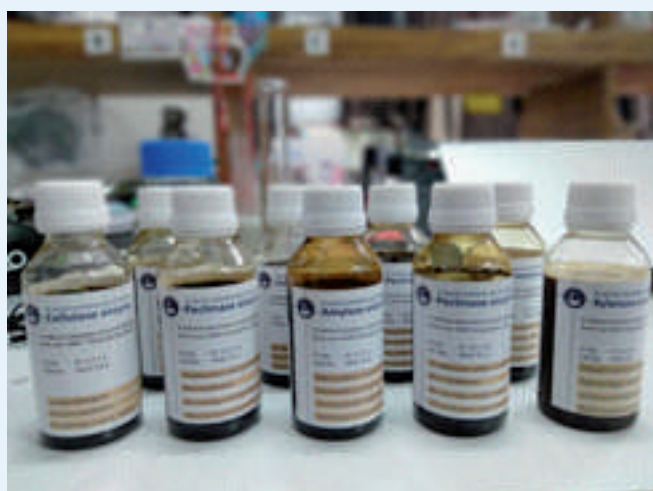
**Product Positioning:** Low cost, high titer industrial enzymes and prebiotics while addressing waste disposal issues of textile/food & beverage/animal feed industries.

**National/Societal relevance:** Since the agro-wastes are procured directly from farmers, this adds to their income which is directly aligned with H'ble PM vision of doubling the farmers income. They have procured more than ~20 tonnes of agricultural waste as of Dec, 2022 which otherwise would have been burnt and this has also resulted in additional revenue of ~6000 INR to 28 farmer households.

**Import Substitution:** Since most of the enzymes are presently imported in India, the present innovation presents a viable alternative to imports.

**Export Potential:** The global enzyme market is valued 7bn \$ and is growing at 7% pa. Further, with industries adopting sustainable practices for biomass treatment and in order to cut carbon emissions, there is a huge potential for exports as well.

## Product Picture



## Present stage of Development

TRL-6/7

## Geographical Region Targeted:

Pan India

## Cost:

INR 1500-4000 per litre of enzyme

## Units sold:

~20 units worth 60K INR supplied to customers.

## IP Status:

A novel SSF bioreactor (patent file no. 201611020038), A process for production of Xylanase, XoS and High CV fuel pellets from a novel isolate A. corrugatus (in process)

## Major Achievements (including awards):

- Won Techtonic- Innovations towards Zero Food waste challenge of DBS Bank and social alpha, Aug 2022.
- Awarded Best Young Innovative Entrepreneur award, at the Assam Biotech conclave 2022 organised by Guwahati Biotech Park and IIT Guwahati, June 2022.
- Awarded Best Startup Stall at TREX Startup conclave 2022, organised by IISER Mohali, October 2022.
- Selected as the Winner of the AgLive 2022- Innovators Pitch competition organised by CII-Food & Agriculture Centre of Excellence (FACE) 5th Nov, Chandigarh.
- Finalists in Qualcomm Design India Challenge 2020
- Nasscom t4g - Technology for good - Finalists 2019

## Contact detail

Mobile No : +91 7409488318

## Website

[www.fermentechlabs.com](http://www.fermentechlabs.com)

## Startup Name

**FIBROHEAL WOUNDCARE PVT LTD**

## Product/Technology

**SILK PROTEIN BASED WOUND MANAGEMENT SOLUTION**

**Unique Selling Point:** Faster wound closure, higher cell attachment, reduced scar formation, cost effective

**Product Positioning:** Comprehensive advanced & active Wound Management Solutions using silk proteins.

**National/Societal relevance:** Import Substitution, cost effective product range with ability to impact many lives including economic multiplier impact.

**Import Substitution:** Yes

**Export Potential:** Yes

## Product Picture



*D-FIBROHEAL – SUTUREDRESS (Silk protein based adhesive dressing For post operative wounds)*



*D-FIBROHEAL –Ag Powder ( Silk protein based powdered dressing For different types of*



*D-FIBROHEAL – Foam (Silk protein based dressing For high exudating wounds)*

## Present stage of Development

EARLY COMMERCIALISATION

## Geographical Region Targeted:

INDIA & WORLD

## Cost:

Rs 40 – Rs 4000

## Units sold:

Upwards of 1 Lakh units

## IP Status:

4 patents in hand

## Major Achievements (including awards):

Winner of National Technology award under start up category, winner of Startup of the year during Bengaluru Tech summit 2020 and finalist of National Startup award in 2020.

## Contact detail

**VIVEK MISHRA**

## Email

## Website

[www.fibroheal.com](http://www.fibroheal.com)



## Startup Name

**Flic Farm Pvt Ltd (XMachines)**

## Product/Technology

**X100 UGV (Autonomous Agricultural Robot for Dry Crops)**

X100 UGV is a fully electric, Multi-purpose Autonomous Robot designed to perform agricultural operations that occur post plowing till pre-harvesting. X100 UGV is autonomous and functions like a micro-tractor to perform Seeding, Weeding, Spraying & Fertilizer Micro-dosing activities with the help of various AI driven smart attachments.

**Unique Selling Point:** The USP of X100 UGV is "Precision agriculture delivered at an affordable price leading to productivity increase, cost savings & lowered crop inputs for Indian Farmer benefitting Indian Farmer, Consumer & Environment".

**Product Positioning:** Vegetable growers in Polyhouses or outdoor farms. As well as any dry crop farmer.

### National/Societal relevance:

- 1) There are no existing robots in the market at our price point of 1.75L, thus making the product a cost-effective, efficient and portable solution even for heavy duty agriculture and industrial work.
- 2) Bringing in a Rental Model via rural micro-entrepreneurs facilitates cost effective solutions for local farmers as well as revenue generating self employment opportunities for the rural youth.
- 3) As a Agri-based Company, we wish to encourage the youth to take up agiculture as an active profession.
- 4) By creating a chemical-free alternative way of addressing farming problems we are shifting the perspective of farmers.

**Import Substitution:** Yes

**Export Potential:** The product can be exported to Europe, Japan, Turkey, Vietnam, Indonesia, Philippines, South Korea and many more industries.

We have already successfully commercially exported a Robot to a European Customer.

### Product Picture



## Present stage of Development

Product ready for sale

## Geographical Region Targeted:

No geographical limitations

## Cost:

Starts from INR 1.75L

## Units sold:

2

## IP Status:

Patents Applied

## Major Achievements (including awards):

- Successfully exported a robot to a European Customer.
- Selected into Food Tech 500 list - 2021
- Selected as one of 75 startups in 75 years of independence by BIRAC
- Successfully finished pilot run with Telangana State Agri University in 2 seasons.
- Secured investment interest from one of the top agri input conglomerates and in final talks.
- We have also been invited to demonstrate our product and technology to various international visitors for its merit. Some of those include visitors from World Economic Forum, Researchers from University of Copenhagen, British High Commission and many more high profile visitors.

## Contact details

Mobile No: : 7674901046

## Email

trivikramkumar@xmachines.ai

## Website

www.xmachines.ai/smart-farming

## Startup Name

**FOOTPRO SOLUTIONS PVT LTD**

**Product/Technology:** Podiatry or Foot related science is the key action area of FootPro®. Every foot is unique and they need customised solutions to get the maximum relief and benefits. We offer advanced foot care solutions by means of customised insoles & footwear to our customers through a unique CAD-CAM technology, imported from Germany. The system consists of a 3D Laser Scanner, a 3D designing software (CAD) and an automatic CNC milling machine (CAM).

**Unique Selling Point:** 100% customization of Insoles using CAD CAM technology combined with a 3D Laser Scanner

**Product Positioning:** Offering foot care services to people with diabetic and orthopedic foot related problems through customised Insoles and Footwear

**National/Societal relevance:** Foot care concept in India is at its earlier stage only. People (mainly economically backward) are unaware or ignorant about the importance of foot care and thereby ended up with disastrous results (amputation, permanent deformity and so on). A diabetic foot if not taken care well, can cause the life of a person (& their family members too) miserable.

**Import Substitution:** Developed the raw materials for the Insoles (EVA) indigenously. Under the process of developing an independent CAD CAM system which is combined with a 3D Laser Scanner

**Export Potential:** A huge world market is open for this project as still the technology is in the hands of Developed nations and is costly too.

## Product Picture



## Present stage of Development

9+ years of trusted service, 10 scanning centers and 40,000+ satisfied customers. Expanding to other parts of India with more and more service centers. Annual turn over of INR 2.7 Crore

## Geographical Region Targeted:

All India

## Cost:

INR 5000 approx

## Units sold:

40,000+ pairs

## IP Status:

Not applicable as the technology is already exists in the developed countries since many years

## Major Achievements (including awards):

A data base of 40,000+ satisfied customers, presence in 8 south Indian cities and a trusted relation with the medical fraternity through dedicated services

## Contact detail

**HARI G NAIR**  
Mobile No: : +91 9447011012

## Website

[www.footpro.in](http://www.footpro.in)

## Startup Name

**Foundation for Neglected Disease Research (FNDR)**

## Product/Technology

**A Device to Deplete Antibiotic Residues from Wastewater to Counteract Anti-microbial**

**Unique Selling Point:** Hospitals, Pharma industries, Animal husbandries, Residential and Commercial complexes

**Product Positioning:** General public, private, and government complexes.

**National/Societal relevance:** To act against antimicrobial resistance.

**Import Substitution:** Filtration device

## Product Picture



Filter Bag



Filter bag housing



Installation at Hospital STP

## Present stage of Development

Technology Readiness Level-6

## Geographical Region Targeted:

India and Outside India

## IP Status:

Application under progress

## Major Achievements (including awards):

Lab scale performance and deployed in a hospital and proven the depletion of antibiotics. Other than antibiotics, device is capable to deplete textile dyes, pathogens, fluoride, heavy metals, etc.,

## Contact detail

Dr. Shridhar Narayanan  
Mobile No: : +91 9611598805

## Email

shridhar.narayanan@fndr.in

## Website

www.fndr.in

## Startup Name

Foundry Medical Technologies Pvt Ltd

## Product/Technology

"SWASA" Ventilator

**Unique Selling Point:** Indigenously developed portable ventilator for emergency ambulatory situations, providing a battery back-up of up to 4 hours continuously.

**Product Positioning:** B2G, B2B, B2C, NGO. They intend to take it to International markets and eventually seek FDA.

**National/Societal relevance:** There have been many instances where patients have lost their life during transit to hospitals due to lack of proper ventilator facilities in ambulances, especially during COVID. SWASA is a portable ventilator that is easy to port from ambulances to ICU and can provide treatment during the crucial time of travel to the hospital and within the hospital. The same device can be configured for both Paediatrics and Adults. Most ICU ventilators are compressor based and hard to move, SWASA is blower based and easy to carry. It has an additional monitoring unit that puts data into the cloud for remote monitoring.

**Import Substitution:** Before COVID, India had only about 16,000 Ventilators of which 90% were imported, which shot up to 36,433 in less than a year because of the Global pandemic. Our Indigenously developed portable Ventilator will provide self-reliance for a crucial product and protect against global supply chain issues

**Export Potential:** The global ventilator market size was USD 2.54 billion in 2019 and is projected to reach USD 9.13 billion by 2027, exhibiting a CAGR of 5.0% during the forecast period. Our device will be a competitor for the Chinese Ventilators being deployed in the country. Provided the right support, it can create an export potential to the under developing countries or countries which require the emergency devices.

## Product Picture



## Present stage of Development

Validation Stage

## Geographical Region Targeted:

USA, European Union & Asia pacific countries

## Cost:

INR 6,00,000

## Units sold:

None as on date

## IP Status:

IP filing is in process

## Major Achievements (including awards):

3rd place in Global Ventilator Challenge

## Contact details

Sai Praveen Panchakarla  
Mobile No: : +91 9553585434

## Website

www.foundrym.in

## Startup Name

**Galanto Innovations Pvt Ltd**

## Product/Technology

**Smart Hand Rehabilitation System (RehabRelive Smart Glove)**

**Unique Selling Point:** Faster recovery of hand movements, Virtual exercises based on activities of daily life, Accurate assessment and tracking of recovery progress, Lightweight and wireless device, Remote doctor consultation

**Product Positioning:** Virtual hand physiotherapy for faster recovery.

**National/Societal relevance:** Post-stroke disability is becoming alarmingly common in the working population. Patients become overly dependent on caregivers and cannot work leading to financial crises, isolation, and depression. Current hand rehabilitation techniques are ineffective in enabling the patients to recover effectively and reclaim their socio-economic independence.

**Import Substitution:** Yes (for FlintRehab, Anika and other virtual rehab solutions)

**Export Potential:** Yes ( Target Market: Asia, US, Europe).

## Product Picture



## Present stage of Development

Validation

## Geographical Region Targeted:

Pan India ( patients with hand disability),  
Physiotherapy centers and Hospitals

## Cost:

Multi account variant: Rs 1,00,000 ( for Hospitals, Physiotherapy Centers);  
Single account variant: Rs 35,000 (for individuals)

## Units sold:

30

## IP Status:

Filed

## Major Achievements (including awards):

1. Entrepreneur-in-Residence (EIR), TIH Foundation, IIT Bombay, 2022
2. Encouragement Award, Pitch-Fest, CAHOTTECH 2022, Sep 24, 2022
3. Gandhian Young Technological Innovation Appreciation Award (SITARE-GYTI) 2021, BIRAC, Department of Biotechnology, Govt. of India
4. INAE Young Innovator and Entrepreneur Award, Indian National Academy of Engineering, Oct 10, 2021.
5. Gold medal, Outstanding Innovation Award, Indian Institute of Technology Gandhinagar, Aug 29, 2021
6. NIDHI PRAYAS GRANT, Department of Science and Technology, Feb 2021.
7. BIRAC cash prize, National Bio Entrepreneurship Competition (NBEC 2020), Ministry of Science, Govt. of India, Dec 2020

## Contact details

Dr Chandan Kumar Jha  
Mobile No: : +91 7898392155

## Email

info@galantoindia.com

## Website

www.galantoindia.com



## Startup Name

**Garveish Herbaceuticals Private Limited**

## Product/Technology

**Herbal Botnical Plant Extracts manufacturing with modern machines and technology with ancient process.**

**Unique Selling Point:** Pure natural extracts.

**Product Positioning:** NA

**National/Societal relevance:** NA

**Import Substitution:** NA

**Export Potential:** Demand of herbal products worldwide increasing day on day.

## Present stage of Development

Manufacturing and Marketing all over

## Geographical Region Targeted:

PAN INDIA

## Cost:

120.00

## Units sold:

5000

## IP Status:

Registered Trademarks

## Major Achievements (including awards):

Selected to visit DUBAI Expo in march 2022

## Contact detail

Mobile No: 918827211111

## Email

info@garveishherbals.com

## Website:

www.garveishherbals.com

## Startup Name

Generation Net Nutrition Private Limited

## Product/Technology

*Cordyceps militaris* Mycelium Mat Tea

**Unique Selling Point:** Affordable price, vegan, gluten free, Cordycepin 1.96 mg/g, adenosine 0.54 mg/g, less production cycle, spill of products (natural yellow colour, cordyceps tablet, extract, power, ingredients for food formulation), alternative protein sources with medicinal properties.

### Product Positioning:

**National/Societal relevance:** The problem for lack cheaper *Cordyceps militaris* products. The existing process is time consuming, collection from wild, uncontrolled environments, identification issues, seasonal, not available through the year etc. Our solution provides alternative approach where mycelium mat is produced in controlled conditions. The mycelium-based health medicinal mushroom product is available in China, Korea and other countries. The products are developed using vegan ingredient, affordable price Rs 10 to 30 per cup of Tea (1 gram of dry product).

**Import Substitution:** Product coming from China and USA

**Export Potential:** Yes.

### Product Picture



## Present stage of Development

Product production trials in Lab completed.

## Geographical Region Targeted:

India and Asia countries

## Cost:

Rs 10 to 30 per gram

## IP Status:

Under provisional patent

## Contact details

Dr. Thiyam General  
Mobile No: : +91 8449494640

## Email

Farden010@gmail.com

## Website

<https://gnetn.com/>

## Startup Name

**Genomiki Solutions Private Limited**

## Product/Technology

**Bioinformatics Pipelines to analyse, interpret and report clinical genomics datasets**

**Unique Selling Point:** The product is a genome-informatics platform and/or service which will analyse complicated, high-throughput big biological datasets in a very reasonable amount of time, will be affordable and promise high sensitivity and specificity. The innovative component of solutions will be the use of genetic diversity of Indian populations.

**Product Positioning:** The solutions and services will empower diagnostic labs to conduct the genomic tests at large scale with reduced costs.

**National/Societal relevance:** We are providing results in very short turn around time and are very affordable which helps to reduce the economic burden of the society and the nation

**Import Substitution:** The current market is using a lot of solutions not made in India. Yes, we are trying to build a product to substitute them.

**Export Potential:** The bioinformatics pipelines and algorithms developed can be used to analyse datasets across the world. They are also building in-house resources which are region specific especially India-specific and will be gradually expanding them to cover other countries as well.

## Product Picture



## Present stage of Development

They have developed the bioinformatics pipelines for three genomic testing datasets and have been validating the efficacy with tie-ups with certain diagnostic labs. They have also commercially provided these services for one of these pipelines.

## Geographical Region Targeted:

We are targeting diagnostic labs  
Pan-India

## Cost:

Under Process

## Units sold:

Under Process

## IP Status:

Are going to apply

## Major Achievements (including awards):

They have received a grant of INR 10,00,00 from Startup India Seed Fund. They have been selected among top 20 and top 100 ventures at Women Startup Program 3 at NSRCEL at IIM Bangalore

## Contact details

Mobile No: : +91 9911554304

## Email

deeksha.bhartiya@genomiki.com

## Website

<http://genomiki.com/>

## Startup Name

**Godaam Innovations Pvt. Ltd.**

## Product/Technology

**Godaam sense-an IOT-based sensor**

Godaam sense-an IOT-based sensor hardware product that uses industrial-graded sensors to collect real-time data from the field and analyze it at the back end using machine learning algorithms and communicating it with farmers over text alerts

**Unique Selling Point:** Onion rotting detection

**Product Positioning:** N/A

**National/Societal relevance:** India is the second largest onion-producing country i.e., 3 crores MT onions every year, where 70% of the production is stored in warehouses for a period of 6-8 months. Every year there is around 40-50% wastage in the warehouses due to various reasons such as the mixed variety sown, cultural practices followed and micro-climate conditions in which the crop is grown and stored

**Import Substitution:** No import substitution right now

**Export Potential:** Can be exported to the onion-producing and storing countries

## Product Picture



## Present stage of Development

Ready to launch

## Geographical Region Targeted:

Maharashtra, Madhya Pradesh, Karnataka

## Cost:

INR 11,000 /-

## Units sold:

500+ devices

## IP Status:

Granted

## Major Achievements (including awards):

Innovative women Agri entrepreneur award - Krishithon, Business and innovations award - Lokmat Sakhi, Research published through an International Conference, Women In Agriculture award, People's choice award Cleantech Global Idea Competition

## Contact detail

Mobile No: : +91 7020785546

## Email

## Website

[www.godaaminnovations.com](http://www.godaaminnovations.com)

## Startup Name

Health Sensei India Pvt Ltd.

## Product/Technology

ICU Remote Monitoring

**Unique Selling Point:** Multibrand Monitor Compatible

**National/Societal relevance:** Allows remote monitoring by ICU doctors from outside the hospital also allowing critical monitoring 24 hours.

**Export Potential:** Possible with certifications.

## Present stage of Development

Commercial Scaling

## Geographical Region Targeted:

Pan India

## Cost:

Annual Subscription Model INR 1,00,000 for 10 monitors to be monitored

## Units sold:

11

## Major Achievements (including awards):

FICCI Award for partner hospital, Commercial status within 11 hospitals,

## Contact details

Dr Magitha Shyamsundar

## Website

[www.healthsensei.co.in](http://www.healthsensei.co.in)



## Startup Name

**HELO HEALTH TM**  
Adarsa Private Limited

## Product/Technology

**Simple to use, portable health check device, built for Bharat, enabling specialized tests, tests for infectious diseases, markers, basic vitals, blood and urine tests**

**Unique Selling Point:** Portable device that can check 35 parameters with instant results

**Product Positioning:** A device to conduct tests, get instant readings, print, WhatsApp reports to patient or doctor for prescription.

**National/Societal relevance:** Solve the issue of lack of access to diagnostics in rural India.

**Import Substitution:** Yes

**Export Potential:** Yes.

## Product Picture



## Present stage of Development

Prototype, MVP

## Geographical Region Targeted:

Rural India

## Cost:

Rs. 2.50 Lakhs

## Units sold:

Being launched at this event

## IP Status:

Patent filed

## Major Achievements (including awards):

- Atal New India Challenge 2.0 Award from Niti Aayog
- Amrit Jan Care Award from BIRAC, Department of Biotechnology (DBT), Government of India
- Startup India Seed Fund Award
- Nidhi Prayas Grant, DST, Govt. of India
- Best Exhibition Award at Impact 2.0 Conclave organized by Pune University and Head Start

## Contact detailsv

SANDEEP BHATIA

## Email

## Website

[www.helohealth.in](http://www.helohealth.in)

## Startup Name

**Heyan Health Solution Pvt. Ltd.**

## Product/Technology

**DiLasa Easy! Smart! Accurate !A Wearablevest having 12 leads on TORSO with embedded systems which generates interpretable and diagnosable ECG which is then transferred to mobile applications and respective cardiologists to provide immediate and effective treatment .**

**Unique Selling Point:** Accurate, easy to use and portable device which can be easily worn even at the time of emergency.

12 lead ECG points on torso, first to identify the points in the world wide.

Easy to operate: non- medico individual can operate and capture the ECG.

One Family, One device: It is not a gender biased and age biased product. One product is sufficient for females as well as males falling under any age group.

**Product Positioning:** B to C, B to B.

**National/Societal relevance:** Importance of ECG in diagnosis of heart related problems will be demonstrated & patient will be aware. Patient will start taking precautions by having timely monitoring & having perfect advice about the heart related issues, So the mortality rate will be reduced People & patients will have easy access to the ECG monitoring & advise across the country.

**Import Substitution:** NA

**Export Potential:** Novelty & Potential to export worldwide

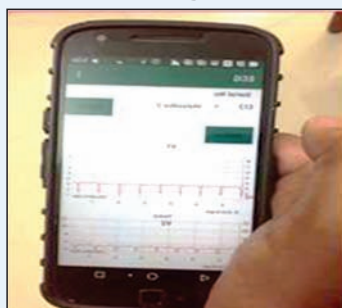
### Product Pictures:



VEST



ECG DEVICE



CLOUD SERVER APP

## Present stage of Development

POC

### Geographical Region Targeted:

Initially, targeting tier one, tier two and tier three cities. Eventually focusing on world wide regions, reaching every health-conscious individual.

### Cost:

Approximately 15K each, subscription model will also be introduced.

### Units sold:

NA

### IP Status:

India Provisional Patent No.53313  
Dt.2019/10/11

- Australian Patent Application No.2020361759
- National Phase Of International Application No.PCT/IN2020/050855
- Singapore Patent Application Number : 11202203702V
- PCT Application No.: PCT/IN2020/050855
- USA ,Attorney Docket Number : 132599-0101
- International Application No.: PCT/IN2020/050855

### Major Achievements (including awards):

BIG Grant 20

## Contact detail

Prashant Sadavarte  
Mobile No: 9869233892

## Website:

[www.heyanehealth.com](http://www.heyanehealth.com)

## Startup Name

**Himalayan Hemp Industries Pvt. Ltd**

## Product/Technology

**Himalayan Hemp Sanitary Pad**

**Unique Selling Point:** Rash-resistant, compostable, highly absorbent, World's 1st hemp sanitary pad

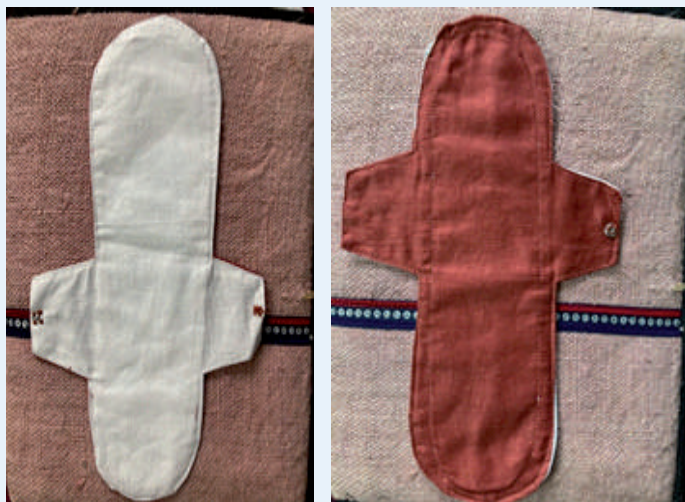
**Product Positioning:** B2B2C

**National/Societal relevance:** It is world's 1st hemp sanitary pads which will be handstitched by local artisans and raw material will come from farmers.

**Import Substitution:** Yes. It can replace other healthy sanitary pads

**Export Potential:** Hemp sanitary pads have huge demand across the world.

## Product Picture



## Present stage of Development

MVP

## Geographical Region Targeted:

Export regions, rural parts of India and tier 1 cities of India

## Cost:

349rs / 3 pads in a pack

## IP Status:

Patent applied and published (Patent application no: 202121000719 A)

## Major Achievements (including awards)

Quantum: INR 5,00,000  
Funder: NIAM, Jaipur (RABI RKVY)

Quantum: INR 10,000  
Funder: Department of Science and Technology (India International Science Festival - Nav Bharat Nirmaan)

Quantum: INR 3,65,000  
Funder: Amrita TBI, Kollam (Nidhi EIR)

Quantum: INR 50,000  
Funder: FICCI FLO

Quantum: INR 70,000  
Funder: ICA Asia Pacific (with Amul and SEWA)

Quantum: INR 49,20,000  
Funder: BIRAC

Quantum: INR 30,00,000  
Funder: Punjab National Bank

## Contact details

Mobile No: : +91 8219655168

## Email

community@himalayanhemp.in

## Website

www.himalayanhemp.in

## Startup Name

Hospito

## Product/Technology

Hospito is making affordable SaaS for Diagnostic Labs to make the day-to-day lab management process more efficient. On top of this, this product will enable diagnostic labs to be discoverable online

**Unique Selling Point:** Currently, no such diagnostic aggregator exists that brings patients and diagnostics labs on a single online platform

**National/Societal relevance:** They aim to create a platform that is trusted by patients and provide blood test services at an affordable price with a premium experience on top of that we aim for the betterment of standalone diagnostic labs by providing them technology (which they really need) and business.

They also have a blood bank portal running, which is built over E-rakthkosh open APIs and helps you to find a blood bank near you in cases of emergency.

**Import Substitution:** In India, they are providing the best technology at the lowest price. Therefore diagnostic labs using foreign software can partner with us.

**Export Potential:** The price for the software is very less compared to the International market, so it creates a scope to expand globally after making the final product after testing.

## Product Picture

## Present stage of Development

They have done our market research and will have our MVP by Mid February, 2023.

## Geographical Region Targeted:

Initially Roorkee for testing and validation, we will then expand to tier-1 cities (Delhi, Noida, Gurugram)

## Cost:

Rs. 500 per month (subscription-based model) for diagnostic labs

## Major Achievements (including awards):

Received a grant of Rs. 7 lakhs from TIDES, IIT Roorkee



## Contact details

Mobile No: : +91 9568561582

## Email

hospito.in@gmail.com

## Website

www.hospito.in

## Startup Name

IAPS Agritech Pvt Ltd

## Product/Technology

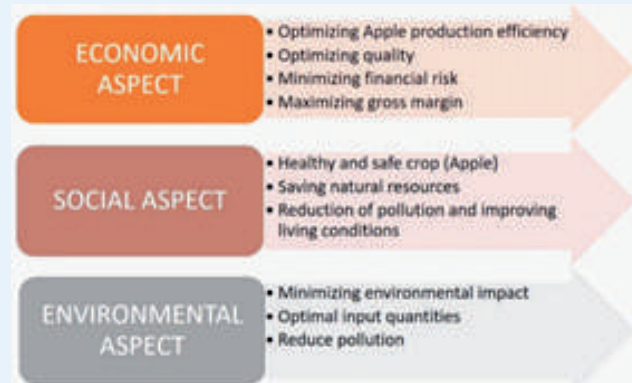
**AppleDOC – An Artificial intelligence-based decision support system for precision apple farming.**

**Unique Selling Point:** Customized spray schedule for each orchard, location and farm specific advisories, orchard specific weather updates, digital soil health cards and actionable plans, disease and pest prediction and forecast.

**Product Positioning:** AppleDoc is the “First Apple Specific AI driven Decision Support System for farmers”, and it would be compliant to Agri 4.0 revolution, and in the most easy to understand format.

It is specific to cohort associated with apple industry like apple growers, policy planners, state agriculture universities, experts, pesticide dealers, nutrition dealers, CA stores and buyers.

## National/Societal relevance:



**Import Substitution:** There are many competitors in the market nationally and globally like Plantix, FASAL, CropIn etc. All of these are generic type DSS. The adoption of any of these platforms is almost zero with the apple farmers, because none of them suits to their specific requirements. AppleDOC being developed organically, would overcome all the deficiencies, and the adoption rate by farmers would be higher than 70% as per our preliminary survey.

**Export Potential:** We are launching our platform (AppleDOC) in Italy for customized fertigation and weather updates plans.

## Product Picture



Homepage

Nursery Page

Weather page

Connect with expert page

## Contact details

Dr Basharat Ahmad Bhat  
Mobile No: : 9541556608

## Email

## Website

<http://getappledoc.com/>

## Present stage of Development

Beta-testing-platform is currently being tested by 1000 growers.

## Geographical Region Targeted:

All apple producing states/regions in India (Jammu and Kashmir, Himachal Pradesh, Uttarakhand)

## Cost:

Platform is under testing phase, so fee is being charged.

## Units sold:

Currently are testing our platform with 1000 growers.

## Major Achievements (including awards):

- Best startup award by SKUAST-Kashmir.
- Excellent contribution in science and technology award from SKUAST Jammu and SKUAST Kashmir.



## Startup Name

**In Dhan Pay Gate Pvt. Ltd.**

## Product/Technology

**Payments Gateway for synchronizing payments in the fuel station industry by using the technology of Non QR Code.**

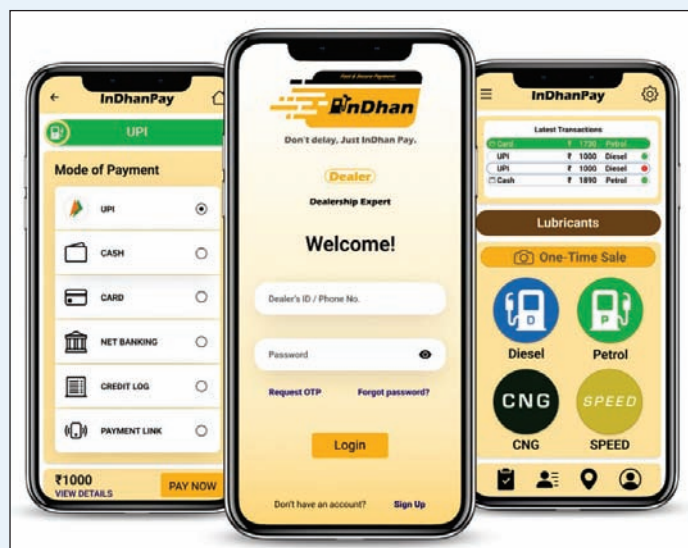
**Unique Selling Point:** Technology

**Product Positioning:** Standalone devices on the dispensary units.

**National/Societal relevance:** It influences the economy of the country.

**Export Potential:** India and Overseas

**Product Pictures:**



## Present stage of Development

Prototype

## Geographical Region Targeted:

India and Overseas

## Cost:

Different subscription models are available

## Units sold:

At the prototype stage

## Major Achievements (including awards):

Selected for AWS Moonshot at Central India's Startup Summit

## Contact detail

Mobile No: 79870 51347

## Website:

[www.indhanpay.com](http://www.indhanpay.com)

**Startup Name****Innovative Scripts Private Limited****Product/Technology**

DigiPatra is a SAAS portal that allows users to instantly store, generate, authenticate, validate, and verify educational documents. We are using blockchain technology to secure certificates and records.

**Unique Selling Point:** Product: Underlying Technology (Blockchain), Support

**Product Positioning:** Quality and Characteristics-based

**National/Societal relevance:** DigiPatra is based on Blockchain technology, and it is increased security. Because a blockchain is a decentralized and distributed ledger, it is less vulnerable to tampering or fraud than a traditional centralized database. This makes it more reliable and trustworthy as a source of information about educational qualifications across nations.

**Import Substitution:** No foreign player in India

**Export Potential:** High

**Product Pictures:**

**Present stage of Development**

Commercialization TRL level 9

**Geographical Region Targeted:**

PAN India

**Cost:**

Rs. 100 (Per Unit) Units sold: 300,000  
(On-Freemium basis)

**IP Status:**

Under Process

**Major Achievements  
(including awards):**

We are recognized by Startup India and among the Top 75 emerging start-ups(2022) in India by the Ministry of Education's Innovation Cell & AICTE. Fund granted and supported by Ministry of Education's Innovation Cell (MIC).

**Contact detail**

Mobile No: 9818987581

**Email** shubham@innovativescripts.com**Website:** <https://innovativescripts.com>, <https://digipatra.com>

## Startup Name

InterCosmos

## Product/Technology

Multi-Purpose Space Vehicles(MSVs)

**Unique Selling Point:** MSVs are smart, ultra stable and are propelled by non-toxic chemical propulsion system called HyperX

**Product Positioning:** To global satellite makers.

**National/Societal relevance:** Yes, National relevance

**Import Substitution:** NA

**Export Potential:** Yes. It has a huge export potential and in fact 90% of our customers are from outside the country.

**Product Pictures:**



## Present stage of Development

PoC to Prototyping.

## Geographical Region Targeted:

Global

## Cost:

Too Early to fix the cost

## IP Status:

Yet to apply for the patent

## Major Achievements

(including awards):

SISFS Grant and Nidhi Prayas Grant.

## Contact detail

Gokul  
Mobile No: 9789289867

## Email

gokul@intercosmos.co

## Website:

www.intercosmos.co

## Startup Name

**Intisen Technology Pvt Ltd**

## Product/Technology

- (a) Smart Module for Respiratory Health Monitoring
- (b) Smart Module for Body-Vital and Cardiac Health Monitoring
- (c) mHealthcare Solutions

**Unique Selling Point:** Affordable modules for large scale deployment, replaceable sensors

**Product Positioning:** The product will be useful for primary healthcare centers, and hospitals/ health centers for initial health analysis in out-door, health monitoring for chronic patients.

**National/Societal relevance:** Decentralization of diagnosis of prevalent diseases, enabling personal healthcare, strengthening rural healthcare, supports make-in India.

**Import Substitution:** The mentioned solutions have potential to replace imported medical equipment for personal healthcare.

**Export Potential:** The mentioned solutions can be exported in other countries for large scale deployment.

**Product Pictures:**

## Present stage of Development

TRL 4 – TRL 5

## Geographical Region Targeted:

The products will be useful in low resource conditions such as in rural/sub-urban set-up in India. Further, this also will be useful in urban and cities as a personal health monitoring devices among youths and chronic patients.

## Cost:

Cost validation in progress

## IP Status:

1 Patent Filed, 3 Patent Filing in Process

## Contact detail

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**Website:** www.intisen.com

## Startup Name

**IOTA DIAGNOSTIC PVT. LTD**

## Product/Technology

**Bio-Specimen Micro-sampler Device**

**Unique Selling Point:** No unsafe blood reaches the patient ; Increase availability and reduction in wastage ; Traceability & accountability ; Quality Assurance & Hemovigilance

**Product Positioning:** NA

**National/Societal relevance:** Bringing affordable and accessible diagnostic reach for 70% rural people of India

**Import Substitution:** Mitra Microsampler, Whatman 903 Card, and Dried Blood Spotting Card.

**Export Potential:** In South Asia, Middle East Africa, United States of America and Europe

## Product Picture



## Present stage of Development

Clinical Evaluation (TRL: 7)

## Geographical Region Targeted:

India

## Cost:

110 INR/kit

## Units sold:

30

## IP Status:

Patented

## Major Achievements (including awards):

- Mr Vaibhav Shitole was awarded the BIRAC SITARE-Gandhian Young Technological Innovation Award-2020 and a 1,500,000 INR Grant for the development of a blood micro-sampling device.
- IDPL has been recognized as a StartUp under Department for Promotion Industry Internal Trade, Govt. of India.
- Recognised Emerging Start-up in Biotechnology by Entrepreneurship Development Institute of India, felicitated by hon. Shri Ashiwini Vaishanv, Union Minister of Railway.
- Selected in 'top 150 Startup' by Lemon School of Entrepreneurship

## Contact detail

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## Email

## Website

<http://iotadiagnostic.com/>



## Startup Name

**ipanelKlean Solar Pvt Ltd.**

## Product/Technology

**ipanelKlean – A disruptive patented technology in waterless solar panels self cleaning system**

**Unique Selling Point:** Increases solar power generation upto 100%, Reduces payback period upto 40%, Gives IRR from 28% to 81%, that too without additional rooftop space or land area.

It does not have any moving parts on solar panels, it is brushless and automatic, only technology that is successful on both rooftop and utility solar segments, has over 25 years system life and very low maintenance cost.

In this we first make the solar panels slippery using nano-coatings such that the dust wont stick to them and then loose dust is blown clean using compressed air. The process is repeated multiple times a day.

**Product Positioning:** Solar Power Plant owners and investors in rooftop and utility segments including commercial, industrial, hospital, institutional and residential.

**National/Societal relevance:** ISolar plants loose power generation upto 70% in rooftop segment and upto 33% in utility segment due to dust deposition, there is scarcity of water in cleaning them (with water table dropping upto 2m/year, by 2030-40% of India wont've access to fresh water, a report of NitiAyog), there's risk to life of solar panel cleaning workers due to high voltage DC electrocution and falling while working. As per NCRB report 13k+ accidental deaths are due to electrocution (with 59% at work place lack of safety practices) and 10k+ deaths due to falling from heights. ipanelKlean solves them all.

ipanelKlean is disruptive patented technology in waterless solar panels self cleaning system that upto doubles the power generation. It has large economic, environmental and social impact globally by potential annual extra revenue of 8 Bilion USD, saving 100 billion litres of water, saving 60 million tons of carbon emissions and saving lives of numerous solar panel cleaning workers from high voltage DC electrocution or falling while working.

**Import Substitution:** Presently, high end robotic solar plants are very expensive to import. Our technology will completely replace them.

**Export Potential:** YThe export potential is for 11 to 15 Billion USD world wide, since there is 629 GW solar plants installed in the world, which are growing @30% CAGR, considering 25% as serviceable addressable market (SAM) it gives us an export potential of 11 to 15 Billion USD worldwide.

## Product Picture



## Present stage of Development

TRL – 6 to 8

## Geographical Region Targeted:

India, Middle East, Africa, US, South East Asia, Australia, Japan and Korea

## Cost:

Rs 22000 to Rs 27000 per kW

## Units sold:

83kW (pilot orders in various stages of progress)

## IP Status:

Our India patent number is 317731. PCT has been filed

## Major Achievements (including awards):

- Selected by Niti Ayog Among Disruptive technology during India PV Edge 2020, Selected by US Embassy initiative among top 3 startups combatting climate change in India, Selected by Capitaland Sustainability X Challenge of Singapore among top 10 startups globally and doing a pilot with them, selected by Sustainability Association of Singapore, among top 12 startups globally 2 times, selected by McKinsey among 200 global startups, Selected by SJVN for a pilot at their Charankha solar park etc

## Contact details

ipanelKlean Solar Pvt Ltd  
Mobile No : +91 9910228861

## Website

[www.ipanelklean.com](http://www.ipanelklean.com)

## Startup Name

iRefill

## Product/Technology

iRefill

**Unique Selling Point:** IOT and AI based refilling machine, QR code-based fully automatic refilling process, Ability to dispense any viscosity of product, Aluminium bottle dispenser, Tracking life of the product

**Product Positioning:** Young people, Environmental conscious, Trend seekers, Competitors' customers, Price-conscious consumers.

**National/Societal relevance:** iRefill are developing a re-filling platform to lessen the impact of plastic. With the aid of cutting-edge technology, To address the plastic crisis by offering product refilling in reusable packaging, allowing customers to refill their products multiple times.

**Import Substitution:** NA

**Export Potential:** Yes

**Product Pictures:**



### Present stage of Development

Pilot stage (Product is developed and already in the market)

### Geographical Region Targeted:

India (Beachhead Market – Indore and Madhya Pradesh)

### IP Status:

Application submitted for the patent

### Major Achievements (including awards):

1. Climate launch pad 2022
2. The Supchallenge (GOA Govt.)
3. Cavin Care Accelerator Program

### Contact detail

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## Startup Name

Janitri Innovations

## Product/Technology

Keyar-Daksh

An affordable & easy to use labor monitoring device KEYAR for early detection of fetal distress by monitoring Fetal-maternal heart rate & uterine contraction in healthcare settings has the potential to prevent neonatal mortality & morbidity. In low resources healthcare settings where a cesarean facility is not available, the early detection of fetal distress will help low-skilled health workers in the early decisions for referral to higher health facilities. KEYAR communicates with our mobile application DAKSH which is an intrapartum monitoring mobile application for an automated partograph generation. DAKSH allows the staff nurse to register and enter vital signs of a pregnant woman. It reminds the staff nurse to monitor the labor vitals, as per the standard WHO intrapartum protocol. It also generates alerts in case of complications, based on an in-built algorithm.

**Unique Selling Point:** Automated Partograph, Remote monitoring, Auto-Interpreted Fetal Reports, Digital reports, Mother's Mobility

**Product Positioning:** B2B, B2C

**National/Societal relevance:** In India almost 70% of the population live in rural areas and availability of biOverwhelming focus on sick care rather than preventive healthcare has been the cause of burgeoning health expenditure and increasing disease burden across the world for a few decades. Along with that, health disparity in urban and rural areas has also been known for a while. So there is a necessity to have a comprehensive, coordinated, and controlled action plan to reform the public primary health care in India. This creates a scope to the new evolving technologies, having much affordable and accessible quality care to serve the last mile. This is possible by collaborating with both Private and Public healthcare sectors in India, which will yield more lucrative results in the future. So, we at Janitri are working with a vision to see a world where no woman or newborn dies during pregnancy, delivery or after delivery.

**Import Substitution:** CTG

**Export Potential:** Worldwide

## Product Picture



## Present stage of Development

Scaling

## Geographical Region Targeted:

Low-middle income countries like India, Africa, Afghanistan, etc

## Cost:

30,000 INR - 1,50,000 INR, product modularity.

## Units sold:

200+

## IP Status:

12 patents filed, 4 granted

## Major Achievements (including awards):

- KEYAR at ASME iShow 2017
- InsightSuccess | The 10 Most Admired Medical Device Companies in 2017
- Deccan Herald | Startup showcases device to ensure safe delivery
- YourStory | Janitri's portable smart device monitors mother and baby to keep them safe through childbirth
- Medical | Silver Winner
- Janitri at Falling Walls Venture 2019 | Breaking the Wall of Maternal and Newborn Mortality
- Janitri at NDTV live campaign "Swasth Banega India"
- Economic Times | Bill & Melinda Gates Foundation-backed Janitri is preventing newborn deaths in rural India
- 4th Commonwealth digital health Merit award in the Maternal & Neonatal health category -
- Janitri at BBC Show | Gujarati
- Janitri at BBC show | Tamil
- Winner at 12th IoT/WT Innovation World Cut in Healthcare Category 2021
- Janitri is one of the notable mentions in PATH PHC tech challenge in MedTech Category.
- 5th ICT Startup Awards by ASSOCHAM
- Janitri has been announced as the lead winner for # CARE startup challenge in the category of Mother and Child Care.
- Public Health Innovation Conclave - Hyderabad TOP INNOVATOR at Innovations Arena 2021.

## Contact details

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## Website

www.janitri.in

## Startup Name

JC OrthoHeal Pvt Ltd.

## Product/Technology

**FlexiOH: The NextGeneration Orthopedic immobilization technology**

**Unique Selling Point:** FlexiOH is a Breathable, washable & lightweight immobilization device for fractured bone and skeletal injuries. It is easy to apply on affected body parts, customizable according to body shapes & also easy to remove after its use.

**Product Positioning:** FlexiOH is addressing strong clinical need from patient perspective, Patient undergoing cast treatment, suffers from poor skin hygiene, lot of hassles related day to day activities and lot of discomfort. FlexiOH is comfortable, convenient and efficient clinical solution for orthopedic injuries which reduces skin related complications.

**National/Societal relevance:** FlexiOH™ is a technology which is completely developed in India by Indian innovators considering not just Indian healthcare situation but for global healthcare goals. Apart from that manufacturing technology going to be used for production FlexiOH™ is also compatible for Indian manufacturing ecosystem. India is a second most populated country in the world and still developing infrastructures hence requirement of healthcare technology is more compare to any other country in the world. India is representing developed as well as developing situation because of large gap in resources availability to general population. There is also huge number of people suffering from bone fractures mainly because of road accidents and trauma. Inventor of the FlexiOH™, who is also a founder- MD of the company, is strongly considering manufacturing setup in India even though product is going to be marketed in India, USA, Canada and Europe. We have projected 5% market coverage in 2027. The Make in India Campaign will help us to make our projections into reality. As per our projections, we are going to generate at least 1000 direct and indirect employment by 2027

**Import Substitution:** Most of synthetic cast are being imported, we can consider particle import substitution with FlexiOH

**Export Potential:** Already exporting in 45+ countries with Major focus in USA and Europe.

## Product Picture



## Present stage of Development

Commercialization

## Geographical Region Targeted:

Global

## Cost:

Rs 2,500/- to Rs 14,000/-

## Units sold:

12000 units

## IP Status:

We have filed an Indian patent with priority number: (3237/DEL/2014) and PCT application (PCT/IB 2015/058579). patents granted in USA.

## Major Achievements (including awards):

- 1) BIRAC-SRISTI Gandhian Young Technological Award 2015
- 2) BIRAC- SRISTI Gandhian Young Technological Grant 2015
- 3) Biotechnology Ignition Grant 2015 – BITAC- DBT- Gol
- 4) Gold Medal DST- Lockheed Martin India Innovation Growth Program- 2016
- 5) IC2 commercialization Support from IC2 Institute, University of Texas – USA on being in top 8 Technology under DST- Lockheed Martin India Innovation Growth Program- 2016
- 6) IUSSTF Silicon Valley Delegate visit on being in top 10 Technology under DST-
- 7) Lockheed Martin India Innovation Growth Program- 2016
- 8) Top 10 promising start-up under CII industrial innovation award 2016.
- 9) BIRAC- Biotechnology Industry Partnership Programme (BIPP) Scheme- 2018
- 10) BIRAC-National Biopharma Mission (NBM)-2020
- 11) BIRAC-Grant Challenges India (GCI)- 2021

## Contact details

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## Website

<https://orthoheal.com/>

## Startup Name

Jouls Ecotech Pvt. Ltd

## Product/Technology

Smart Electric Vehicle Charger for Residential Application

**Unique Selling Point:** 30% efficient, 10x faster technical support

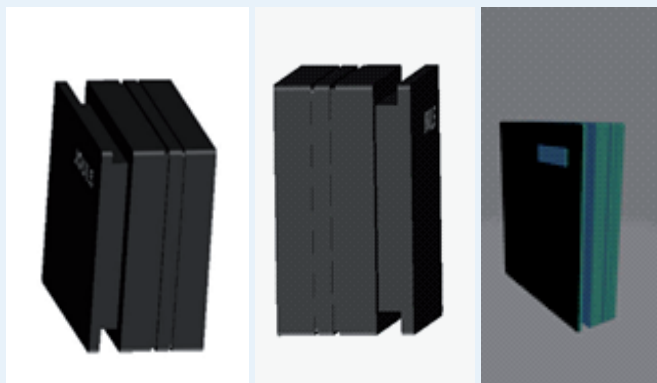
**Product Positioning:** Premium Smart Electric Vehicle Charger.

**National/Societal relevance:** The proposed charger allows users to make them more sustainable, allows to have better charging experience. User can charge with 100% solar power which allows adoption of rooftop solar panels. Their vision is to create innovation & bring inspiration for people to transit towards sustainable lifestyle

**Import Substitution:** 10 %

**Export Potential:** Can be exported

## Product Picture



## Present stage of Development

Product Development,  
MVP Development

## Geographical Region Targeted:

India

## Cost:

50,000 (tentative)

## IP Status:

In Progress

## Major Achievements (including awards):

Won 1st prize BIT-NISHAN (College Competition), Won 2nd prize in Energy Hackathon organized by RRECL.

## Contact detail

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## Startup Name

**Kidaura Innovations Pvt. Ltd.**

## Product/Technology

1. ScreenPlay - Game & AI based Screening tool for autism.
2. Kidaura - A therapy management platform for therapy centers

### Unique Selling Point:

1. ScreenPlay - Games based screening tool, language independent, AI-based.
2. Kidaura - Progress tracking, Data based insights, Home-reinforcement of therapies, Therapy related documentation, In built- Assessment, IEP.

**Product Positioning:** Kidaura offers innovative solutions for early identification and management of autism in children through ScreenPlay, a game-based digital screening tool and Kidaura Care, a therapy management platform. ScreenPlay is fun, non-intimidating, convenient and accessible, Kidaura Care provides an efficient way to document, track progress and manage appointments for therapy centers.

**National/Societal relevance:** Kidaura's products, ScreenPlay and Kidaura Care, are highly relevant to society as they support children with autism and therapy centers. ScreenPlay is a game-based digital screening tool, Kidaura Care is a therapy management platform, both help in early identification, better therapy management, and better outcomes for children with autism and their families.

**Export Potential:** ScreenPlay, a game-based digital screening tool for autism, and Kidaura Care, a therapy management platform, can be easily exported globally with minimal barriers to entry. Both products are in high demand for early identification and management of autism worldwide, especially in countries facing difficulties in therapy centers management.

### Product Picture



1. ScreenPlay



2. Kidaura Care

### Present stage of Development

1. ScreenPlay - Under clinical trials.
2. Kidaura - Launched in May 2022.

### Geographical Region Targeted:

MENA and South East Asia

### Cost:

1. ScreenPlay - INR 500 per child
2. Kidaura - INR 599 per child per month

### Units sold:

1. ScreenPlay - NA
2. Kidaura - More than 15+ therapy centers across MENA and south east Asia

### IP Status:

1. Patent published - ScreenPlay (application number : 202021026125)
2. Trademark granted : Kidaura

### Major Achievements (including awards):

1. Winner of the BIRAC-Social Alpha Quest for Assistive Technologies.
2. Winner of TIDE 2.0 grand challenge - a startup funding program of MEITY.
3. Winner of BIRAC- BIG 17.
4. Part of Anjal Z Techstars Founder Catalyst powered by the Abu Dhabi Early Childhood Authority

### Contact details

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7009105996

### Website

[www.kidaura.in](http://www.kidaura.in)

## Startup Name

**Knowledgepie Pvt. Ltd.**

## Product/Technology

Knowledge is developing a nanoparticle based contrast agent for magnetic resonance imaging (MRI) which can perform dual functionalities of diagnostics and therapeutics. They are safe in normal cell lines and will be tested in renal impaired rodents. Once tested, it will overcome the nephrogenic systemic failure (NSF) issues associated with conventional Gd-based contrast agents present in the market. These nanoparticles were synthesized by an aqueous, green and cost-effective technique and the aqueous solution of it is highly stable in nature.

**Unique Selling Point:** The raw materials for Gd-based contrast agent are mostly imported to India. Hence contrast agent will be the "First to market" "Make in India" product in this regard. Secondly, the same contrast agent possesses both diagnostic and therapeutic property. Third and most importantly, this contrast agent overcomes the NSF issue associated with current CAs.

**Product Positioning:** India's first self developed contrast agent for MRI and world's first MRI contrast agent possessing both diagnostic and therapeutic effects.

**National/Societal relevance:** Over the last decade, magnetic resonance imaging (MRI) has become established as a useful referral diagnostic method in medicine. The use of MRI has grown due to its unparalleled capability to produce high-contrast, anatomically detailed tomographic images of soft tissue structures. Unlike radiography and computed tomography (CT), which use attenuation of an x-ray beam to create an image, techniques that use magnetic resonance (MR) do not reflect changes in tissue density. Instead, MR uses the electromagnetic signal emitted from protons in different tissues.

However, contrast agents are as important as the technique itself. The conventionally used ones are Gd<sup>3+</sup> and Mn<sup>2+</sup> based complexes which work as T1 weighted contrast agents. Where, Mn<sup>2+</sup> is considered as the trace element in mammals body composition and Gd<sup>3+</sup> is not a part of it in normal condition. Hence, toxicity issues are always accompanying the success ends of these contrast agents. We are proposing a contrast agent based on FePt nanoparticle composite capped with biocompatible ascorbic acid. The proposed contrast agent will be able to reduce the toxicity concern significantly whereas its applicability as a therapeutic agent also will enable obtaining multifunctionality within a single entity. Most importantly, the synthesis technique used to develop the proposed contrast agent is a very facile, one pot process which can be executed with minimal facilities.

The high yield, facile synthesis technique used to develop the proposed contrast agent and the higher relaxivity data of the developed FePt nanoparticles will certainly result into a commercial product which can dominate the contrast agent market in near future

**Import Substitution:** In India, the raw material for developing GBCAs are mostly imported. Hence, our product will be an import substitute in this regard.

**Export Potential:** The product is the first one with simultaneous diagnostic and therapeutics. Hence, it has huge export potential.

## Present stage of Development

TRL 4

## Geographical Region Targeted:

India

## Cost:

Rs. 1250 per bottle of 10 mL

## Units sold:

NA

## IP Status:

Indian patent granted to synthesis technique (Indian Patent Reference no 351940)

## Major Achievements (including awards):

Recipient of BIG (18th Call) grant of Rs 50 lacs

1st position (cash award Rs. 5000) in "Innovative idea competition" in a workshop conducted by Kaziranga University, Assam, DPIIT Chair, Tezpur University and NRDC, New Delhi.

## Contact details

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## Website

<https://knowledgepie.in/>

## Startup Name

**Krimmi Biotech LLP**

## Product/Technology

**A Novel Eco-friendly process to induce the silkworm to produce naturally colored silk fibre of desired choice with increased yield**

**Unique Selling Point:** The technology to produce a naturally coloured cocoons (non-woven silk fabric.) -also proposed through a novel technique of forced induction of planar silk. -The proposed planar silk can be value enriched for biomedical applications, undergarments, sportswear's etc. through this technique. - Reduced dependency on water and controls environmental pollution and Reduced dependency on Synthetic/Carcinogenic dyes

**Product Positioning:** Both B2B (with reeling industries )and B2C (Sericulture farmers)

### National/Societal relevance:

- The proposed product helps to increase the yield with desired choice of color
- This technology also eliminates the usage of synthetic dyes which leads to environmental pollution.
- No major producers of planar natural colored silk in India
- Government supports for avoiding the usage of carcinogenic dyes

**Import Substitution:** The technology is already in discussion with Sericulture Association of India, Karnataka State Sericulture Department, FPO's etc., e-commerce companies like Nilima Silk for future commercialization of our products.

### Present stage of Development

The products developed under BIG Scheme are validated and conducted field trials. The products are anticipated to be commercialized in next 6 months.

### Geographical Region Targeted:

The target area is entire Southern India and have done preliminary survey of the proposed technology and sufficient interest among the realer and farmers who can get an additional revenue.

### Cost:

Average Price: (INR 220/- per 50 ml tube (prices varies with colour))

### Units sold:

NA

### IP Status:

Two patents filed on "Inherently Colored Silk with Increased Yield" and "Novel Device to Produce Planar Silk for Biomedical Application"

### Major Achievements (including awards):

Received 'Successful Entrepreneur Alumni Award' from Sir.MVIT Bangalore and Received 'BIRAC Innovator Award' from Hon'ble Union Minister Piyush Goyal during Global Bio India at New Delhi

## Contact detail

**Deepak Bajantri**  
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## Website

**www.krimmibiotech.com**

## Startup Name

**Krisham Healthcare**

## Product/Technology

**Herbal Mosquito Repellent/Vector Control**

**Unique Selling Point:** 100% natural, pure and safe ingredients with highly effective mosquito repellent activity and skin care benefits like moisturization, anti-inflammatory, hydrating and nourishment

**Product Positioning:** Our 100% natural mosquito repellent product range offers complete protection against mosquito bites to customers of all ages and skin types (oily to normal, normal to dry, dry and sensitive). They also offer a body roll-on for frequent travellers and vaporizers for all night protection catering to all domestic users and guests in hotels/resorts. They offer wide range of toxin-free, safe products with skincare benefits and no adverse effects for consumers that can be used indoor as well as outdoor.

**National/Societal relevance:** The recent years have seen a dramatic increase in mosquito vector transmitted viral diseases like Dengue, Chikungunya, malaria, Zika, yellow fever, Lymphatic filariasis, Rift valley virus fever and Japanese encephalitis etc. A key strategy to control the spread of these deadly diseases is to effectively control the vectors. In this context, development of mosquito repellent products could be invaluable for protecting individuals from mosquito bites as well as reduce the mosquito burden by curbing their breeding. Most of the commercial mosquito repellents use the chemical compound N,N-diethyl-m-methylbenzamide (DEET) available since 1946. But its use has been limited by side-effects ranging from skin rashes to neurological disorders. Other options like the piperidine analogue picardin and pyrethroids also pose health hazards to humans on prolonged exposure. A recent study had shown that the commercial mosquito repellent mats and films emitted over 230 volatile organic compounds, prolonged exposure to which can lead to health complications. Further, many mosquito species have gained resistance to extensively used chemical repellents. Our herbal vector control products from Krisham® serve as safe and highly efficient mosquito repellents and also help in skin care by nourishing, hydrating and moisturizing the skin and imparting anti-inflammatory, anti-bacterial and anti-ageing properties. Further, they also indirectly contribute to promoting plantation of the plants from which the raw materials (phytochemicals) are sourced thereby keeping the environment green. .

**Export Potential:** Has export potential to US, Australia, Asian, South American and African countries that also have mosquito control issues.

## Product Picture



## Present stage of Development

Product ready to be launched

## Geographical Region Targeted:

Tropical and temperate regions with mosquito infestation

## Cost:

- Mosquito repellent cream: Rs 40 (10 g), Rs 185 (50 g), Rs 360 (100 g)
- Mosquito repellent lotion: Rs 75 (30 mL), Rs 130 (50 mL), Rs 245 (100 mL)
- Mosquito repellent body butter: Rs 120 (30 g)
- Mosquito repellent vaporizer: Rs 145 (40 mL), Rs 190 (one 40 mL bottle with vaporizing unit)
- Mosquito repellent body roll-on: Rs 45 (10 mL)

## Units sold:

Products to be launched in March 2023 for commercial sale

## IP Status:

Patent application being drafted; Field trials underway

## Major Achievements (including awards):

DST-NIDHI PRAYAS award, Dermatologically tested; Good feedback from consumers on aroma, texture and repellent activity; First mosquito repellent body butter

## Contact details

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krishahealthcare2022@gmail.com

## Website

Under construction



## Startup Name

**Kwaklei and Khonggunmelei Orchids Pvt. Ltd**

## Product/Technology

**Hybrid orchids**

**Unique Selling Point:** Hybrid orchids of Indian origin

**Product Positioning:** The major target customers are the Indian orchid cultivators and the tissue culture laboratories that do commercial micropropagation. Most of these firms depend on other heavyweight orchid producing countries and thus pay heavy import duties. If the products can replace and reduce the import load to certain extent initially, it will be a commendable effort. Our orchids will be more suitable in the different agro-climatic conditions in India for cultivation, than those imported ones. Moreover our orchids are of Indian origin.

**National/Societal relevance:** India, despite having rich orchid resources, has not been able to translate the resource into economy. There is the potential for a flourishing orchid industry in India and this would require dedicated orchid breeders to feed the requirement of new varieties and planting material from time to time. India can also be an exporter of good quality orchids.

**Import Substitution:** Many orchid cultivators, hobbyists as well as tissue culture commercials labs will be benefited by our effort and product. The import loads by this business sector will be minimized to certain extent. New and novel orchid varieties developed in India can be exploited commercially.

**Export Potential:** It is definitely there since orchid industry is a global industry.

## Product Picture



## Present stage of Development

Hybrid orchids which were developed under the BiG and SBIIRI schemes are at pre-commercialization stage. Some of the orchids have flowered and for commercial production clonal propagation via micropropagation is being conducted.

## Geographical Region Targeted:

Global

## Cost:

Rs. 500 per flask (TC plants); Rs. 50/- to Rs.500/- per plant (greenhouse cultivated plants depending upon their age or size)

## Units sold:

>2000/-

## IP Status:

Two Patents Applied

## Major Achievements (including awards):

- Icons of Asia 'Entrepreneur of the Year (Innovation in Technology)' 2022. Conferred by Global Empire Events and Biz Nation TV, New Delhi
- Dr. S. P. Vij Memorial Award, 2022. Conferred by the Orchid Society of India (TOSI)
- Dr. Ibeyaima Innovation Award – 2018 for Hybrid Orchids, Manipur Science and Technology Council (MASTEC), Sponsored by Manipuri Association of Canada, Ontario.

## Contact details

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## Website

[www.kwakleikhonggunmeleiorchids.com](http://www.kwakleikhonggunmeleiorchids.com)



## Startup Name

**Lab Iconics Technologies LLP**

## Product/Technology

**LAB ICONICS LIMS (LABORATORY INFORMATION MANAGEMENT SYSTEM) and ELN (ELECTRONIC LAB NOTEBOOK)**

**Unique Selling Point:** Lab Iconics LIMS – ELN offers many unique features like

- Sample Management and Experiment Management for QC and R&D Workflow
- Custom Field
- Ease of Master Creation by Single time Test Registration
- Test Variables for custom calculation
- Configurable Dashboard
- Default Remarks
- Configurable E-Signature Workflow
- Simplified and Ease of Operation
- Modules for Inventory, Analyst Qualification, LDMS, Label Management, Stability Management, Instrument Management, Retain Sample, etc.,
- Meets regulatory compliance requirements like 21 CFR Part 11, EU Annex 11, GAMP5, ALCOA+

**Product Positioning:** B2B

**National/Societal relevance:**

1. Augment or improve upon human intelligence
2. Increase the speed and quality of decision making
3. Improve transparency, traceability and auditability

Compliance burden removed and product quality is improved by automating critical quality processes like document, training, quality event and product release management in a single end-to-end solution. When quality data is digitized, collected and integrated, it becomes a business-wide commodity that has the power to influence change and improvement across the entire product life cycle. LIMS helps the laboratory to maintain the custody of sample chain and data management, ensure compliance, right product to consumers on time.

**Import Substitution:** Yes. Currently Indian Pharma and Biotechnology industry is dependent on laboratory applications from US, UK and European Suppliers. With the launch of Lab Iconics LIMS, we can provide solution which is made in India with all quality and regulatory standards at affordable cost with quality and compliance.

**Export Potential:** Yes. Studies found that blood supply chain complexities in developing countries like : expiry time, temperature and transportation requirements, supply and demand gap etc. Many low income countries still practice unbanked directed blood transfusion which can be avoided by having effective blood supply chain monitoring solutions.

**Product Picture**



## Present stage of Development

Pre-Commercialization - Product Launched to Market, Beta Testing and Validation in progress

## Geographical Region Targeted:

International

## Cost:

INR: 10 - 35 Lakhs

## Units sold:

Yet to be sold, Integrated LIMS – ELN is scheduled to launch during Mar 2023

## IP Status:

Trade Mark Registration approved for Lab Iconics LIMS, ELN and ADBS

## Major Achievements (including awards):

1. Best Innovative Technology Award from Indian Society of Analytical Scientists (ISAS) at Analytica Anacon India LabExpo, Mumbai - April 2022
2. MSMECCII Excellence Award 2020
3. India 500 Startup Award for year 2019

## Contact details

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## Startup Name

**Life and Limb Private Limited**

## Product/Technology

**BIONICLI®**

**Unique Selling Point:** User Customized Myoelectric Prosthetic hand

**Product Positioning:** BIONICLI® has the following innovative design features:

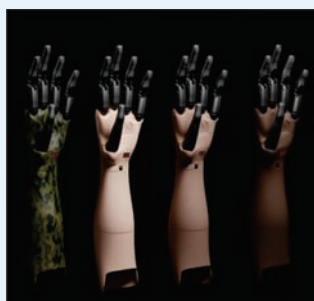
1. Compact and Efficient Battery Pack
2. Motorized abduction motion of thumb
3. Forearm Rotation up to 180 degrees
4. Flexible Origami PCB
5. Thinnest Property EMG Sensors
6. Quick Detachment
7. Ergonomic wrist
8. World's only Standalone Terminal device
9. Customized RAL Color Options
10. Hollow Forearm Shell
11. Anthropomorphic Design
12. Less than 500 g weight
13. Inbuilt EMG mapping by dedicated display
14. Fast Charging support with universal type C
15. BIS Certified Battery back
16. No Screw Bionic design
17. Active distal and proximal flanges
18. Actuator inside fingers
19. 14 Grip patterns offered
20. Safe charging as per IEC/ISO directives

**National/Societal relevance:** Life and Limb intend to deliver a state-of-the-art prosthetic solution that can empower to live to the fullest.

**Import Substitution:** Yes

**Export Potential:** Yes

**Product Pictures:**



## Present stage of Development

Pilot Stage

## Geographical Region Targeted:

India

## Cost:

INR 3.5 Lacs

## IP Status:

Granted: Dt.2019/10/11

- 414739 - "A passive compliant wrist for upper limb prosthesis" [March 2022]

## Major Achievements (including awards):

Received following recognitions for the product:

- Won ISHOW 2021 by American Society of Mechanical Engineers, New York.
- Won Falling Walls Lab India 2021.
- Won AtmaNirbhar Innovation Challenge by MAGIC, Aurangabad.
- Finalist in 3D Pioneers Challenge 2022, a global 3D printed product challenge held in Erfurt Germany, where we were the only Indian Product.

## Contact detail

Prachi Kharb  
Mobile No: 7973039341

## Website:

[www.lifeandlimb.ai](http://www.lifeandlimb.ai)

## Startup Name

**List App Pharmatech Pvt. Ltd.**

## Product/Technology

**PharmaTech company is building transparency between Pharma Companies and Retail Pharmacies.**

**Unique Selling Point:** Exhaustive Pharma product with supplier directory within 2hr service request.

**Product Positioning:** Easily finds Supply information

**National/Societal relevance:** Enablement of last mile pharmacies of India

**Export Potential:** All countries excluding the modern developed ones.

**Product Pictures:**

## Present stage of Development

MVP

## Geographical Region Targeted:

Rural and Urban excluding Metros

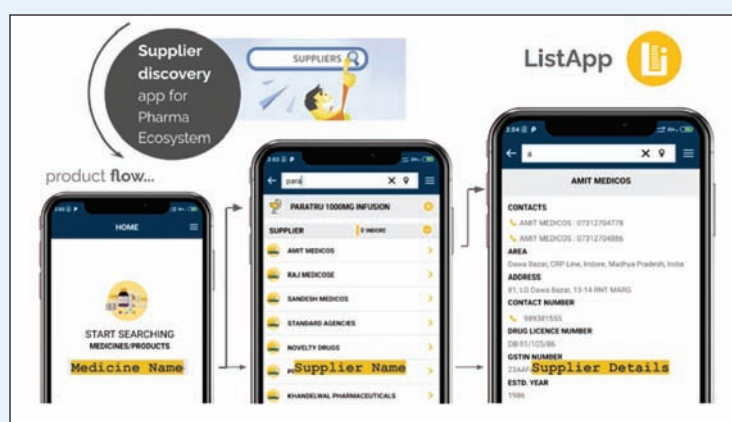
## Units sold:

4000+

## Major Achievements

(including awards):

Super 75 startup of Indore



## Contact detail

Shanil Kothari  
Mobile No: 9977773388

## Website:

<https://bit.ly/Li-S>

## Startup Name

**Machphy Solutions**

## Product/Technology

**Cold Chain for Biotech and Medical sector**

### Unique Selling Point:

- Power backup upto 48 hrs without battery or electricity
- IoT monitoring and preventive maintenance with lowered TAT
- OPEX models
- Renewable power interface

**Product Positioning:** For rural and semi-urban India where cold chain gets expensive due to lack of proper infrastructure. Helps save logistics operators lower upto 50% of operating expenses.

**National/Societal relevance:** Highly relevant to Indian Societal scenario majorly benefiting the Healthcare and Biotech Industry in strengthening the supply chain in Tier-2 cities of India. Also has a potential to impact more than 100 Million lives in India by improving the Blood Bank chains in rural India

**Export Potential:** upto \$5M to South-Asian countries and African Nations.

### Present stage of Development

Commercialised

### Geographical Region Targeted:

India & Southasian countries, Africa

### Cost:

3500 to 4,50,000

### Units sold:

3000

### IP Status:

5 Patents filed in India

### Major Achievements (including awards):

- Awarded Pilot project with World Bank-IFC in Bangladesh , 2022
- Awarded by Cabinet Minister Shri Purshottam Rupala for impact in Animal Husbandry, 2022
- Awarded BIG-BIRAC grant for PoC, 2019

### Contact details

Mobile No: : +91 7978457552

### Email

info@machphy.com

### Website

www.machphy.com

## Startup Name

**Manastik Technologies Pvt. Ltd.**

## Product/Technology

**Teleneurology & Teleneurorehabilitation product catered towards Neurology healthcare ecosystem**

**Unique Selling Point:** One-stop solution in the entire dementia ecosystem.

**Product Positioning:** As of now, product is published in Google Play in internal testing track.

**National/Societal relevance:** Firstly, through the use of CMR feature (Cloud storage of Medical Records), users including doctors can store medical records and access from anywhere on the go.

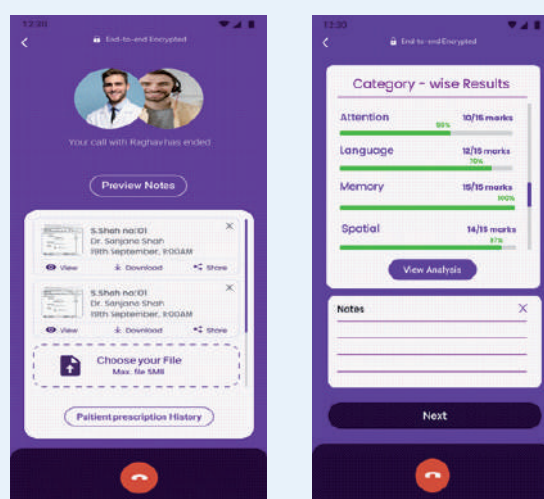
(Doctors for all purposes here mean Neurologists, Neuropsychologists, Neuro Therapists and SLPs/SLTs in the domain of Neurology/Neurosurgery/ Cognitive Neuroscience)

In today's world, old age people are mostly rejected unfortunately. Not many care about them, especially new generation. Further, in dementia, people hardly bother about what they are going through. We are trying to bring about a positive change in their lives including the entire family.

**Export Potential:** Given the increasing rate in mental health disorder community off late, there is a certain need of this in these countries/ continents. Moreover, in some places patient awareness needs to be brought about first in order to ship this product.

All in all, there is a huge export potential, which is in plan when the product crosses Phase 3 release in Indian market.

## Product Picture



## Present stage of Development

TRL-6, in the prototype stage, moving it to production environment.

## Geographical Region Targeted:

Maharashtra (Pune, Mumbai), Delhi

## Cost:

200 Rs/month & comission based model on teleconsultation

## Units sold:

NA

## IP Status:

We are working to get the IP finalized and file a patent.

## Major Achievements (including awards):

- BIRAC BIG Grant Awardee (2022)
- IFNR Young Investigator of the Year Award (2022)
- ASEAN-India Startup Festival (2022), selected amongst 30 startups to represent India at Bogor, Indonesia
- Presented Project at IFNRCON 21 (2021)
- Presente Project at AOCNR (2021)

## Contact details

Mobile No : +91 7588285664  
9172665769

## Email

soubhik.das@manastik.com

## Website

www.manastik.com



## Startup Name

**mBioSys Private Limited**

## Product/Technology

**A low-cost non-invasive early-stage detection kit for colorectal cancer**

**Unique Selling Point:** Microbiome based low-cost non-invasive early-stage detection kit for colorectal cancer, can be used at home

**Product Positioning:** Healthcare

**National/Societal relevance:** Much needed due to rise in colorectal cancer cases

**Import Substitution:** None

**Export Potential:** Yes, major

**Product Pictures:**

## Present stage of Development

Proof of concept done, prototype in development

## Geographical Region Targeted:

India and other countries

## Cost:

Not estimated yet but should be below Rs 100 for India and about 10 USD for other countries

## IP Status:

To be filed after the prototype development is completed

## Major Achievements (including awards):

None

## Contact detail

Dr. Vineet K. Sharma

## Website:

[www.mbiosys.com](http://www.mbiosys.com)

## Startup Name

**Medic Tech Pvt Ltd**

## Product/Technology

**Nanomaterials based industrial additives (raw materials), Different types of Nanomaterials, Nanoparticles, and Nano-composites. They have developed a unified platform for the synthesis of different nanomaterials.**

**Unique Selling Point:** They are manufacturing in house through own developed nanoscale manufacturing machine. They can supply from few milligrams to bulk quantities with custom specifications, with comparative rates.

### Product Positioning:

**Government:** Government Research and Development Labs, Defense (India and Allies)

**Industry:** Industries manufacturing nanomaterial based products (examples including but not limited to) Research labs, Central Instrumentation facilities, Universities, Institutions

**End use Customers:** Nanoscale material based products

### National/Societal relevance:

#### SOCIETAL IMPACT:

- Our custom developed and a wide variety of nanomaterials portfolio will help boost application of nanomaterials in the field of health care and medical diagnostics, where different types of nanoscale materials are required.
- Low-cost nanomaterials decrease the production cost of nanomaterial based products which in turn will help reaching advanced nanomaterial based product to the common man.

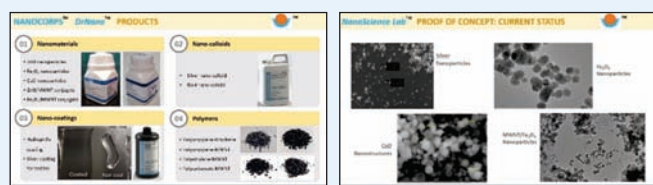
#### MARKET IMPACT:

- Make the overall research cost low in comparison with the products available and the current global exorbitant cost of nanomaterials which suppliers such as Sigma Aldrich and SRL are providing.
- Increasing employment.

**Import Substitution:** Yes

**Export Potential:** Export of machine system, nanoscale materials synthesized in machine system and application-based products in different industries.

### Product Pictures:



### Present stage of Development

All the materials are well characterized using SEM, TEM, XRD, and other related techniques. Kindly refer to the Picture 1 and Picture 2 uploaded along with this form.

### Geographical Region Targeted:

Entire World

### Cost:

Silver nanocolloid (Industrial grade): 900 INR/Liter  
Silver nanoparticles dispersion, APS~50 nm, RG: 1650 INR/50 ml  
Fe3O4/MWNT conjugate, MWCNT Av. OD.: 30 nm, Fe3O4 APS: ~ 25 nm, Metal impurity: <1%, 1 gram: 5600 INR  
ZnO/MWNT conjugate, RG, MWCNT Av. OD.: 30 nm, ZnO APS: ~ 40 nm, Metal impurity: <1%, 1 gram: 5600 INR  
Silver nanoparticles dispersion, Functionalization- PEG coated, APS~50 nm, RG: 2150 INR/50 ml

### Units sold:

- Collaborative beta version memorandum linked with NIPGMR, New Delhi
- Collaborative tech licensing and manufacturing talks going on with organizations like BCIL, NRDC, TIFAC

### IP Status:

- PCT APPLICATION, WIPO, titled "NANO MATERIAL SYNTHESIS MACHINE", app no. PCT/IN2022/050175, Priority date 03-03-2021, Filing date 02-03-2022. PUBLISHED ON 09-09-2022

### Major Achievements (including awards):

- Grantee from BIRAC, under BIG Scheme.
- Our First Successful Industrial support Collaboration and submission of project proposal under SERB-Technology Translational Award (SERB-TERTA) with Dr Jagadis Gupta Kapuganti, Scientist V, National Institute of Plant Genome Research (NIPGR), Aruna Asaf Ali Marg, New Delhi-110067.
- The project envisages the development of nitric oxide nanoparticle formulation using NanoScience Lab TM

### Contact detail

Dr.Inder Kumar Gupta  
Mobile No: 8076157043

**Website:** [www.medic.net.in](http://www.medic.net.in), [www.nanocorpus.com](http://www.nanocorpus.com)

## Startup Name

**Mediklik Webhealth Pvt Ltd**

## Product/Technology

**VENSI Next Generation Advance Ventilator**

### Unique Selling Point:

Universal Application – Adult Paediatric and Neonatal Ventilation

Zero Running cost - No flow sensor needed (Integrated reusable flow sensor),  
No bacteria filter needed (Integrated UV filter)

Zero Cross Contamination - Smart Sterilization monitoring

Lung protective Ventilation - SmartVent - intelligent ventilation mode,  
PVTools - Easier lung recruitment PulmoSmart - Real time Lung Graphics,  
SmartWean - Faster and easier weaning

Brilliant User Interface- Customized to suit user needs, Gesture control

Guaranteed performance - 20000 hours guaranteed lifetime

**Product Positioning:** B2B – it is required in corporate hospitals, Private hospitals and in Nursing homes B2G – product is required for Research institutes, all medical colleges and in all government hospitals.

**National/Societal relevance:** Over 3.6 million people die each year from respiratory illness in India alone. Over 46 percent of these patients die due to lack of Mechanical Ventilator. Per WHO standards, India itself currently needs an additional 1 Million Ventilators.

Though they have few manufacturers who came up with some make shift solutions during the time of COVID, but unfortunately none of such solutions are built on international safety guidelines and hence are not useful for critical patients.

So still, 95% critical care ventilators used in India are imported and they are not only unreasonably expensive but they have high running cost due to monopoly on consumables.

With VENSI they wish to change this scenario, and not only they will be making our country self-sufficient, but would also export the product to other countries.

And with just 1/3rd cost of imported ventilator, VENSI can make healthcare more reachable for the people of our country

**Import Substitution:** As briefed above, still 95% of our requirements are fulfilled by foreign companies for critical care ventilator, with VENSI we can not only replace these foreign products but can also bring down the cost to 1/3rd

**Export Potential:** The overall global market is of US\$ 3.2 Billion for advance ventilators and they product is designed and built with keeping in mind the international safety standards and requirements, hence they aspire to start the export of the product as soon as possible.

### Present stage of Development

Ready to License

### Geographical Region Targeted:

Global market

### IP Status:

Patent Application Number:  
202121037769, A347994-001,  
347995-001, 347993-001  
Design registrations: A347994-001,  
347995-001, 347993-001  
Trademarks - 3409951

### Major Achievements (including awards):

NA

### Product Picture



### Contact details

Mobile No: : +91 8770898770,  
7898902455

### Website

<http://mediklik.com>

## Startup Name

Medlarks Private Limited

## Product/Technology

Design and development of a device to prevent the Catheter Associated Urinary Tract Infections CAUTI in the patients indwelled with a urinary catheter.

**Unique Selling Point:** It is just an add-on device, not going to change the existing catheter system and procedure as the foley catheter market is well established

**Product Positioning:** They are planning to sale product to the hospitals (both private and the government).

**National/Societal relevance:** In hospital settings, there are over 15 million CAUTI incidences and USD 31 Billion economic burden globally per year with 2.7 million cases in India alone. Each year, 63 thousand deaths in India and 359000 deaths occur worldwide. More than 100 million catheters.

This small, add-on, effective, affordable and easy to use device can bring the biggest transformation into urinary catheter systems since its invention of Foley catheter in the 1930s. It can manage the avoidance of CAUTI in an efficient manner to save thousands of lives per year.

**Import Substitution:** Yes, we don't have much solution in India so it's high time to have solution in India.

**Export Potential:** Very much, where the hospital is very keen to prevent these infection as it is not a part of insurance cover.

## Product Picture



## Present stage of Development

TRL4 (High fidelity Prototype ready for the clinical validation)

## Geographical Region Targeted:

All over the worldwide

## Cost:

Around 10k-20k/- (INR)

## Units sold:

Not yet

## IP Status:

Device to prevent catheter associated urinary tract infection

Indian Patent Application No.-  
IN201811045665

PCT Application No.- PCT/  
IN2019/050878/ WO2020115762A1

USA Application No.- 17/299446/  
US20220118131A1

Japan Application No.- 2021-531783/  
JP2022514820A GRANTED

## Major Achievements (including awards):

They have developed a fully functional prototype need to be validate and scale-up.

## Contact details

Nirmal Kumar

## Website

www.medlarks.com

## Startup Name

**MedPrime Technologies Pvt. Ltd.**

## Product/Technology

**Cilika Digital Microscopes**

**Unique Selling Point:** Tablet integrated microscopes that enable digital sample viewing, capturing, projection, live streaming and measurement without any loss of magnification, resolution or field of view. Ideal for education, diagnostics, research and telepathology

**Product Positioning:** Cilika microscopes are a range of digital microscopes (mostly B2B) which can be used in diagnostics, research, education, agriculture or veterinary research. In terms of magnification, resolution and clarity of samples, Cilika microscopes are at par with any other branded microscope available in the market, such as Olympus, Nikon, Zeiss, Labomed, etc. Cilika provides the additional advantages of having digital zoom, unlimited data sharing options such as WhatsApp, Telegram, email, Google Drive, local sync as well as live streaming of the sample through Zoom, Teams, Google Meet, etc. There are 3 versions available – Cilika Portable, Cilika Benchtop and Cilika Transform.

**National/Societal relevance:** Digitalization and automation of microscopes opens up the potential to automate routine tests done regularly and to employ machine learning and artificial intelligence to assist pathologists and technicians in time taking samples. This will address the shortage of pathologists and reduce the turnaround time for diagnostic tests

**Import Substitution:** No

**Export Potential:** Export to neighboring countries such as Nepal, Bangladesh, etc is being explored. We are open to export to other Asian and Africa nations, subject to the presence of a suitable importer with necessary distributor with sales and service strength in the respective countries.

## Product Picture



## Present stage of Development

Revenue generating (In-Market)

## Geographical Region Targeted:

Pan India

## Cost:

INR 1 lakh - 3.2 Lakhs

## Units sold:

600

## IP Status:

1. Patent Granted-304199: Portable upright bright field microscope with smart device compatibility
2. Patent Filed-201821000042: Universal Digitization head for integration of smart device with microscope
3. Patent Filed-202021048690: Digitization module for microscopes to enable sample viewing on a smart device

## Major Achievements (including awards):

Recipient of ACT grant, IHF grant, BIG Grant, and SASACT Grant. Special mention in ZS Prize 2021, Winner of Magnetic Maharashtra Startup Awards 2018

## Contact detail

Greeshma Unnikrishnan  
Mobile No: : +91 7506122866

## Email

greeshma@medprimetech.com

## Website

www.medprimetech.com



## Startup Name

**MEEALANTAAS (M-TAAS) Pvt. Ltd.**

## Product/Technology

**BrainoscopeTM**

**Unique Selling Point:** BrainoscopeTM is an objective, scientific method of analyzing an individual's innate and acquired traits, characteristics and potential. It helps individuals choose the right career stream.

**Product Positioning:** The biggest challenge in any service industry is finding suitable buyers/customers and to encourage customer to purchase the product. Potential customers would be: Parents, job seekers, and employers.

**National/Societal relevance:** IBrainoscopeTM is a real revolutionary service-based product that has positively transformed lives of those who have opted for it. It aligns the individual's inborn potential and traits to suitable career streams. Individuals become high performance professionals with minimal input that in the long run makes them happy and content. The mental and physical health and well-being of the individual in turn affects the family and society then nation as whole- we get full utilization of talent in the country alongwith fulfillment of UN SDG of achieving Health for all.

**Import Substitution:** Yes

**Export Potential:** Yes. Studies found that blood supply chain complexities in developing countries like : expiry time, temperature and transportation requirements, supply and demand gap etc. Many low income countries still practice unbanked directed blood transfusion which can be avoided by having effective blood supply chain monitoring solutions.

## Present stage of Development

Revenue Stage

## Geographical Region Targeted:

Delhi-NCR

## Cost:

10,000/- per test including counselling

## Units sold:

> 500 clients tested

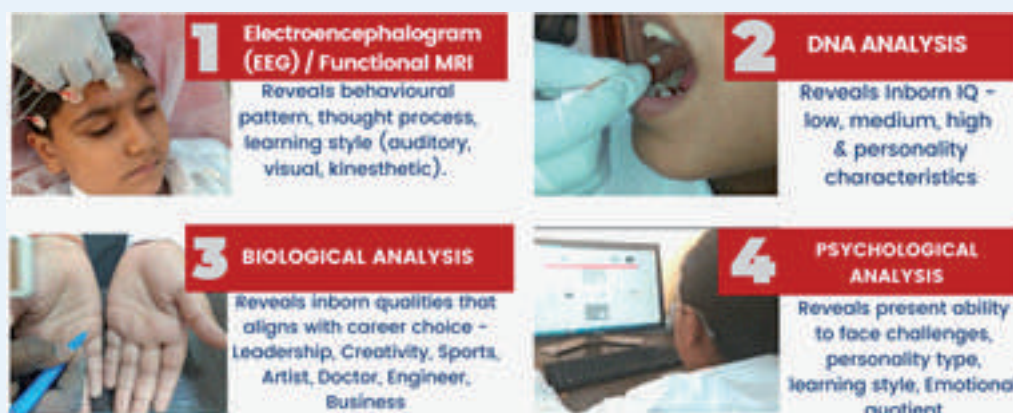
## IP Status:

Patent Pending

## Major Achievements (including awards):

1st Position-National event on Women entrepreneur at start-up stage, 8th March 2022.

## Product Picture



## Contact details

**Dr. Meena Mishra**  
Mobile No: : +91 9910545338

## Website

[www.meealantaas.com](http://www.meealantaas.com)

## Startup Name

Natswear Pvt Ltd

## Product/Technology

Twance Divine X 100 - Wireless Active Noise Cancellation headphone

**Unique Selling Point:** Configurable noise profile, Wireless Active Noise Cancellation headphone, Designed and manufactured in India.

**Product Positioning:** Target Audience – Professionals (IT, Management).

**National/Societal relevance:** Twance is designed & manufactured in India [headphone design, PCB design, PCB fabrication and assembly and molding being done in India].

**Import Substitution:** Yes

**Export Potential:** Exploring the export opportunities.

## Product Picture



## Present stage of Development

Moving towards Production

## Geographical Region Targeted:

Pan India

## Cost:

INR 7999

## IP Status:

Patent filing for Headphone technology

## Major Achievements (including awards):

- PATH - selected as one of the 12 startups for improving primary healthcare in LMIC.
- Finalists in Qualcomm Design India Challenge 2020
- Nasscom t4g - Technology for good - Finalists 2019

## Contact detail

### Email

swetanjali03@gmail.com

### Website

<https://www.natswear.com>

## Startup Name

**Natural bioceramics Pvt Ltd**

## Product/Technology

**Novel Nanohydroxyapatite Bone Graft Material**

**Unique Selling Point:** The product is Nano in size and contains trace elements (Mg, Si & Zn) required for bone regeneration. It is Cost-effective; superior in quality hence has the highest export potential. The availability of Nano-hydroxyapatite from a natural source is scarce in the market.

**Product Positioning:** Buyers (B2B): Dental paste, cement, Pharmaceutical Industry, and other Industrial manufacturers.

Users (B2C): Medical practitioners including orthopedics, Neurosurgeons, Dental practitioners including oral and Maxillofacial Surgeons, Endodontists, and pedodontics use it as Graft Substitute.

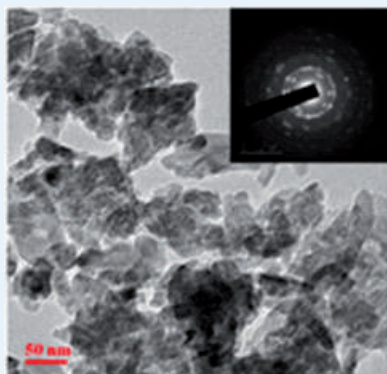
**National/Societal relevance:** The use of graft material prevents the burden of the second surgery, morbidity, time required, etc. for harvesting autografts; and the cost associated with manpower can be utilized for better service. India largely depends on imported graft materials, the product reduces foreign depends and acts as import substitution; Hence this has national and Societal relevance.

The product is sourced from a natural material that is eggshell. Hence use of eggshells removes waste & safeguards the environment. The technology focuses on-waste to wealth products and Empowers hatchery. The production technology is Environment-friendly, go-green - clean energy efficient

**Import Substitution:** The Nano-hydroxyapatite bone graft material is import substitution for various bone graft materials imported for clinical use like Octabone, NOVABONE, MORSEL, Creos, DFDBA, DEMBONE etc. It will also be an import substitution for raw materials required for the production of desensitizing and remineralization formulations and additive manufacturing products

**Export Potential:** The product is Nano in size and contains trace elements (Mg, Si & Zn) required for bone regeneration. It is Cost-effective; superior in quality hence has the highest export potential. The availability of Nano-hydroxyapatite from a natural source is scarce in the market

## Product Picture



## Present stage of Development

TRL 5/6

## Geographical Region Targeted:

Asian Countries – initial stages for 2 years, later European and American Market after 5 years

## Cost:

1500 /CC

## IP Status:

Applied, Application no. 201941017474

## Major Achievements (including awards):

N/A

## Contact detail

Dr.Vivekanand Kattimani  
Mobile No: : +91 9912400988

## Email

drvivekanandsk@gmail.com

## Website

www.naturalbioceramics.com

## Startup Name

**Nawgati Tech Private Limited**

## Product/Technology

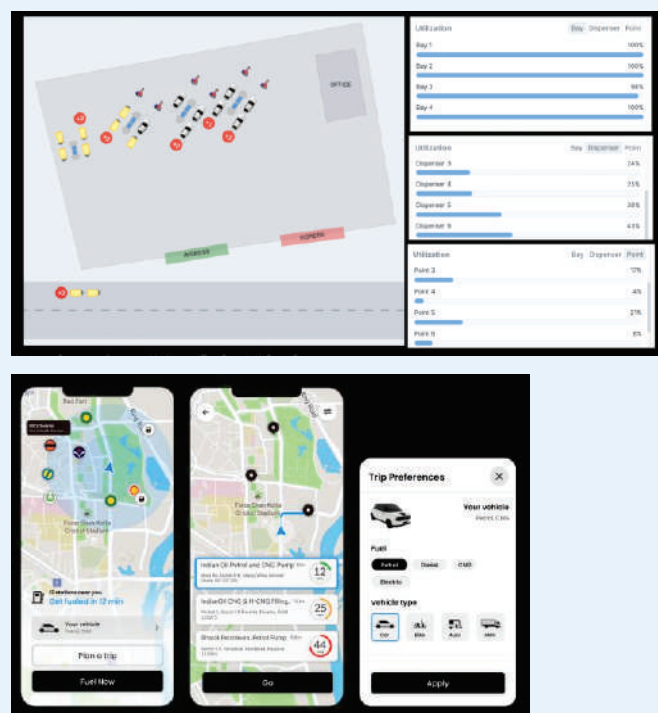
**B2B SaaS, and B2C app**

**Unique Selling Point:** Plug and play congestion and compliance monitoring system for fuel stations.

**Product Positioning:** India's first fuel aggregator

**National/Societal relevance:** At scale, we want to reduce congestion at fuel stations, and provide a seamless fuelling experience to every consumer.

**Product Pictures:**



## Present stage of Development

Early revenue, Seed-funded (valued at over 4M USD)

## Geographical Region Targeted:

Pan-India

## IP Status:

Provisional Patent filed for "Method and system for congestion monitoring and management". Trademarks granted for "Nawgati" under class 9 and class 42. Trademarks filed for "Aaveg" under class 9 and class 42.

## Major Achievements (including awards):

Nawgati's offering, Aaveg, is live at Indraprastha Gas Limited outlets, Indian Oil outlets in the Delhi-NCR region and Mahanagar Gas outlets in Mumbai region. Pilots are live with GAIL Gas, Delhi Transport Department, Sabarmati Gas, Gujarat Gas, and HP Gas. Deployments are in pipeline with Torrent Gas, CUGL, Think Gas, IRM Energy and JioBP.

On the B2C front, we have Nawgati Fuelling App (formerly CNG Eco Connect) with ~6 lakh downloads, 1.2 lakh MAUs, 15K DAUs, 15 minutes daily average screen time. Winner of Hiroshima University Global Pitch Challenge 2022 organised by HAX Tokyo. Winner of AWS Moonshot Days organised by NITI Aayog. Finalists of AIM National Innovation Challenge 2022 by NITI Aayog and MoRTH. Finalists for National Startup Awards 2022. Part of MeitY Startup Hub's first cohort of SAMRIDH scheme.

## Contact detail

Mobile No: 8750366868

## Email

team@nawgati.com

## Website:

www.nawgati.com

## Startup Name

Neontram Pvt. Ltd

## Product/Technology

A neonatal anti-sore bed

**Unique Selling Point:** The designed product is the only neonatal bed in the world that can be used for prevention of pressure ulcers.

**Product Positioning:** There are approximately 18,000 neonatal beds available in NICU as per the data of 2021. The recommended NICU bed strength per million population is 30. The population of India is 140 Cr. Hence, 42000 neonatal beds are required in India. On average, each NICU would have about 10 beds, which gives us 4200 NICUs in total in an ideal state. This product perfectly fit into the NICUs of India

**National/Societal relevance:** According to UNICEF, every day 67,385 babies are born in India, that's one-sixth of the world's childbirths. Therefore, this product has huge demand in Indian hospitals. The Government of India has been addressing the issue through its National Health Mission NHM program by conceptualizing and providing many rural and urban districts now with special newborn care units with provision for at least secondary-level Care. As per our back-of-the-envelope calculation, there are approximately 18,000 neonatal beds available in NICU till 2021. The recommended NICU bed strength per million population is 30. The population of India is 140 Cr. Hence, 42000 neonatal beds are required in India. On average, each NICU would have about 10 beds, which gives us 4200 NICUs in total in an ideal state. NICUs in India will get benefitted from our product. It will also improve the quality of neonatal care in India

**Import Substitution:** Currently, there is no bed that is used for the prevention of pressure ulcers. Therefore, no such product is imported to India. Therefore, this product will be major player in India as well as other countries

**Export Potential:** Globally, newborn health is now considered a high-level national priority. Adequate and trained manpower is the backbone of NICU care and the key to better outcomes. This product will reduce the workload on overburdened nursing staff and will ensure that the rate of occurrences of bed sores will be diminished. We developed a unique mattress suitable for NICUs. There is no such product in the market that can be a competitor of our product. Therefore, there is a huge potential for this product in other countries as well. Our target market is India and later we may also export.

## Present stage of Development

Validation stage (TRL-6)

## Geographical Region Targeted:

NICUs and PICUs of hospitals  
in all over India.

## Cost:

8000 INR (Approx.)

## Units sold:

0

## IP Status:

Not applied yet

## Major Achievements (including awards):

- BIRAC BIG-19 Award
- Best Poster Presentation in NBRCOM 2021, SYBS India

## Product Picture



## Contact detail

Mobile No: : +91 9078825885

## Email

## Website

<http://neontram.com/>



## Startup Name

**Netraum Ayurveda**

## Product/Technology

**Netram Anjan Reverse Cataract without Surgery**

**Unique Selling Point:** Result in 5 Minutes

**Product Positioning:** Already on Flipkart, and Amazon.

**National/Societal relevance:** 285 million people are visually impaired in the World (World Health Organization) 39 million are blind. WHO predicts that 35 million Cataract operations will be performed in 2023 if the current trend is followed

**Import Substitution:** 100% Made In India, No import

**Export Potential:** 285 million people are visually impaired in the World (World Health Organisation)

## Product Picture



## Present stage of Development

Pre-Clinical Successfully Completed  
(Product Manufacturing from 3rd Party & started marketing)

## Geographical Region Targeted:

Pan India

## Cost:

500/-

## Units sold:

50,000

## IP Status:

1 Trademark Approved, 2 Applied

## Major Achievements (including awards):

Best Start-up Award by a-Idea in 2019

## Contact detail

Mobile No: : +91 9713862555

## Website

<https://netram.in/>

## Startup Name

Nutrixeric LLP

## Product/Technology

Dehydrated indigenous highly nutritious products of Northeast India, turning unutilized portions into valuable by-products.

**Unique Selling Point:** Pocket-friendly healthy products without additives and preservatives.

**Product Positioning:** We position our product concerning the target audience as:

1. Health-conscious individuals who are looking for easy and convenient healthy food options in metropolises and cities throughout the year.
2. They are lightweight and easy to store, making them an excellent choice for travellers and hikers.
3. Industries, that use dehydrated vegetables and herbs as raw materials.

**National/Societal relevance:** Our approach will benefit 3 different segments: (1) Farmers (2) those involved in the rest of the food system (e.g., processing, manufacturing, food service, and retail); and (3) Consumers. Furthermore, by utilizing unconsumed or unused portions, we can alleviate waste and create a sustainable society.

**Export Potential:** The global fruit-vegetable processing market is forecast to grow by 7.95% between 2022 and 2029. A report indicates that Northeast exported agricultural products worth over Rs 1,800 crore to different countries last fiscal year, with Assam exporting the most, over Rs 1,700 crore. Consumption and demand for convenient food are increasing globally, indicating the products' potential.

## Present stage of Development

TRL 6

## Geographical Region Targeted:

Northeast Region of India.

## Cost:

20- 100 Rs per packet (Different product comes with different pricing.)

## Units sold:

1550 packets

## Major Achievements (including awards):

Selected and awarded seed fund under Ishanyas 3.0 "Innovation & Agri-entrepreneurship" of RKVY-RAFTAAR by the Department of Agriculture & Farmers Welfare, Govt. of India, New Delhi.

## Product Picture



## Contact details

Mobile No: : +91 8486794040

## Website

[www.nutrixeric.com](http://www.nutrixeric.com)

## Startup Name

**ONEOMICS PRIVATE LIMITED**

## Product/Technology

**Saliva Collection Kit**

### Unique Selling Point:

- Easy, fast and non-invasive: sample collection method
- Affordable price compared to existing saliva collection kits
- Saliva Preservation Solution – stabilizes buccal cells and white blood cells found in saliva over 1 year at Room Temperature
- Kids and Old age people can be diagnosed from home
- Extremely useful to study oncogenesis and tumor progression, especially in Oral Cancer
- used for genetic testing

### Product Positioning:

**National/Societal relevance:** This Kit can be used to collect the cheek saliva easily (Split), non-invasively and painlessly. Hence kids and age-old peoples can diagnose without any trouble.

**Export Potential:** Huge export potential especially, Singapore, South Korea, Dubai and Taiwan.

### Product Picture



### Present stage of Development

Pre-Commercialization

### Geographical Region Targeted:

Pan India and Overseas

### Cost:

INR 500 / Kit

### IP Status:

App No. 202141054882, 26/Nov/2021, India

Title: Saliva Preservation compositions and processes thereof

### Major Achievements (including awards):

- Recognized by Startup India
- ISO 9001:2015 Certified Company
- DST-Nidhi Prayas grant of 9.9 Lakhs for development of qPCR based Mucormycosis Diagnostic Kit
- TANSEED 4.0 award worth 10.0 Lakhs from TamilNadu Startup and Innovation Mission (TANSIM)
- Innovation Voucher Programme award of 10.0 Lakhs from EDII, TamilNadu for Development of Saliva collection kit for Oral Cancer diagnosis

### Contact details

#### Email

[sales@oneomics.in](mailto:sales@oneomics.in)

#### Website

<https://oneomics.in>

## Startup Name

**Onward Assist**

## Product/Technology

**Path Assist from Onward Assist**

**Unique Selling Point:** Onward's pathology AI algorithms analyse images of cancer biopsy slides and assist the cancer pathologist in their reporting process, and hence reducing the reporting process time by 30-40% and improving the accuracy by 12-15% around tumor grading, and cell quantifications.

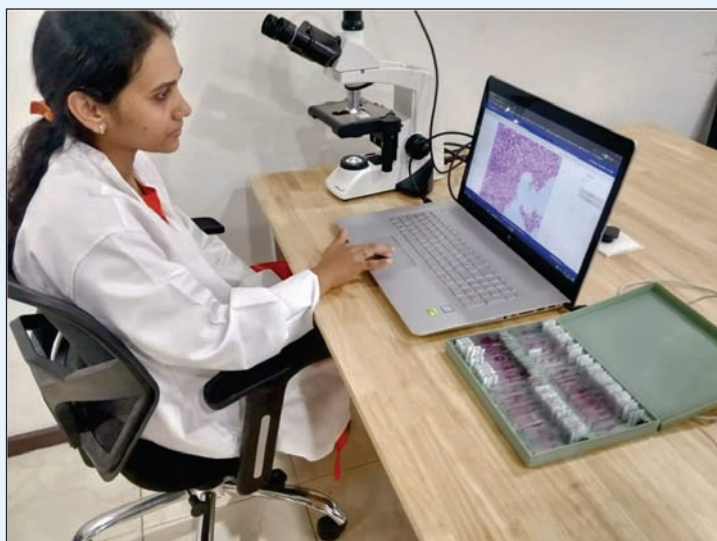
**Product Positioning:** reporting assistant tool for Cancer pathology reporting; Meant for assisting reporting pathologists in Labs, Hospitals, CROs, Pharma

**National/Societal relevance:** India faces a shortage of trained oncopathologists while the number of biopsies continues to grow year on year. Biopsy reporting is a time taking process. Path Assist AI platform helps pathologists for accurate and timely biopsy reporting.

**Import Substitution:** PathAssist can serve the needs of pathology labs in place of expensive analytical tools and software which may not match needs of Indian population.

**Export Potential:** Cancer pathology and reporting is a growing domain globally, and world over, there is a shortage of pathology reporting expertise, including UK, US, etc. Hence, Path Assist is targeted at a global market to serve the need from pathology labs as well as Big Pharma.

### Product Pictures:



### Present stage of Development

Path Assist AI algorithms for Breast cancer pathology is already under commercialisation for customers in the clinical research segment in India and US. The digital pathology workflow software for reporting and image archiving is available for diagnostics customers in India and abroad.

### Geographical Region Targeted:

India, USA, Global.

### Cost:

Price available on request. Pricing of AI and software is available on per-usage model.

### Units sold:

3

### IP Status:

Patents have been filed for innovations in pathology AI imaging pipeline, as well as for data shaping used in training.

### Major Achievements (including awards):

BIRAC – Jancare AMRIT Grand Challenge – Winner – Stage 2 grant, T-Spark grant, T-Hub Healthcare Startup, Winner, MeitY Tide 2.0 Grant, NSRCEL-IIMB Healthcare Incubation Cohort

### Contact detail

Mobile No: 9930092432

### Email

info@onwardhealth.co

### Website:

www.onwardassist.ai



## Startup Name

**Panakeia Medisys Pvt Ltd**

## Product/Technology

**"Pisces" Anaesthesia Workstation**

**Unique Selling Point:** An Indigenously developed Anesthesia workstation with the latest Technological advances at an economical price, boosting the Make in India initiative

**Product Positioning:** B2C as Potential customer of this product are the Hospital and Nursing Home owners.

**National/Societal relevance:** Anesthesia machines have become complex pieces of medical equipment incorporating a ventilator and various forms of monitoring devices. The Technology related to anesthesia machines has advanced extensively to make anesthesia safer to administer. The modern anesthesia machine implementing a closed-circuit system allows for recycling inhaled gases (i.e., oxygen, nitrous oxide, isoflurane, sevoflurane, etc.), resulting in a significant reduction in environmental pollution. Our workstation is integrated with the latest advances in this technology, creating great import substitution and export potential.

**Import Substitution:** By 2026 the Indian Anaesthesia Machine market will be about 350 Crore. About 90% of the device category is imported from Chinese and other markets. This product has the potential to substitute the imported devices and create a stronger Indian market for the device category

**Export Potential:** The Global Anaesthesia Machine market size is expected to grow from \$ 16.65 billion in 2021 to 18,79 billion in 2022 at a compound annual growth rate (CAGR) of 12.8% The global anaesthesia market size is then expected to grow to \$28.84 billion in 2026 at (CAGR OF 11.3%. With the increasing number of chronic illnesses like cataracts, nervous disorder, muscles repair, oral problem and abdominal issues require surgeries, the use anaesthesia machine has also increased. So, there is a wide scope of Export for the product globally.

## Present stage of Development

Pre-commercialization Stage

## Geographical Region Targeted:

Asia Pacific & Under developed countries

## Cost:

5.50 lakh + GST

## Units sold:

None as on date

## IP Status:

IP filing is in process

## Major Achievements (including awards):

NA

## Product Picture



## Contact detail

Sourendra  
Mobile No: : +91 98113 40469

## Email

## Website

[www.panakeia-medisys.com](http://www.panakeia-medisys.com)



## Startup Name

**PhotoSplMeDx Private Limited**

## Product/Technology

**Smartphone based cervical precancer screening device**

**Unique Selling Point:** We have developed a smartphone-based polarized fluorescence spectroscopic device. It is compact, portable, minimally invasive, and provides objective and real-time results. Being a standalone device and requiring minimally trained personnel to operate, it can be easily used in rural areas where there is a lack of medical infrastructure. Our three fundamental value propositions are: precancer screening diagnostics, accessibility of our device in remote areas, and affordability to the masses.

**Product Positioning:** Our solution monitors the storage conditions of blood bags while it is transported and stored through RFID technology. Using our solution we will be able to provide data regarding vein to vein that is from donor to patient along with end to end tracking and traceability that is made available for Public and Private Hospitals to ensure safe and quality blood.

**National/Societal relevance:** Cervical cancer kills one woman every eight minutes in India, with the country accounting for about a fifth of the global burden. Also, the conventional techniques currently in practice are time-consuming, expensive, limited in either their sensitivity or specificity, and dependent on the examiner's subjectivity. So, there is a need for devices that are affordable, accessible, accurate, and minimally invasive. Our polarized fluorescence-based device is effective in early diagnosis with objective and real-time analysis. Hence, it can go a long way in improving the healthcare of the female population of India

**Import Substitution:** India has a huge market potential for medical devices but still it depends heavily on imported devices to meet the domestic demand. These imported devices, apart from being costly, may not be suitable for Indian hospital conditions or the healthcare infrastructure. Our indigenously developed diagnostic device can create huge market impact since it has the potential of filling in the gap created by the lack of affordable diagnostic devices

**Export Potential:** This device after successful validation and verified by the authorized body will have the potential to reach those countries which are lacking better health facilities and awareness about women health. The device will be able to screen women patients with signs and symptoms of cervical cancer.

## Product Picture



## Contact detail

**Shikha Ahirwar**  
Mobile No : +91 9651605272

## Email

[ceo@photospimedx.com](mailto:ceo@photospimedx.com)

## Website

<https://photospimedx.com/>

## Present stage of Development

The prototype is developed and validated in-house at IIT Kanpur. Currently multiple units are being fabricated to be used for clinical validation of the device. Clinical testing of the device is being carried out at various hospitals in the country

## Geographical Region Targeted:

Our device will be of societal importance which will affect the cervical cancer cases and reduce the mortality numbers in the country. So, our targeted areas are hospitals and clinics all across the country and also reach to rural and far flung areas.

## Cost:

~ Rs 2,00,000 (hardware cost)

## Units sold:

zero (pre-revenue stage)

## IP Status:

Patent application filed for smartphone-based device for cervical cancer detection: IPA # 202111006127, Title: "Smartphone based polarized fluorescence spectroscopic device for early detection of cervical cancer".

## Major Achievements (including awards):

- PATH - selected as one of the 12 Winner of BIG 13 call scheme sponsored by BIRAC, India.
- Patent application filed for smartphone based device for cervical cancer detection: IPA # 202111006127, invention title: "Smartphone based polarized fluorescence spectroscopic device for early detection of cervical cancer".
- Collaboration project with IIT Kanpur: Received aid in grant funding ~ 70 lakhs from DST (Department of Science and Technology).
- Published a research paper titled "A smartphone-based 3D printed prototype for polarized fluorescence collection from human cervix" in Optica publishing group.
- Published a journal paper titled "Design, fabrication and testing of 3D printed smartphone-based device for collection of intrinsic fluorescence from human cervix" in Scientific reports.
- Winner of BCIC Emerging Stars Awards, 2022.
- Winner of I-HUB Grant challenge 2022.

## Startup Name

**Plabeltech Private Limited**

## Product/Technology

**Precision engineering of proteins**

### Unique Selling Point:

- Chemical toolbox for precise and homogeneous protein and antibody conjugates
- candidates for imaging guided surgery, directed cancer chemotherapeutics, and other protein-based diagnostics/therapeutics.

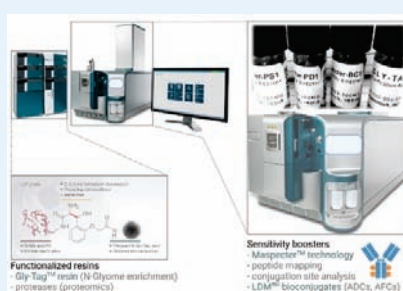
### Product Positioning: NA

### National/Societal relevance:

- Employment generated: NINE (full time and part-time employees)
- Value generation: Pre-established technological demands with no solution. Our unique state-of-the-art technological platforms create new opportunities for the biotechnology product and service sector. Importantly, it creates unique opportunities to address long-standing needs in the field of directed cancer chemotherapeutics and precision therapeutics.

**Import Substitution:** The technological demand for precision engineering of proteins is well-established. Even though the Indian Biopharma sector needs it, no Indian company can provide these services due to lack of technology.

**Export Potential:** Maspecter kit was purchased by a sub-vendor for export. The international market size is much larger with unmet technological demand.



### Present stage of Development

- FOUR products at TRL9 stage, THREE products in the pipeline
- Bioconjugation B2B custom services: launched
- Pipeline 1: AFC, image-guided tumor surgery; Pipeline 2: ADC, directed cancer chemotherapeutics

### Geographical Region Targeted:

Indian and International biotech and pharma sector

### Cost:

Variable: depending on customization of products and services

### Units sold:

Services – 5 service orders completed, Products – 1 set (Maspecter)

### IP Status:

- Deep-tech company: groundbreaking technologies backed up by 11 years of research
- SIX patents and FOUR trademark including LDM, Gly-Tag, and Maspecter

### Major Achievements (including awards):

- BIRAC-BIG grant to Plabeltech
- National Technology Startup Award to Plabeltech
- CDRI Award for Excellence in Drug Research to Founder
- SERB-TETRA Technology Translation Award to Inventors

### Contact detail

Mobile No: 95220 44555

### Website:

<https://www.plabeltech.com>

## Startup Name

Primary Healthtech Pvt Ltd

## Product/Technology

IOT-enabled Point-of-care Blood testing Device for affordable and accessible healthcare powered AI/ML algorithms

**Unique Selling Point:** NA

**Product Positioning:** NA

**National/Societal relevance:** Symptoms of majority of non-communicable diseases are detected at later stage. Our innovation, the Multi-Diagnostic Device 'Mobilab', is capable of analyzing different parameters for diagnosis of Kidney, Liver, Pancreas, Heart problems, etc. through the proprietary innovations in nanotechnology, electronics & materials. This is easy-to-use product, self-guided UI and AI-engine makes it the perfect solution for providing decentralized low-cost comprehensive healthcare to low-income households even at the remote-locations.

**Import Substitution:** Yes

**Export Potential:** Affordable Portable POCT device has huge demand across globe .

## Product Picture



## Present stage of Development

Pilot testing of device

## Geographical Region Targeted:

All across India

## Cost:

~25000/device

## Units sold:

Pre-Revenue Stage

## IP Status:

5 Patents filed

## Major Achievements (including awards):

1. SASACT grant by MEITY, GOI.
2. CHUNAUTI grant by MEITY and STPI.
3. Incubated and funded under invent program at KIIT TBI.
4. Recipient of DBT-BIRAC BIG grant.
5. SOCIAL INNOVATION LAB disburse grants by CITI

## Contact details

Mobile No: : +91 9315824671/  
9650788728

## Email

## Website

www.primaryhealthtech.com

## Startup Name

**Primogen Biotech Private Limited**

## Product/Technology

**TrimoPrim: DNA, RNA and protein simultaneous isolation kit**

**Unique Selling Point:** The kit (TrimoPrim) can simultaneously isolate pure form of genomic DNA, total RNA and protein from a single biological sample. TrimoPrim is the first “Make in India” product of its kind. The protocol developed is rapid, efficient and user-friendly. And the price of the kit is economical compared to similar kits available in market.

**Product Positioning:** B2C: Research Laboratories.

**National/Societal relevance:** It is known fact that intervention of molecular tools like molecular markers, molecular diagnosis, transgenics, etc will play an important role for human welfare. Lots of molecular biology work need to be performed in coming years for genomic and proteomic studies. For any molecular biology work we need to have good starting molecules like DNA, RNA or protein with quality yield, integrity, stability, and purity of samples. The best part is that this kit is the first “Make in India” product of its kind. Thus promoting “Make in India” concept; generating revenue and creating job opportunities for the young generation.

**Import Substitution:** Since our product is first of its kind in India therefore, it has a potential to substitute similar kits imported from abroad.

**Export Potential:** TrimoPrim can be a strong contender to compete with similar kits available globally.

## Product Picture



## Present stage of Development

Validation stage at TRL 6

## Geographical Region Targeted:

India and abroad

## Cost:

10,000 INR (Tentative)

## Units sold:

NIL

## IP Status:

Indian Patent filed (Application No. 201831000081 Dated: 01.01.2018)

## Contact details

Mobile No: : +91 7896881168/  
7896307821

## Website

Developing shortly

## Startup Name

**Prognostics In-med Pvt Ltd**

## Product/Technology

**Neuroshield: a) Creating and annotating a manually/semi-automatically segmented database of Indian brain MRIs. (b) Designing and validating a deep neural net for automated segmentation**

**Unique Selling Point:** The present stage of Development: Commercialization

**National/Societal relevance:** IQuantification of brain structures using the Indian brain template enables neurologists to use an evidence-based medicine approach for neurodegenerative conditions while referring to the MRI of the brain.

**Export Potential:** We are targeting exports in 35 countries and have started with discussions with distributors and aggregators. We are also US FDA 510k pending and post USFDA we plan to launch in both developing and developed markets

## Present stage of Development

Commercialization

## Geographical Region Targeted:

India

## Cost:

500

## IP Status:

Mark: NeuroFlo CLINICAL AI AT WORK  
(Logo) Owner: In-Med Prognostics Inc  
DLG. Ref.: INME-002-00AST Intl.  
Class: 009

## Major Achievements (including awards):

- GE Edison Cohort II in 2021
- BIG Innovation Fund in 2019
- Microsoft Startup Program 2022

## Contact details

Mobile No: : +91 9764445205

## Website

<http://in-medprognostics.com/>



## Startup Name

**ProPlant Foods Pvt Ltd (ProMeat)**

## Product/Technology

**Plant-Based Meat Alternatives using Plant sources and Cutting Edge Technology like Wet-Extrusion and Electro-Spinning Methods**

### Unique Selling Point:

- Products with 60% Protein content compared to animal meat.
- Made with Plant-based fat (Good fat).
- Complete Micronutrients and Macronutrients compared to animal meat.
- No Off-note Issue.

**Import Substitution:** Yes

**Export Potential:** Yes

### Product Picture



### Present stage of Development

MVP [Minimum viable product]

### Geographical Region Targeted:

We plan to target all Cities in India, starting with the major metropolitans including Delhi, Gurugram, Mumbai, and Bengaluru

### Cost:

B2B - 800-900 per kg / D2C - 1200-1300 per kg.

### Units sold:

NA

### IP Status:

Filed

### Major Achievements (including awards):

We won the India Smart Protein Innovation Challenge (Plant-Based Meat Category) by Good Food Institute, India in Dec 2020. We received a grant from the Govt Of India and Proveg International. We emerged in the Top 3 startups globally in the Innovation Challenge (Improving Plant-Based Meat Technology Category) by Unilever in Feb 2021. We emerged in the Top 10 teams globally in ReThink Protein Challenge 2 in Plant Protein Innovations in April 2021. We recently won the Envirocare Green Awards 2021 among 65+ teams globally. Challenge 2020 Nasscom t4g - Technology for good - Finalists 2019

### Contact details

Mobile No: : +91 8724057453

### Website

[www.promeat.in](http://www.promeat.in)

## Startup Name

**Quantrello Digital Private Limited**

## Product/Technology

**Borlaug Web Services® (BWS)**

**Unique Selling Point:** Immutable data, fair governance & accountability; generation of test reports on blockchain to certify honey; premium for certified and traceable honey; the information is shareable and visible to any stakeholders

**Product Positioning:** We are currently creating Beekeepers Collectives and establishing a standard for responsible sourcing of honey. In the process, we plan to build a Honey Subscription Model, a true farm-to-fork model, where the Apiaries can be tokenized via

blockchain, and adopters/subscribers (businesses) can subscribe to a share of the harvest or hive products directly from the apiaries. This will enable farmers to pre-sell their produce at the beginning of the harvest and Customers, on the other hand, will get access to pure unadulterated honey directly from farms

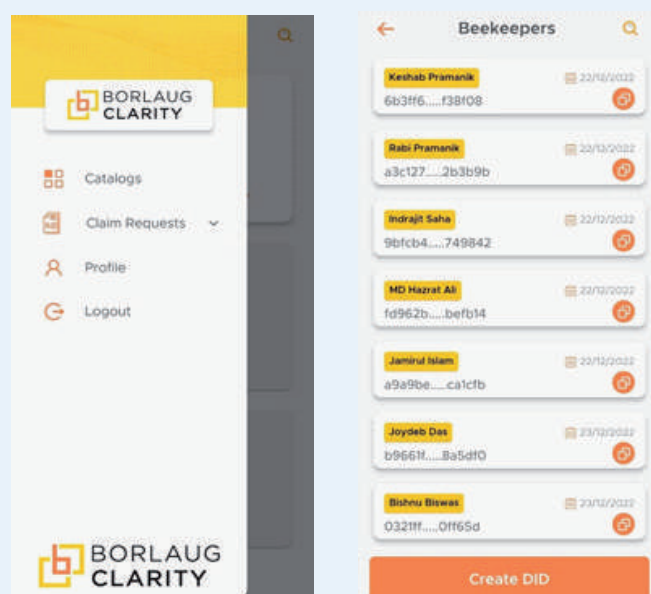
### National/Societal relevance:

- Equal access to economic and social benefit schemes
- Reduce wastage and carbon footprint
- Create fair opportunities and wider market access
- Food safety, credibility, and trust.
- Secure data management
- Compliance with EAC-PM Report for verifying source to prevent adulteration

**Import Substitution:** N/A

**Export Potential:** Scientifically produced honey with test reports, trace reports, and trade reports on blockchain to reach global markets

### Product Picture



## Present stage of Development

TRL - 7

## Geographical Region Targeted:

India, Africa, EU

## Cost:

INR 200000

## Units sold:

N/A

## IP Status:

IP filling is in process. We are working on the IP for our open source Borlaug Network blockchain with an IP Attorney firm

## Major Achievements (including awards):

- Winner of Sustainable Agri Award 2022 for Driving Sustainable Agriculture & Food Security from IGCC at CII Agro Tech, Chandigarh.
- Winner of SDG Impact Accelerator and UNDP-funded Digital Agriculture Implementation in Uganda for coffee sustainability. (2021)
- Featured in impact city and inc42

## Contact detail

Mobile No: : +91 7980941562

## Website

www.borlaug.ws

## Startup Name

**Reinste Nano Ventures Private Limited**

## Product/Technology

**Warrior Anti Viral & Antimicrobial Coatings**

**Unique Selling Point:** Warrior TM Coatings are developed after rigorous R&D by a 11-year-old Nanotechnology based company which has a history of service in nanotechnology for health care sector. Research of this product was overlooked by DBT (BIRAC), Govt. of India and all certifications are from Government accredited labs. The product is proven 99.9% effective against SARS CoV-2 and other disease-causing viruses, fungi & bacteria

**Product Positioning:** Available in market

**National/Societal relevance:** Warrior Coatings are Nanotechnology based coatings which are 99.9% effective on wide range of pathogenic Microorganisms including Virus. The product is tested & certified from different government bodies like National Forensic Science University, Shree chitra trimul Institute. The product is Non toxic to humans and has 99.9% killing rate of pathogenic microbes. The coating works 24\*7 and neutralizes the microbes which come in contact with this coating. The Coatings are extremely cost effective and are ideally suited in wide situations, surfaces and environments and are available for all kind of surfaces

**Import Substitution:** The product is a great substitute for the antimicrobial paints, coatings, or even other disinfectant solutions imported currently in India which are used in hospitals and other labs

**Export Potential:** The Warrior antiviral product is tested from Government of India laboratory which states that the product is 99.9% effective and safe for humans as well . The product has great potential to be exported.

## Product Picture



## Present stage of Development

Pre Commercialisation

## Geographical Region Targeted:

All over the Globe

## Cost:

Ranges between  
Rs 0.5 – Rs. 150 per Sq Ft

## Units sold:

50 L

## IP Status:

We are planning to file patent

## Major Achievements (including awards):

Textile Industry is manufacturing antimicrobial mask using our product and technology.

## Contact detail

Mobile No: : +91 9810662669

## Email

## Website

[www.hiyka.com](http://www.hiyka.com)

## Startup Name

**Reenergizr Industries Pvt. Ltd.**

## Product/Technology

**Valorization of Agro waste for converting into bio active compounds/ bio-fuels/bio-chemicals using biotechnology process with microbial / enzymes in dark fermentation technology.**

**Unique Selling Point:** NanoTechnology approach to Encapsulate beta carotene to increase its stability and atomizing with CNTs(carbon nanotubes) for better isolation. We will use plant based citric acid solution (50 wt% volume with deionized water) to soak all waste to ensure pectinase and other enzymes/ compounds get inactivated prior to extraction process.

**Product Positioning:** High value platform green chemicals and biofuels .

### National/Societal relevance:

1. The use of waste for the production of natural beta carotene will prevent emission of 600,000 cubic meters of greenhouse methane gas from 1Kg of natural beta carotene production which is an important step toward sustainable development.
2. Purchasing the discarded/poor quality of nendran banana fruit post harvest from farmers will provide additional income of Rs 25 per kg which will help in their economic development/financial upliftment but also help prevent greenhouse gas emissions to ensure cleaner and greener environment.
3. Fruit waste utilization increases Human development index(including key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living) by 10% based on the fact that additional income generation for fruit waste generators which will be passed on to the fruit vendors and farmers with increased standard of living along with increased health & age of consumers who are utilizing these natural bio active compounds, greenhouse gas emissions reduction of around 6% to 8% by utilization of fruit waste.

**Import Substitution:** Yes for synthetic chemical based pectin which is Rs 500 crore market

**Export Potential:** Packaging and chemical, Food and beverages, pharmaceutical industries.

### Product Picture



### Present stage of Development

MVP and now in process of commercializing

### Geographical Region Targeted:

North Indian states

### Cost:

Rs 1500 per Kg

### Units sold:

120 Kg

### IP Status:

To be filed

### Major Achievements (including awards):

BIRAC Sparsh fellowship grant funding, Schaeffer India Social Innovation Fellowship Award at national level

### Contact details

### Email

renergizr.industries@gmail.com



## Startup Name

**REVY Environmental Solutions Pvt. Ltd**

## Product/Technology

**Anaerobic Granulated Sludge**

**Unique Selling Point:** An Innovative effective solution for organic waste / waste water conversion to recover Biogas and reusable water

**Product Positioning:** Our Solutions will also act as a very cost-effective solution for High Rate Anaerobic Digesters (e.g UASBs) commissioning as well as will work as medicine for all sick units of STPs & ETPs. Once the existing anaerobic digesters as well as upcoming anaerobic digesters start using granulated sludge, their operational functionality will improve drastically, and much more liquid waste can be treatment in a quicker way for its re-use.

**National/Societal relevance:** India has 17% of world population and only 4% of world fresh water resource. Another major issue is fresh water bodies deterioration due to untreated sewage and effluent discharge. 62,000 MLD sewage is generated but no more than 18,883 MLD (21%) of sewage is actually treated. Out of 816 STPs, only 522. Water for irrigation is expected to reduce by 25% by 2050. Thus, there is an urgent need for efficient water resource management through enhanced water use efficiency and waste water recycling.

India's quest for energy security and sustainable development rests a great deal on the ability to tap energy from the renewable sources. Our per capita average annual freshwater availability has reduced by 3.5 times since 1951. It is expected to further reduce by 4.5 times by 2050. Insufficient capacity of waste water treatment and increasing sewage generation pose big question of disposal of waste water. Problem can be mitigated by adoption of cost effective eco-friendly technologies for waste water treatment

**Import Substitution:** Yes

**Export Potential:** Yes

## Product Picture



## Contact details

**Mobile No: : +91 9824519652**

## Email

**mail@revy.co.in /**

## Website

**http://www.revy.co.in/**

## Present stage of Development

Pre-commercialization

## Geographical Region Targeted:

All India

## Cost:

Rs 250/ Litre

## Units sold:

300 Litres

## IP Status:

Granted In India, USA, South Africa;  
Under Review in Europe and Malaysia

## Major Achievements (including awards):

- Winner India-Israel Innovation Challenge 2017 organised by Invest India
- Finalist Smart Fifty Award conferred by Department of Science and Technology, Government of India and IIM Calcutta Innovation Park
- Felicitated for "Success Story Award" during India International Science Festival, 2018.
- Winner of "Swachh Bharat Grand Challenge" organized by Start-up India
- Winner of "Integrate to Innovate Challenge" organized by Invest India.
- Winner of YESSCALE under cleantech category and is being funded by Villgro
- BIRAC-TiE WinER Award 2019 by DST, GOI.
- Winner award in the ICC start up pad at Bengaluru.
- Winner of ASSOCHAM Start-up Launchpad, Pune.
- Winner of Social Alpha Urban Liveability Challenge, 2019 under Cleantech category
- Awarded as 'Frontrunner' in Cleantech sector by ITC Go Global Awards 2021
- Winner of National Start Up Awards 2021 under environmental Biotechnology
- Conferred Global Technology Innovation Award in MSME Category by GITA
- Dr Vanita Selected for 'Women in Biogas' By World Biogas Association, London.
- Dr Vanita Selected for BRICS Mulan Award, Conferred by BRICS China under BRICS Women's Business Alliance Initiative.
- Finalist GUSEC Techcelerate Program



## Startup Name

**Rigel Bio Environ Solutions Pvt. Ltd.**

## Product/Technology

**PHA bioplastics from grain based distillery wastewater**

### Unique Selling Point:

- 1) Natural Degradable Bioplastic
- 2) Manufactured from Waste – Thus Waste Valorization
- 3) Can be Retrofitted with ETP/ STP to produce this product

**Product Positioning:** Ready for Commercial Pilot Run

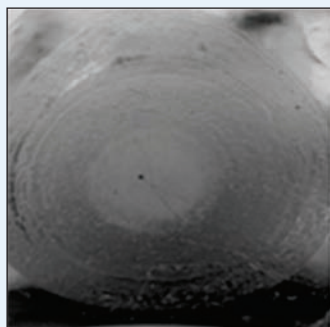
### National/Societal relevance:

- 1) Product from Waste Valorization
- 2) Reducing Carbon Foot Print in ETP/ STP

**Import Substitution:** Yes, as PHA is Present 100% Imported in India

**Export Potential:** Yes, having export potential due to lower cost

### Product Pictures:



### Present stage of Development

Prototype Stage Successful

### Geographical Region Targeted:

Indian Market in Total & also Eyeing Global

### Cost:

Rs. 600/ kg

### Units sold:

Not Yet Commercial Production Yet

### IP Status:

Process Patented

### Major Achievements

(including awards):

Process cited in international reviews

### Contact detail

Mobile No: 9830494422

### Website:

[www.rigelgroup.in](http://www.rigelgroup.in)

## Startup Name

**RONCOV Diagnostics and Therapeutics Pvt. Ltd**

## Product/Technology

**Targeted Radiotracer for Diagnosis ( $^{99m}\text{Tc}$ ) and Treatment ( $^{177}\text{Lu}$ ) of Prostate Cancer**

### Unique Selling Point:

- Novel and indigenous, no violation of international copyrights
- The products are cost effective, accurate and selective
- Indigenous technology to diagnose PCa and treat incurable mCRPC
- No false positives, precise, inexpensive, and non-allergic
- No collateral damage to healthy tissues, and minimal side effects
- Availability of specialized experts for applications of radiopharmaceuticals in human clinical trial during last 10 20 years using targeted technology

### Cost:

Market	Diagnostics (PET, SPECT $^{68}\text{Ga}$ , $^{99m}\text{Tc}$ )	Therapeutics ( $^{177}\text{Lu}$ )
India (50%)	17,250 PCa x INR 5,000/- x 2-Scan = INR 172,500,000/-	17,250 PCa x INR 10,000 x 5-session = INR 862,500,000/-
International (10%)	141,425 PCa x USD 500 x 81 x 2-Scan = INR 11,455,425,000	141,425 PCa x USD 500 x 81 x 5-session = INR 28,638,562,500 (1 USD = 81 INR)

### Product Positioning: HealthCare

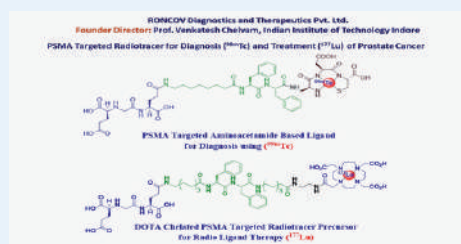
**National/Societal relevance:** Our product aims to deliver early diagnosis and therapeutic treatment for prostate cancer. The molecule is composed of targeting ligand AAPT followed by peptide linker and radioactive isotope as  $^{99m}\text{Tc}$  for diagnostic and  $^{177}\text{Lu}$  for therapeutic, which binds with PSMA receptor overexpress on the PCa

**Import Substitution:** PSMA-617 PCa Diagnostic Agent

### Export Potential:

Medical Hospitals, International Cancer Centers	Diagnostics (PET, SPECT $^{68}\text{Ga}$ , $^{99m}\text{Tc}$ )(No. of Patients)	Therapeutics ( $^{177}\text{Lu}$ )
India (50%)	17,250	17,250
International (10%)	141,425	141,425

### Product Picture



### Present stage of Development

Preclinical Development

### Geographical Region Targeted:

India and International

### Units sold:

Preclinical Trials

### IP Status:

Venkatesh C., Sengupta S., Krishnan M.A., Pandit A. (2018), Small molecule inhibitors for early diagnosis of prostate specific membrane antigen cancers and neurodegenerative diseases (Application No. 201821044594, Indian Patent)

Venkatesh C., Sengupta S., Krishnan M.A., Pandit A. (2019). Small molecule inhibitors for early diagnosis of prostate specific membrane antigen cancers and neurodegenerative diseases (Application No. 16695851, USA Patent)

### Major Achievements (including awards):

- PATH - selected as one of the 12 startups for improving primary healthcare in LMIC.
- Finalists in Qualcomm Design India Challenge 2020
- Nasscom t4g - Technology for good - Finalists 2019

### Contact details

Dr. Venkatesh Chelvam  
Mobile No: : +91 7898514502

### Email

cvenkat@iiti.ac.in

### Website

http: people.iiti.ac.in/~cvenkat/

## Startup Name

RUT3

## Product/Technology

Rut3

At Rut3 makes you Safer, Comfortable and Efficient, by integrating suspension inside the rim i.e. suspension wheel. We aim to transform our mobility sector into a safer way of commuting. Today people travel using various modes of transport but safety and comfort is their priority. They aim address the same in a very cost effective way, reducing back injuries, saving lives during accidents, and making the vehicle efficiency better.

**Unique Selling Point:** The product is a rim with suspensions inside it, replacing the spokes. The product is multi-axis suspension system which provides comfort [reducing back injuries], Safety [multi-axis helps during accidents to take impact from the front], Efficiency [forward movement helps to reduce the efforts to drive]. We have replaced the spokes by the suspension system inside rim, which when travels over uneven terrain the flexible ellipse expand and compress providing suspension action and when they get back to their initial position it provides forward movement reducing efforts to ride

**Product Positioning:** Product enhancing Safety, Comfort and Efficiency in Wheelchairs [Also creates high social impact], and Bicycles. With pipeline products in Two-wheelers, Toys , Drones and Space market.

**National/Societal relevance:** The solutions are initially targeted towards Wheelchairs, Bicycles. Majority of people using these mobility's will be affected directly by the innovation. The innovation creates a massive impact on the perspective of physically challenged towards mobility and their movements on every terrain. The innovation will drive the automobile industry into a new generation of safety wheels, reducing risk of losing life, inducing back injuries, and also making the vehicle efficient overall. The product is unique as it combines wheel + suspensions in single product and addresses issues like spine/back injuries, safety during accidents.

They make the physically challenged capable of travelling over any terrain

**Import Substitution:** They will create a type of wheel hub in India, which will create new exports and also replace/substitute other advance technologies in wheels

**Export Potential:** Already in talks with International players with very high volume, exporting majorly to Europe.

## Product Picture



## Present stage of Development

The product is deployment ready in the Indian Wheelchair Market and we are looking for long term vendors, soon our Bicycle prototype will be ready

## Geographical Region Targeted:

South Asian, Western, Middle East

## Cost:

B2B cost ranges from 4500/pair of wheels to 18000/pair of wheels

## Units sold:

Pre-order of 4000 Wheels

## IP Status:

Granted

## Major Achievements (including awards):

- Prosus Assistive Technology Winner [1st Place Overall India]
- Utility Patent Granted 2022
- MEITY EIR Grantee- 2022
- ATAL Innovation grantee -2021 – Top 26 in India- By NITI Aayog GOI
- BAJAJ CSR-2020
- Industrial Design Granted-2021
- NIDHI EIR Fellowship-2019
- Utility Patent Published 2017
- Vibrant Gujarat Award
- MIT Vishwa Young Innovator
- Dexterity Innovation Award
- YUKTI Innovation Award
- Covered by Media, and Newspaper

## Contact detail

Mobile No: : +91 7798626714

## Email

<https://linktr.ee/rutthree>

## Website

[www.bagmo.in](http://www.bagmo.in)

## Startup Name

**Ryot Agro Private Limited**

## Product/Technology

**Automatic Cocoa Bean Separating Machine**

**Unique Selling Point:** Gives more output than competitor product and price is less

### Product Positioning:

- Machine will separate 300-350 kg of cocoa beans in 1 hour for large machine & the small machine will separate 100-150 Kg of cocoa beans in 1 hour, thereby reducing the time requirement for cocoa bean separation.
- Machine can be operated by the farmer alone, thereby reducing the labour cost comparing with manual process of cocoa pod breaking & cocoa bean separation.
- Machine is provided with protective covers, so there is no chance of being injured.
- Less chances of faults, since the machine is working fully mechanically.

**National/Societal relevance:** There is huge scope among cocoa farmers in Kerala, Tamil Nadu, Karnataka and Andhra Pradesh. This machine will help the farmers to reduce labour cost, time and energy

**Import Substitution:** Currently no such machine is available in Indian Market

**Export Potential:** Currently one company china is manufacturing one such machine. But comparing with them ours is priced less and output is more.

### Product Picture



## Present stage of Development

Prototype Developed

## Geographical Region Targeted:

Kerala, Tamil Nadu, Karnataka, Andhra Pradesh

## Cost:

Rs 40,000 for Small machine and  
Rs 80,000 for Large Machine

## IP Status:

Filed Design Patent, Patent Application  
No: 347614-001

## Major Achievements (including awards):

- Won BIRAC BIG grantee,
- Won NIDHI Prayas Grant

## Contact details

Ajith Mathew  
Mobile No: : +91 9048947909

## Email

ajithmathewthakidi@gmail.com

## Website

<https://ryotagro.com/>

## Startup Name

**Samasti Health Technologies Pvt Ltd**

## Product/Technology

**Svasthya**

**Unique Selling Point:** Effortless User Experience with Medical Grade Clinical Accuracy and Context Assessment

Wireless, Cuffless, Ambulatory assessment with real-time alerting for timely medical intervention, care co-ordination and delivery at any place

**Product Positioning:** The cloud based bio-informatics platform provides clinical decision assistance to physicians to assess health, triage and provide care remotely. As a GP / virtual assistant we send EWS and alerts to specialist physicians only on a need basis. They help hospitals extended services beyond hospitals in a clinical data driven, pay per use scalable model without requirement of capital investment and develop patient stickiness ultimately increasing foot falls, improving capacity utilization, health equity and revenue possibilities at the same time.

### National/Societal relevance:

- Svasthya enables remote health delivery to a population in rural or urban settings by providing,
- Remote healthcare and triage
- Population health statistics
- Primary health screening.

**Import Substitution:** Multiparameter monitors and Remote care. Indian patient monitoring market is valued at USD 1,369.56 million and growing at CAGR 9.39%

**Export Potential:** Svasthya's TAM 47 million subscribers in India, US, UK + Europe, Middle East + North Africa geographies with a market potential of USD 2.5B.

### Product Picture



### Present stage of Development

TRL 7, Pre-deployment trials at hospitals

### Geographical Region Targeted:

India, Europe, US and Japan

### IP Status:

Patent under ISR

### Major Achievements (including awards):

- Product launched by KBITS.
- Product launched at Bengaluru Tech Summit
- Swedish Innovation Award for "Life saving from distance" along with our Swedish partners
- Part of KSAPBIO50, BioNest, SEED
- Customers
- Partnership MoUs
- Clinical trials completed at Jayadeva Institute of Cardiovascular Sciences and Research
- Sagar Apollo Hospital
- BGS Global Institute of Medical Sciences
- Clinical trials in discussion
- Shankara Cancer Care
- St John's Hospitals
- PHC implementation with Government Of Karnataka
- Pilot implementation at Shivagange PHC in progress – Workflow automation and Data interoperability

### Contact detail

**Avinash Babu M**  
Mobile No: : +91 9886350754

### Email

**avinash@svasthyahealth.com**

### Website

**www.svasthyahealth.com**



## Startup Name

**SAVEMOM PRIVATE LIMITED**

## Product/Technology

**AlloTricoder: An IoT based kit that measures 8 vital parameters and securely sends the data over to the cloud for analytics.**

**AlloWear: A smart wearable device that continuously tracks activity and sleep cycle reminds the patient to take medicines and do their scheduled check-ups**

**Unique Selling Point:** Devised an easy method to collect critical maternal data digitally. Products can be connected with a mobile application through which all the collected data can be stored and used for providing home-based antenatal care, screening of high-risk pregnancy as well share the data with their healthcare providers. Innovation has four major customers, a Pregnant mother and her husband, a health worker, Doctor, and a Hospital/ District administrator. Products has been integrated with esanjeevani Tele consultation platform by Government of India to provide the real time vital tracking during the video call.

**Product Positioning:** NA

**National/Societal relevance:** The product deployed in western ghat tribal community working with three state Government. Successfully monitored more than 36,000 pregnant mothers through our platform and provided 2,90,000 home based antenatal care for mother.

Our innovation become a design thinking case study at Harvard Business School

## Product Picture



## Present stage of Development

TR9 Successfully completed the Clinical trail with Andra pradesh Government as part of Jancare Challenge program

## Geographical Region Targeted:

Western gaud remote villages & PHC

## Cost:

INR 30,00,000

## Units sold:

100

## IP Status:

Granted Patent No : 355555-01

## Major Achievements (including awards):

- SAVEMOM Become a Design Thinking Case Study in Harvard Business School
- Winner of NASSCOM Health Innovation challenge 2.0
- Finalist of the Healthy Mom & Healthy Baby Innovation challenge organized by Parview view Health USA.
- A case study published in Yale public health USA
- Winner of SIHI Award from TDR World health organization for Social Innovation health initiative
- Winner of Jancare Health innovation challenge
- Winner of Anjani Mashker inclusive innovation Award 2020

## Contact details

Mobile No : +91 8095207092

## Website

<https://savemom.in>

## Startup Name

**SCYLENE TECHNOLOGY AND LIFE SCIENCES PVT LTD.**

## Product/Technology

**HealthFillz Vegan Plant-Based Protein**

### Unique Selling Point:

- Higher Mix ability
- Easy absorption and digestion Natural
- Vegan and Gluten-free Affordable

**Product Positioning:** Hospitals, Pharmacies and Wellness centers.

### National/Societal relevance:

- Cruelty-free
- Sustainable Environment Healthy
- Reducing Protein Deficiency

**Import Substitution:** Pea protein imported from Poland

**Export Potential:** Rising demand in European Market

### Product Picture



### Present stage of Development

Commercialization

### Geographical Region Targeted:

India and European Regions

### Cost:

749 INR for 350 grams

### Units sold:

560

### IP Status:

Applicable for trade secret.

### Major Achievements (including awards):

Startup India and Startup Odisha Recognition

### Contact details

Mobile No: : +91 7077560541

### Email

scylene.pvt.ltd@gmail.com

### Website

www.scylene.com

## Startup Name

SEGS India

## Product/Technology

Multi -Layer PCB System

**Unique Selling Point:** Customizes Design, Make in India

**Product Positioning:** Industry & Research

**National/Societal relevance:** Make in India Technology

**Import Substitution:** China manufacturer

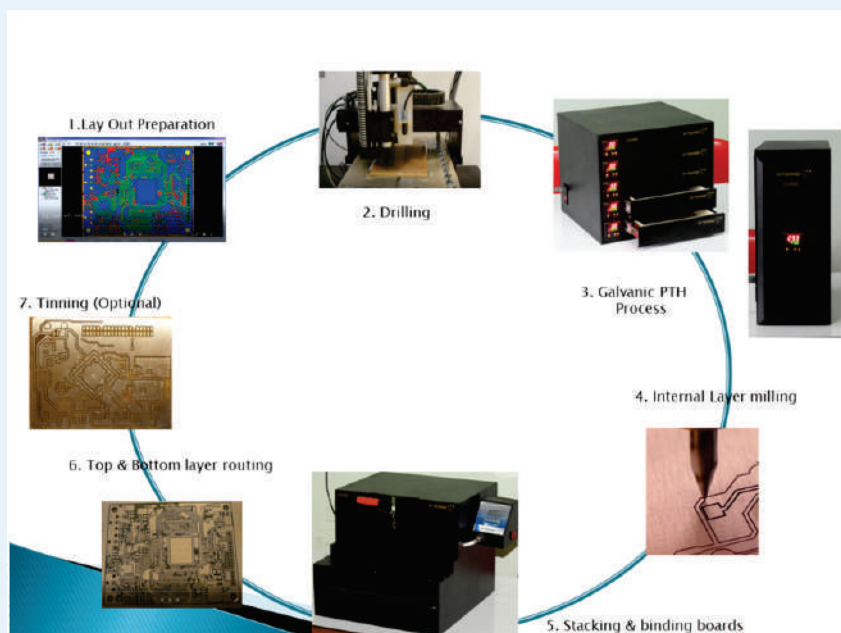
**Product Pictures:**

**Present stage of Development**  
Testing Setup Under Development

**Geographical Region Targeted:**  
NA

**Cost:**  
8L to 45L (Depends on Size)

**Units sold:**  
4



**Contact detail**

**Website:** gupta2104alok@gmail.com

## Startup Name

**Sengathalibiofiber Pvt Ltd**

## Product/Technology

**Banana Sap & Liquid Fertiliser**

**Unique Selling Point:** Farmers

**Product Positioning:** To the End customer

**National/Societal relevance:** National importance project

**Import Substitution:** Reduction of import chemical fertiliser

**Export Potential:** Very good export potentials

## Product Picture



## Present stage of Development

Ready to Market

## Geographical Region Targeted:

Banana tree cultivation area

## Cost:

Vary with Quantity

## Units sold:

We have sold one machine and 5000 litter of banana sap

## IP Status:

In Process

## Major Achievements (including awards):

We have received IISF 2017 Award at Lucknow

## Contact details

Mobile No: : +91 9443110344

## Website

[www.bananasilkfiber.com](http://www.bananasilkfiber.com)

## Startup Name

**Shankaranarayana Life Sciences LLP**

## Product/Technology

**ROBAC: Robotic Biomolecule & Cell separator**

ROBAC is capable of separating biomolecules like protein, RNA, DNA or other biomolecules and different kinds of cells. ROBAC has additional flexibility to adjust experiment conditions based upon custom requirements of the user.

**Unique Selling Point:** Hospitals, Clinical Laboratory and Port Of Entry.

**Product Positioning:** Diagnostic laboratory, Research Laboratory, Academics and Manufacturing company.

**National/Societal relevance:** All countries are having adequate testing facility, but is not economical and accessible to maximum number of populations. In consideration, the ROBAC device can be installed at any hospitals, clinical laboratory and port of entry. It would be reliably helpful in diagnosing patients within a shorter time, and is very useful in country like India and throughout the world.

**Export Potential:** 100

## Product Picture



## Present stage of Development

Product Launched

## Geographical Region Targeted:

South India

## Cost:

Rs. 4 Lakhs

## Units sold:

10

## IP Status:

TRL-9

## Major Achievements (including awards):

- Programmable RNA isolation device inaugurated by Honourable Deputy CM of Karnataka Dr. C. N. Ashwathnarayan
- CDSCO approved
- Patent Application No: 202041021570
- Running in more than 10 hospitals

## Contact details

Mobile No: : +91 7022035071/  
9483504143

## Website

[www.snlifesciences.com](http://www.snlifesciences.com)



## Startup Name

SharingMitra Foundation

## Product/Technology

Web Application

**Unique Selling Point:** We are reducing carbon footprint along with spreading happiness both at the same time

**Product Positioning:** For the children by the children, Community driven initiative

**National/Societal relevance:** We are reducing carbon Footprints and spreading happiness among under privileged children

**Import Substitution:** Not relevant

**Export Potential:** Not relevant

## Present stage of Development

Product Ready, Traction mode

## Geographical Region Targeted:

Started from Nagpur and spread across India

## Cost:

Zero cost and that is the USP

## Units sold:

Reduced more than 200000 (eq) Carbon Footprints by putting resources to reuse

## IP Status:

Not relevant

## Major Achievements (including awards):

Young Innovator Award 2022- Finalists 2019

## Contact detail

Ashfaq Ashraf  
Mobile No: : +91 9324672383

## Website

[www.sharingmitra.org](http://www.sharingmitra.org)

## Startup Name

**Simplismart**

## Product/Technology

The last no-code AI platform you will ever need. Simplismart makes it easier for researchers and businesses to build and deploy machine learning models. It lets you manage your machine learning lifecycle within minutes without any coding. It combines the power of low-level APIs and AutoML to give you an intuitive, transparent and flexible model-building experience.

**Unique Selling Point:** Simplismart is a generalisable and flexible platform that unlocks the power to build bespoke deep learning solutions in minutes on almost any kind of dataset and gain full control over the MLOps lifecycle without writing any code.

**Product Positioning:** NA

**National/Societal relevance:** NA

**Import Substitution:** No such platform in India. Closest competitor in US, Predibase

**Export Potential:** Majorly exporting for US universities and enterprises

**Product Pictures:**



## Present stage of Development

Currently piloting with 10+ customers, just released their public beta. The platform is already bringing in revenue after the beta.

## Geographical Region Targeted:

Global (Southeast Asia, US, India, Europe, Gulf)

## Cost:

Varies from Rs. 4,50,000 to Rs. 3 Cr+

## Units sold:

Have more than 150 users, out of which 10+ are paying

## IP Status:

The IP resides solely with the founders. Going to file 3+ patents for different components of the platform.

## Major Achievements (including awards):

Won a hackathon with a prize money of Rs 7.5 lakh in Jan 22. Raised their first round of Rs. 1.95Cr, currently raising on convertibles at a valuation cap of Rs. 40Cr. Universities like Johns Hopkins University, BITS Pilani and many more are using their platform.

## Contact detail

Mobile No: 9953108361

## Website:

<https://simplismart.ai>

## Startup Name

**Sinewavs**

## Product/Technology

They have developed a proprietary technology alongside AI and ML that specializes in anticipatory prediction, detection, and management of severe electrical mishaps like Power Thefts, Faults and Electrical disasters, all in real-time thus preventing DISCOMs and end-consumers from financial and life damages.

**Unique Selling Point:** Unique selling point is our innovative, proprietary technology, which offers unparalleled precision in predicting, detecting, and locating electrical incidents such as power thefts, faults, and system failures in the power distribution grid with an accuracy rate of over 90%. They are one of the first product in the country working effectively in the domain of electrical disaster prevention systems.

**Product Positioning:** Primarily targeting the state owned DISCOMs with AT&C losses above 20%

**National/Societal relevance:** In India, power thefts are a significant contributor to financial losses for distribution companies (DISCOMs) and result in significant damage to property and loss of life. These untracked pilferages, coupled with the lack of digitization in the power distribution grid, have led to a high level of debt for DISCOMs. As of 2022, INR 1,00,000 crore is the total posted loss of all the DISCOMs in the country owing to Pilferage activities.

**Import Substitution:** Currently, there is a gap in the market for this type of solution, nationally and internationally. Their technology is uniquely designed, utilizing primarily locally-sourced raw materials.

**Export Potential:** Their product has a great export Potential in the regions of world requiring grids systems to be disaster/pilferage proof and smart incorporated with Intelligence.

### Product Pictures:



### Present stage of Development

Post MVP testing stage

### Geographical Region Targeted:

We primarily are targeting DISCOMs in the Central Indian Geography having an aggregate AT&C loss of over 20%.

### Cost:

A single Unit costs INR 4500/- with monthly subscription excluded

### IP Status:

Patent-pending

### Major Achievements (including awards):

They were the winners of the "National Innovation Contest- 2020" organized by Ministry of Education's Institute Innovation Council, AICTE. They were among the 30 selected innovations/startups from the country for financial grant support from the Ministry of Education.

### Contact detail

Mobile No: 7999166385

### Email

sharmaapurv99@gmail.com

### Website:

www.sinewavs.com

## Startup Name

**SMART Home Health care Solutions Pvt Ltd**

## Product/Technology

**Urhlab, Online Physiotherapy and digital rehab platform**

**Unique Selling Point:** Automated patient compliance and recovery tracking, AI based remote assessment

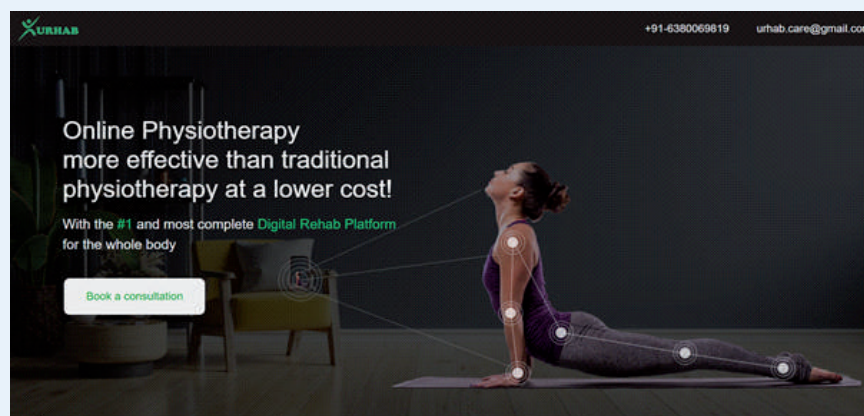
**Product Positioning:** Access to top physiotherapists from India.

### National/Societal relevance:

- Access to top Physiotherapists from any part of India,
- reduced total cost of recovery,
- better compliance and improved productivity of patient and Physiotherapists

**Export Potential:** Potential to treat International patients from India

### Product Picture



### Present stage of Development

Validation

### Geographical Region Targeted:

Across India

### Cost:

199/ per day

### IP Status:

TBD

### Major Achievements (including awards):

BIG award from BIRAC

### Contact details

**Arun Kumar Ramasamy**  
Mobile No: : +91 6380069819

### Website

[www.urhab.com](http://www.urhab.com)

## Startup Name

**SNRASSYSTEMS**

## Product/Technology

**BLUEBOX Aquaculture System**

**Unique Selling Point:** Nursery rearing and grow out of freshwater finfish, high valued fishes and Crabs. Can be used for live fish transportation.

**Product Positioning:** End to End Supply chain integration starting with yield multiplication using BLUEBOX and finishing with market linkage support

**National/Societal relevance:** Empaneled by National Fisheries Development board under Pradhan Mantri Matsya Sampada Yojna launched in 2020 where 2.5 Bn USD is infused to solve the demand supply gap of fisheries which 8.5 million tons today. Awarded by Fisheries Secretary of India, CII and WorldBank for designing Livefish transportation systems using the BLuebox Technology

**Import Substitution:** Yes. 6x cost effective than imported RAS systems.

**Export Potential:** Yes. Received intents from Middle-east and African and South Asian countries.

## Product Picture

## Present stage of Development

Minimum Viable Product

## Geographical Region Targeted:

UP, MH, KN, WB, BH, TN, NE

## Cost:

15 lacs

## Units sold:

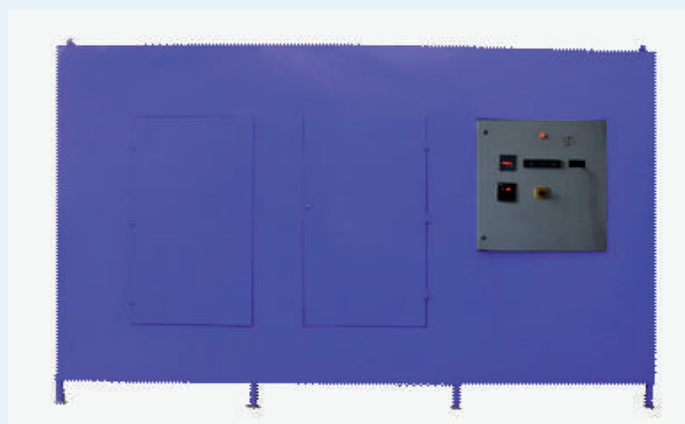
6

## IP Status:

1 granted, 2 filed

## Major Achievements (including awards):

NA



## Contact detail

Mobile No: : +91 7020307244

## Email

## Website

[www.snrassystems.com](http://www.snrassystems.com)



## Startup Name

**STEAMedu LEARNING PRIVATE LIMITED**

## Product/Technology

**STEAM Education**

**Unique Selling Point:** Learning-by-Doing Programs for 21st century Learners & Educators

**Product Positioning:** Students of all ages and educators of all streams who want to enhance their learning and teaching through STEAM Education.

**National/Societal relevance:** An amalgamated knowledge of Science, Technology, Engineering, Arts and Mathematics through experimentation leading the students of all ages to be part of development of society, country, and world along with self development. Students also volunteer for Peer mentoring to impart STEAM Education in underserved community free of cost as part of the social outreach programs and served more than 1500 students so far from rural & remote areas

**Import Substitution:** The technology aims to provide advance international STEAM education with open source resources. Learners don't need to import anything

**Export Potential:** While the STEAM education system globally is progressing rapidly, there is a huge gap for STEAM Educators, Alumnae of the program can fill this gap as an export potential of STEAM teachers.

## Product Picture

## Present stage of Development

Revenue generation stage

## Geographical Region Targeted:

Global

## Cost:

Regular Program- 45k yearly fee for age below 10, 125k yearly fee for age above 10  
Workshop/Bootcamp fee- 300 to 500 per hour

## Units sold:

40 workshops/bootcamps conducted with more than 500 students' participation

## IP Status:

Logo trademark applied

## Major Achievements (including awards):

STEAMEDU received Udyam Veer Award 2019



## Contact detail

Mobile No: : +91 9555984326

## Website

[www.steamedu.in](http://www.steamedu.in)

## Startup Name

**Swab Nanosolutions Private Limited**

## Product/Technology

**AgroNanoNutrient**

**Unique Selling Point:** Product developed through unique Green Nanotech Process Present stage of Development: Prototype Development

**Product Positioning:** Plant growth promoter and fertiliser

**National/Societal relevance:** Improving crop yield and productivity in agriculture

**Import Substitution:** Majority of fertilisers are imported from china

**Export Potential:** N/A

**Major Achievements (including awards):**

**Product Pictures:**



## Present stage of Development

TRL 4

## Geographical Region Targeted:

Indian Subcontinent

## Cost:

Rs. 900-1000 per kg

## IP Status:

In process of filing provisional patent application

## Contact detail

Abhinav Sirothia  
Mobile No: 8839331739

## Contact detail

Dr Sweta Bhansali  
Mobile No: 8383895012

## Website:

[www.swabnanosolutions.com](http://www.swabnanosolutions.com)

## Startup Name

**Swapeco Solutions Pvt. Ltd.**

## Product/Technology

**ScrapUncle - An On Demand Junk Selling Platform (App/Website) for India**

**Unique Selling Point:** ScrapUncle is bridging the digital divide in the traditional recycling business by blending it with technologies like mobile applications, IOT-based smart weighing scales, analytics, etc.

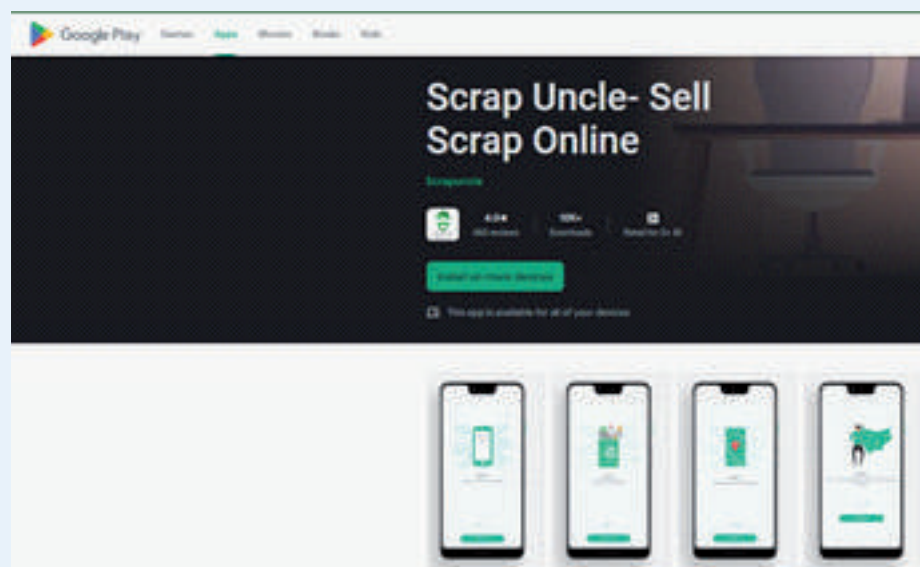
**Product Positioning:** Received 60k+ signups on the platform. Completed 32k+ pickups in Delhi NCR. Sent ~16 Lacs Kgs of Scrap for Recycling .

**National/Societal relevance:** Diverting Recyclables from Landfills to Authorized Recyclers; Training and employing people from the informal sector.

**Import Substitution:** Yes

**Export Potential:** Yes.Studies found that blood supply chain complexities in developing countries like : expiry time, temperature and transportation requirements, supply and demand gap etc. Many low income countries still practice unbanked directed blood transfusion which can be avoided by having effective blood supply chain monitoring solutions.

## Product Picture



## Present stage of Development

Growth Stage (Revenue Stage)

## Geographical Region Targeted:

Delhi NCR

## Major Achievements (including awards):

- -Winners of the Urban works challenge by Columbia University. Received a \$38k grant (~Rs. 30 Lacs) for the same.
- -Winners of the Mbillionth Awards South Asia organized by DEF & Facebook
- -Received Facebook Grant for small businesses (Rs. 1.5 Lacs)

## Contact detail

Mobile No: : +91 9958455627

## Email

mukul@swapeco.com

## Website

www.scrapuncle.com

## Startup Name

**This Life Matters Pvt Ltd**

## Product/Technology

**Ferma Tech Beverages**

**Unique Selling Point:** Gut Health and Mind Health

**Product Positioning:** Super stores and Online selling.

**National/Societal relevance:** Improving GUT health.

**Import Substitution:** NA

**Export Potential:** YES Market is ready.

**Product Picture :** NA

## Present stage of Development

Market Ready

## Geographical Region Targeted:

North India

## Cost:

150/-

## Units sold:

10,000

## IP Status:

Applying

## Major Achievements (including awards):

NA

## Contact details

**Abhishek Dhaliwal**  
Mobile No: : +91 9899048319

## Website

[www.ekkomoh.com](http://www.ekkomoh.com)

## Startup Name

**Tishyas Medical Device Development Solutions Pvt Ltd**

## Product/Technology

**IXanner®**

### Present stage of Development

The pre clinical product named IXanner AEAR is already in the market. The clinical product is in the process of obtaining regulatory certificates

### Geographical Region Targeted:

India, Asian and African Developing nations

### Cost:

16L INR for the entire device or 400Rs per scan and a minimum of 400 scans.

### Units sold:

IXanner AEAR – 2 units, Enctra OCT – 2 units, FPGA based OCT DAQ – 1 unit

### IP Status:

"SYSTEM AND METHOD FOR ENHANCING ROBUSTNESS, QUALITY, EFFICIENCY, AND SIGNAL TO NOISE RATIO IN SPECTROMETERS" – Filed 2. "A method to reduce motion artefacts in an optical coherence tomography system" – Filing in process.

### Major Achievements (including awards):

Nidhi Prayas in 2019, BIRAC Seed in 2020, BIRAC BIG in 2021, ELEVATE in 2022, Jan Care in 2022, Awarded by DST through SAMEER for indigeneity of the product, Awarded at NLS, conference at IIT Kgp for contribution to deep tech science in India, Top 10 start ups from MedTech Actuator

IXanner® enables the capability of comprehensive Eye screening anywhere in the world, as it is a battery run, the device is accessible at very remote locations as well. The device is capable of screening patients for up to 8 Hrs and can generate the report within minutes. Each scan takes less than 4 mins on an average for elderly people (>40 Years) and less than 2.8minutes for young people (<40 Years) demonstrating the ease of use. The signal strength and Signal to Noise ratio is greater than the closest competition by at least 5%. The device encompasses cold OLED illumination allowing patient comfort compared to other diagnostic methods. The device is tele-medicine ready and therefore can be screened patients in tele-ophthalmology platform.

**Unique Selling Point:** The world's only device that can perform comprehensive eye screening at site. Scanning patients from neonates to centennial

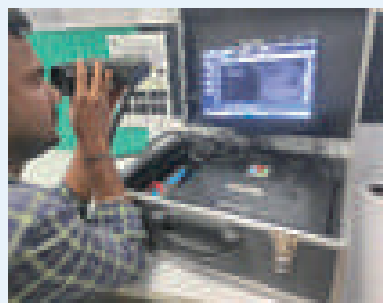
**Product Positioning:** Use our services (Eye camps) conducted by a. Corporates and hospitals b. Non-profit organizations and NGO's. Use our Product for Advanced diagnosis offered by a. Multi speciality eye centers b. Independent Practitioners at rural and suburban regions.

**National/Societal relevance:** More than 66% population shall be benefitted by IXanner.

**Import Substitution:** For the Current need, the possible imports are from Zeiss, Topcon, Retcam, Optovue and Leica which are still very bulky and costs more than 30 L INR

**Export Potential:** Very High (~5Cr a year with 4% growth).

### Product Picture



### Contact details

#### Email

ravikiran@medevplus.com

#### Website

<https://medevplus.com>



## Startup Name

Trestle Labs | Kibo

## Product/Technology

**Kibo - AI-powered solution to listen, translate, digitize and audio'tize any kind of printed, handwritten and digital content**

**Unique Selling Point:** 1. Language: While other products only support English and other Latin-based languages, Kibo supports 60+ Global languages including 13 Indian languages and covering 80% of world's spoken languages.

2. Handwriting: While other products only support printed content, Kibo supports handwritten content with accuracy up to 99% at times, such that visually-impaired professors use Kibo to assess the handwritten answer sheets of their students independently.

3. Audio'tization (Text to MP3): While it currently takes 4-6 weeks for volunteers to manually audio-record one 300-page book, with Kibo you can Type, Scan or Upload content and convert it to MP3, even for Indian regional language content.

4. Translation: While online translation services like Google Translate provide translation only for accessible digital documents, Kibo provides translation even for scanned image-based PDF files while saving 75% manual translation time with its high accuracy translation output.

5. Multi-device access: While other solutions store content offline, Kibo uses cloud storage to store and access documents across devices seamlessly

**Product Positioning:** Product is positioned as an assistive technology and digital transformation tool for schools, colleges, universities, libraries and offices.

### National/Societal relevance:

1. GDP increase: an Increase of \$3 billion in GDP by including 30 million visually-impaired in the workforce

2. Reduced Economic burden: By making Visually-impaired people socio-economically independent and shifting them from being welfare-recipients to becoming active-contributors of the economy

3. Grass-root level change: Sustainable Grass-root level impact resulting in increased GDP-prospects by 7.5% (\$3 billion)

4. Reduced dependency: 37% lesser dependency on others for persons with blindness and vision-impairment

5. Lesser drop-out rates: with faster and easier access to educational resources

6. Better prepared: for mainstream education, skilling and employment

**Import Substitution:** Yes

**Export Potential:** Already exporting to Singapore, Kenya, Ghana, Thailand, Nepal, US, UK and Brazil

## Present stage of Development

Commercially available (TRL-9)

## Geographical Region Targeted:

Global

## Cost:

Rs.47,000/- (Kibo XS device)

## Units sold:

500+ (Kibo XS device)

## IP Status:

Patent Granted (Patent No.: 411804)

## Major Achievements (including awards):

- General Motors Prize at MIT Solve, New York, USA, 2022
- Patrick J. McGovern Foundation AI for Humanity Prize at MIT Solve, New York, USA, 2022
- MIT Solver for the Class of 2022 at MIT Solve, New York, USA, 2022
- Winner, One Young World Lead2030 Challenge for SDG8 supported by Santen, Manchester, UK, 2022
- Selected for Washington DC based Halcyon Incubator's Residential Fellowship Program, Washington DC, USA, 2022
- Winner, DBS Social Enterprise Grant, 2021
- Winner, Prosus Social Impact Challenge for Accessibility Grant, 2021
- Selected for 'Leaders In Innovation' Advance Program by Royal Academy of Engineering, London, UK, 2021-2022

## Product Picture



## Contact detail

Akshita Sachdeva  
Mobile No: : +91 9654177418

## Email

## Website

<https://trestlelabs.com>

## Startup Name

**Tvachan Organics**

## Product/Technology

**Low Cost Organic Sanitary Pad**

**Unique Selling Point:** Low cost, High Absorbency, does not release toxins on incineration, Biodegradable

**Product Positioning:** 12.3 billion pads are used by Indian Women every year. This results in landfills. Inorganic Sanitary napkins result in release of toxins on incineration and cause rashes during periods. Organic napkins are very expensive in India. Tvachan is an organic sanitary napkin that degrades and does not cause rashes and itchiness as there are no harmful chemicals present. Tvachan is also made affordable. The cost is estimated to come down on mass production.

**National/Societal relevance:** Tvachan is one step towards reducing landfills caused by menstrual waste. It does not cause itchiness and rashes. In India as of 2018, only 48% of India's women use menstrual devices. The affordability is another step towards more women using menstrual napkins and devices.

**Import Substitution:** Tvachan is a 100% locally made product whose raw materials are native to India. It will be manufactured by women and transgenders hence increasing employability.

**Export Potential:** The west is gradually understanding the benefits of native Indian lifestyle. Tvachan being affordable will have a high export potential.

### Product Pictures:



Hygiene LLP

### Present stage of Development

TRL 7

### Geographical Region Targeted:

Initial target is South and West India

### Cost:

Rs 10 per pad initially.

### Units sold:

The prototype is in the pharmaceutical testing stage.

### IP Status:

Waiting for the pharmaceutical results to apply for the patent.

### Major Achievements (including awards):

Winner of National Innovation Contest 2020, Among the top 12 teams in Manthan Competition 2022 organized by FKCCI, received a grant of Rupees 5 lakhs from Karnataka State Pollution Control Board, Innovative Start-up award in the regional meet organized by MOE, in Bangalore.

### Contact detail

Mobile No: 9902087963

### Email

vaishnavianand01@gmail.com

## Startup Name

**UNINO Healthcare Private Limited**

## Product/Technology

**PleuraGoh®**

### Unique Selling Point:

1) PleuraGoh® patch a sutureless chest tube sealing and securement device which prevents recurrence of trauma induced iatrogenic pneumothorax, it reduces the complication related to air leak, tube dislodgement and infection prevention.

2) PleuraGoh® Drain is an IoT and AI based portable drainage system complementing pleuraGoh® patch, with remote monitoring, continuous controlled auto suctioning and auto chating for early prognosis.

3) Novel Tech in PleuraGoh® drainage system entrap pathogens for the purpose of enrichment and isolation, selectively from the fluids that enable early detection. These pathogens are used for further testing and clinical studies and diagnosis at point of care

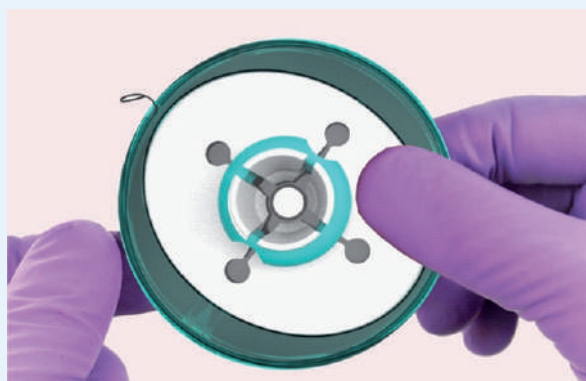
**Product Positioning:** PleuraGoh® improves patient outcomes, reduces costs, increases hospitals productivity enabling them to provide care to large patient populations. Trauma Surgeon, Cardio-thoracic Surgeon, Intensivist, and more are the users. The patients needing plural drainage or with chronic disease condition with malignant effusion are actual beneficiaries of the PleuraGoh®.

**National/Societal relevance:** One fourth cases of world tuberculosis are in India and moreover, chest drain surgeries may be required for various other conditions such as traumatic road accidents and non-traumatic like cardio thoracic surgeries, respiratory infections and more. Low-cost, easy procedure and prevention of recurrence all this are majorly required on large tertiary healthcare set-ups. PleuraGoh® Patch is a cost-effective solution which prevents recurrence of surgeries and pleuraGoh® Drain acts as an Import Substitute with added value at point of care with reduced time of treatment..

**Import Substitution:** Yes

**Export Potential:** Traditional methods of care with the use of suture and gauze are globally used having its own set of complications. PleuraGoh® addresses these complications and the only solution to prevent reoccurrence of trauma induced pneumothorax. This has a good untapped potential in the global market.

### Product Picture



### Present stage of Development

TRL4

### Geographical Region Targeted:

India, USA, UK, Middle East, South East Asian and Japan

### Cost:

Target cost INR 950

### Units sold:

Yet to Launch

### IP Status:

Patent Granted: 370099 Title: Fluid extraction device.

### Major Achievements (including awards):

- Featured in top 75 biotech women entrepreneur in India in a coffee book published by BIRAC DBT celebrating 75 years of aazadi ka amrit Mahotsav launched by Mr. Jitender Singh, Minister of Science and Technology, GoI at Biotech Startup Expo, 2022 inaugurated by Mr. Narendra Modi, Prime Minister of India
- Top 10 at CAHO (Consortium Association of Hospital Organization) Pitchfest, 2022
- Top 10 - Pan India track, Conquest cohort, 2022
- Top 10 innovation, MakerMela 2022
- Received BIRAC BIG Grant of Rs. 50 lac.

### Contact detail

Mobile No: : +91 9819202145

### Website

[www.uninohealthcare.com](http://www.uninohealthcare.com)

## Startup Name

Urban Air Labs

## Product/Technology

Ubreathe – Nature based technology for air purification

**Unique Selling Point:** Plant based air purification

**National/Societal relevance:** Air pollution is one of the most important topics on a national level.

**Export Potential:** High

## Product Picture



## Present stage of Development

Early traction

## Geographical Region Targeted:

Pan India

## Cost:

Rs. 39,999/-

## Units sold:

More than 1000

## IP Status:

6 patents filed in India and one PCT in Europe

## Major Achievements (including awards):

BIG BIRAC awardee

## Contact details

Shubham Sahu  
Mobile No: : +91 83188 37539

## Website

<https://ubreathe.in/>

**Startup Name****Utopic Tech****Product/Technology****Creasens**

**Unique Selling Point:** Measures creatinine accurately within a minute at home.

**Product Positioning:** Creatinine is primary marker of kidney function is one of the most widely ordered metabolite test in path labs. It is currently tested in path labs which are not universally reliable, and have very long lead time.

With our novel patented technology we will be shortening the time of measurement to 1 minute with just a finger prick sample, and improve reliability of results. It has potential to become method of choice for general creatinine testing for over a billion creatinine test done annually.

**National/Societal relevance:** India has over 100Mn CKD (chronic kidney disease) patients out of which more than 90% are undiagnosed due to its asymptomatic nature in early stages. If detected in early stages, it is possible to stop and in cases reverse further damage. But to diagnose patients in early stages is possible only through screening camps, which are currently very limited in number due to operational limitations of testing methods. Creasens being portable, battery operated, will enable conducting kidney screening camps in remotest of the areas and has potential to save lives of millions from falling in trap of lifelong dialysis in wait of kidney transplant.

**Import Substitution:** First of its kind product.

**Export Potential:** USD 1 Bn.

**Product Pictures:**

**Present stage of Development**

Prototyping and Validation.

**Geographical Region Targeted:**

India, Asia pacific, US, Canada, Japan, Africa.

**Cost:**

INR 5000/- [ device] INR 70/- [per strip] .

**IP Status:**

Patent granted.

**Major Achievements****(including awards):**Villgrow Innovator solver Award.  
BIRAC's BIG Grant.**Contact detail****Email**

info@utopictech.com

**Website:**

www.utopictech.com



## Startup Name

**Vel Natural fibers**

## Product/Technology

**Banana fiber separator and banana fiber products**

**Unique Selling Point:** Entrepreneurs, NGOs, Farm products companies

**Product Positioning:** Agricultural farm area

**National/Societal relevance:** National Importance.

**Import Substitution:** This fiber products reduce some import fibers

**Export Potential:** Huge demand for export

## Product Picture



## Present stage of Development

Ready to market and sold 7 units

## Geographical Region Targeted:

Banana cultivation area

## Cost:

Vary with output requirements

## Units sold:

7

## IP Status:

Patent no.251438

## Major Achievements (including awards):

We have received "L ramp award of excellence 2006 and IISF award

## Contact detail

K. Murugan

## Email

## Website

[www.bananasilkfiber.com](http://www.bananasilkfiber.com)

## Startup Name

**Velmenni R&D Pvt Ltd**

## Product/Technology

**LiFi Technology**

**Unique Selling Point:** LiFi is a fully networked indoor wireless technology enabling the transfer of data through light. Using the visible/invisible part of the light spectrum it transmits data, unlike WiFi which operates on radio frequencies. LiFi provides higher speed and secured communication in comparison to existing technologies such as Wi-Fi.

**Product Positioning:** The product has applications in creating stronger Telecom Infrastructure (5G deployments). The startup has also created custom solution using same technology for Indian defense.

**National/Societal relevance:** The technology has been developed in India which has global scale in Telecom sector.

**Import Substitution:** RF based technologies such as UBR Radio, E-Band Radio, Microwave, Wi-Fi

**Export Potential:** The product has already been exported.

## Product Picture



## Present stage of Development

Commercial Grade Product launched at IMC22

## Geographical Region Targeted:

India, South-East Asia, Europe, USA

## Cost:

USD 2000

## Units sold:

100+

## IP Status:

Patent Granted in EU, pending in India, US, Singapore, Australia.

## Major Achievements (including awards):

Won National Entrepreneurship Award 2019 (A3 Category). Won Top 10 Innovator in India under 35 by MIT and HT Media Group

## Contact detail

Mobile No: : +91 8527599685

## Email

info@velmenni.com

## Website

www.velmenni.com

## Startup Name

**Verdant Impact**

## Product/Technology

**Animal ICU-Provide digital livestock healthcare services**

**Unique Selling Point:** Their cattle credit card product helps farmers in availing credit products for their animals.

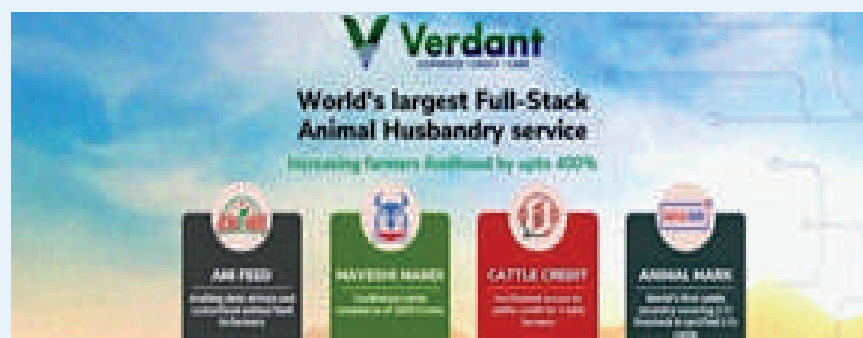
**Product Positioning:** Our solution monitors the storage conditions of blood bags while it is transported and stored through RFID technology. Using our solution we will be able to provide data regarding vein to vein that is from donor to patient along with end to end tracking and traceability that is made available for Public and Private Hospitals to ensure safe and quality blood.

**National/Societal relevance:** They are increasing farmers income upto 400% along with affordable healthcare service for livestock with bioscience based intervention

**Import Substitution:** Too less

**Export Potential:** High

## Product Picture



## Present stage of Development

In-Market

## Geographical Region Targeted:

India, South Africa, Europe, North America

## Cost:

INR 90

## Units sold:

1000600

## IP Status:

Submitted

## Major Achievements (including awards):

Won " Best Emerging AgriTech Startup Award" 2. Pashu Samridhi Award, Featured in top20 Startups in PM Kisaan Sammelan2022

## Contact detail

Mobile No: : +91 9672025828

## Email

manish@verdantimpact.com

## Website

https://verdantimpact.com

## Startup Name

Vizola Ed-tech solutions

## Product/Technology

Classroom learning enrichment system

**Unique Selling Point:** We have the earlymovers advantage and a team who live and breathes the problem they are solving.

**Product Positioning:** Personalized calls and via social media handles

**National/Societal relevance:** Education is Indian government's utmost important topic

**Import Substitution:** NA

**Export Potential:** 1st world countries

**Product Pictures:**

## Present stage of Development

Prototype

## Geographical Region Targeted:

Indore

## Cost:

NA , In future (subscription based revenue model)

## Units sold:

Prototyping stage

## Major Achievements

(including awards):

AWS Moonshot Qualifier.



## Contact detail

Mobile No: 7224887647

## Email

vizola.official@gmail.com

## Startup Name

**Xefficient Pvt Ltd**

## Product/Technology

**EXNOS Wind turbine**

**Unique Selling Point:** Efficient design (22.3% more efficient than the conventional vertical axis wind turbine)

**Product Positioning:** Small industries, PWD Sectors, Highways, HAWT Farm

**National/Societal relevance:** Renewable Energy generation

**Import Substitution:** Made in India Product

**Export Potential:** Europe and North America

**Product Pictures:**



## Present stage of Development

POC

## Geographical Region Targeted:

Regions with Optimum wind conditions availability (2m/s to 15m/s)

## Cost:

1.5 lakh

## IP Status:

Patent filled

## Major Achievements

### (including awards):

Winner of KPIT Sparkle 2020, Winner of Dare to Dream 2.0, Received Grant under Nidhi Prayas, Received Grant Under IIC

## Contact detail

Mobile No: 8698267540

## Website:

[www.xefficient.in](http://www.xefficient.in)



## Startup Name

**Yuvitel Technologies Pvt Ltd**

## Product/Technology

**System and Method for Mobile Healthcare Kiosk To Bridge Out the Health Service Barriers**

**Unique Selling Point:** Doorstep Healthcare Solution

**Product Positioning:** B2B.

**National/Societal relevance:** The company provides affordable treatments and diagnostics at doorstep in rural and remote locations, thereby providing treatment to all.

**Import Substitution:** Yes

**Export Potential:** Yes

## Product Picture



## Present stage of Development

Pre-Commercialisation

## Geographical Region Targeted:

Rural India

## Cost:

3,50,000.00

## Units sold:

5

## IP Status:

409518

## Major Achievements (including awards):

INR 25 Lakhs grant funds raised

## Contact details

Mobile No: : +91 9907522413

## Website

<https://okk247.com/>

## Startup Name

**Zevyu Energy Pvt. Ltd.**

## Product/Technology

**Electric Bicycle / Li-Ion Battery Technology**

**Unique Selling Point:** Battery Pack with longer life compared to current battery packs in market

**Product Positioning:** Lifestyle and Fitness

**National/Societal relevance:** Green and Clean ways of commuting.

**Import Substitution:** BLDC motor to be substituted by indigenously developed motors at a later stage

**Export Potential:** Yes, Middle East, Europe and Africa

**Product Pictures:**



## Present stage of Development

Electric Bicycle – Commercialized/  
Battery Pack – Concept Stage

## Geographical Region Targeted:

Pan India & Exports

## Cost:

33,000/- to 47,000/-  
(based on battery pack capacity)

## Units sold:

Approx 800+

## IP Status:

Design registration in process

## Major Achievements

(including awards):

NA

## Contact detail

Ashwin Dhanotia

## Website:

[www.ride-efai.com](http://www.ride-efai.com)



## **Biotechnology Industry Research Assistance Council**

**A Government of India Enterprise, Under Department of Biotechnology  
Ministry of Science & Technology, Government of India**