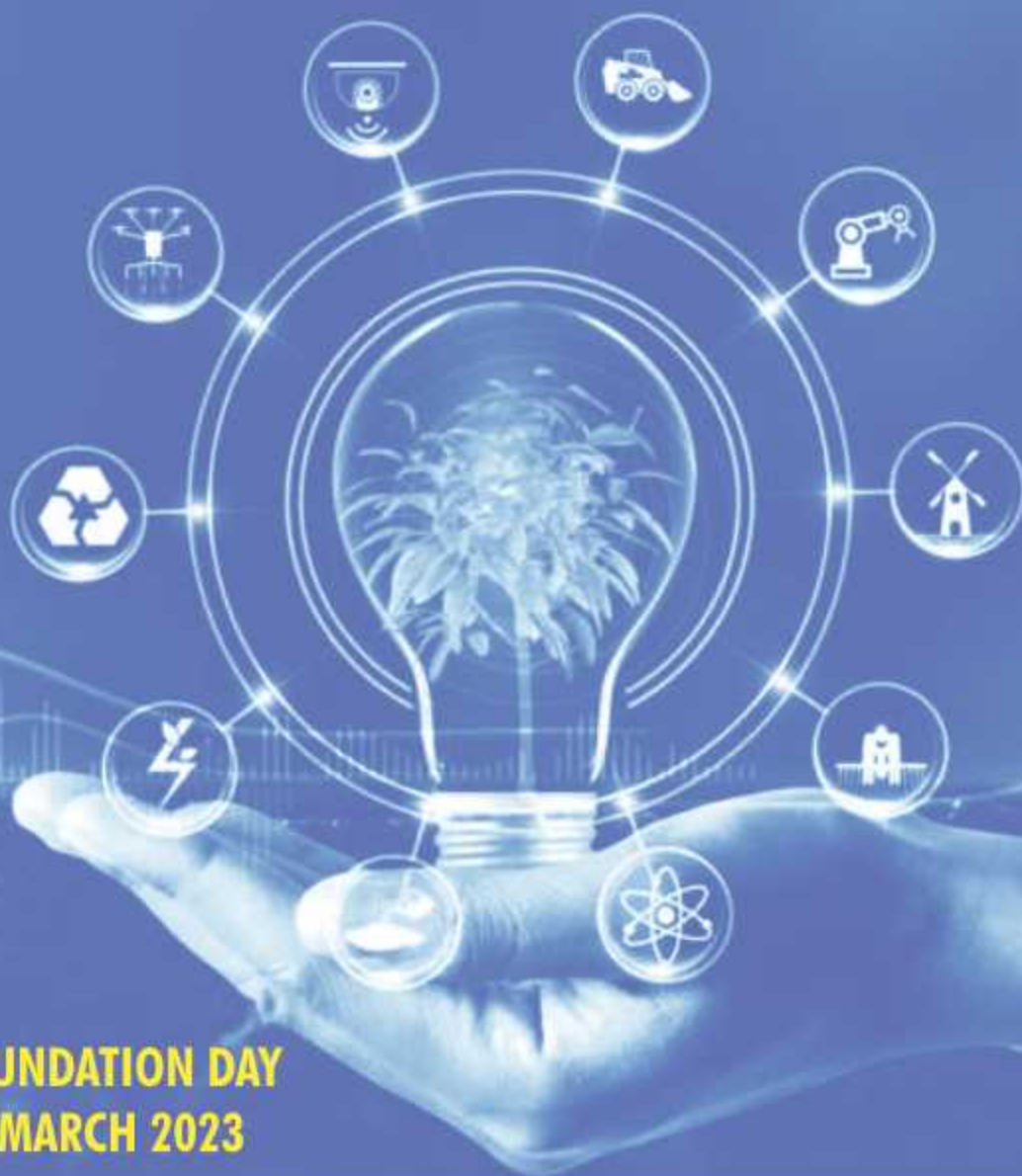


# biroac

# i3

*Ignite • Innovate • Incubate*

## Innovations Paving the way for Amrit Kaal



**11<sup>TH</sup> FOUNDATION DAY  
20TH MARCH 2023**



Biotechnology Industry Research Assistance Council  
(A Government of India Enterprise)



**January-March 2023**

No. 1 Vol. 10



**birac**

## **EDITORIAL COMMITTEE**

**Dr. Shirshendu Mukherjee**

Mission Director  
Grand Challenges India

**Ms. Ginny Bansal**

Consultant (Comm.)  
Grand Challenges India

**Ms. Himanshi Sharma**

Consultant (Comm.)  
National Biopharma Mission

## **DESIGN AND PRODUCTION**

Chiranjiv Advertising, E-170, East of Kailash, New Delhi -110065



# CONTENT

## IN THIS ISSUE

**Leader's Message** 02

**Chief Editor's Take** 03

**BIRAC Feature** 04

**BIRAC Reports** 06

Industry – Academia Interaction on

E- waste management

2-day Webinar Series on 'Fermentation:

Interplay of Microbes, Immunity and Nutrition'

108th Indian Science Congress 2023 (ISC 2023)

BioAsia 2023

BIRAC sensitization workshop on Bio-Entrepreneurship

and Intellectual Property & Technology Management

in Life Sciences

Akash for Life (National Conference)

Partnering with CBT-IIT Delhi for organizing training

workshop/course series

**HR & Admin Activities** 15

Women's Day 2023





**(Dr Rajesh S Gokhale)**  
Secretary DBT  
& Chairperson BIRAC

India has entered the Amrit Kaal; 25 years till we reach India@100. To achieve the PM's vision of having an Atmanirbhar Bharat; confluence of science, technology and innovative research will play a major role to transform India in a global leader.

I want to congratulate BIRAC on completing its journey of eleven years. Department of Biotechnology had created BIRAC with a mission to promote innovative research for development of affordable products and processes. In the past 11 years, BIRAC has lived up to its expectations and filled the gap in innovation chain by delivering impactful programs.

Support from BIRAC in nurturing the talent pool, providing opportunities to startups to Seed, Succeed and Scale is evident.

The funding support combined with access to mentoring and incubation space has benefitted more than 3500 start-ups, entrepreneurs and companies and resulted in development of 800+ products and technologies and generation of more than a 1200+ IPs.

All these years, BIRAC has constantly worked towards fostering innovation and entrepreneurship climate in the country. The research and innovation capabilities will have to focused on becoming innovation and biomanufacturing hub as well as to find solutions for affordable innovations to tackle a wide range of social issues.

Quoting our Hon'ble Minister Dr Jitendra Singh, "Science, Technology and Innovation will define India@100 in 2047", I am convinced that BIRAC can play a significant role in advancing technological breakthroughs for creating accessible products that can compete on a global scale.

The coming years would need BIRAC to re-invent itself, leapfrog in terms of achievements and accelerate innovation and translation of breakthrough ideas to raise India's share in global economy.

Finally, I want to congratulate the entire BIRAC team for working relentlessly for fostering and nurturing the innovation ecosystem in the country.





**Dr. Alka Sharma**  
Senior Advisor, DBT &  
Managing Director-BIRAC

It gives me immense pleasure to say that BIRAC celebrated its 11th Foundation Day on 20th March 2023. The theme of this foundation day was "Innovations Paving the Way for Amritkaal." Over these 11 years, BIRAC has very successfully nurtured innovations and empowered the country in the biotech sector. Biotechnology holds great potential to become the industry of the future. A lot of young innovators and entrepreneurs in the biotech space are inclined towards nation building by providing innovative solutions to the unmet needs in the public health sector. The innovators and entrepreneurs across the country have been working hard to make the vision of AtmaNirbhar Bharat a reality.

The mandate of BIRAC from the very start has been to nurture and empower the biotech innovation ecosystem. BIRAC has provided a vibrant ecosystem to the startups, which has resulted in an excellent pipeline of products and technologies developed by innovators in several successful enterprises that have made an impact both in the domestic and global markets. Through support to 75 bioincubators, BIRAC has nourished over 4000+ entrepreneurs, startups, and SMEs, 350 academia supported, and 7.1 lakh+ sq. ft. of incubation space in just 10 years.

Over the years, BIRAC has initiated several programmes and schemes, networks and platforms that have helped to bridge the existing gap in Biotech research and facilitated the development of novel, high-quality, affordable products through cutting edge technologies.

It gives me immense pleasure that BIRAC has been nurturing the biotech ecosystem in the country during its existence; the impact on the biotech innovation landscape is commendable.

Today's era is rightly called the "age of science and technology," as it has taken over every aspect of human lives. The number of biotech startups in the country has increased from 50 to over 5300 in the last decade because of the growing enabling ecosystem and prioritization by the government of India. It is expected to cross the figure of 10,000 by 2025.

BIRAC have come a long way in nurturing the talent pool, and providing opportunities to startups to seed, succeed and scale. I believe that "Technology and Innovations" are going to be the Torchbearers of 2047 economy and BIRAC will keep contributing in the unprecedented expansion of research and innovation in India.



# Foundation Day 2023 Innovations Paving the Way for Amritkaal

Biotechnology Industry Research Assistance Council (BIRAC) celebrated its 11th Foundation Day on March 20th 2023 at the National Institute of Immunology, New Delhi. The theme for the 11th Foundation Day was '**Innovations Paving the Way for Amritkaal**'.

Since its inception in 2012, BIRAC has been instrumental in creating a robust ecosystem for biotechnology innovation in the country. The event highlighted the journey and progression of BIRAC in the last 10 years and how it has created a vibrant ecosystem which has been able to succeed, scale and address the pressing needs of the society at large.

The event featured talks from Secretary, Department of Biotechnology Dr Rajesh S Gokhle and Dr Alka Sharma, Senior Adviser, Department of Biotechnology, & Managing Director, BIRAC. Dr Gokhale in his inaugural address talked about BIRAC's contribution in empowering the Biotech innovation space. He also asserted on celebrating the indomitable spirit of science.



The event featured talks from BIRAC supported startups about the contribution of BIRAC in their journey. The entrepreneurs shared their entrepreneurial journey and the challenges they faced. Mylab Discovery Solutions, Actorius Innovations & Research, Ahamune Biosciences., Haystack Analytics, ATGC Biotech, Eystem Research, Voxelgrids Innovations talked about their startup journey.



The Foundation Day Lecture was delivered by **Mr. Rizwan Koita**, Philanthropist and Entrepreneur (Co-Founder of CitiusTech and Koita Foundation) on "Driving Healthcare Innovations." He also talked about the learnings for entrepreneurs.

Prof. Ajay K. Sood, Principal Scientific Advisor to the Government of India was the chief guest of the event. He talked about the status and challenges of the Indian Biotech Innovation Ecosystem. He also stated that BIRAC will have an important role in helping India rise in the innovation index ranking.

BIRAC's Facilities Network E-Portal was launched during the event. This portal allows you to access the BioNEST instrumentation and user charges details along with National BioPharma Mission Common access, facilities, and clinical trial networks. You can access this portal on BIRAC's Home page.



A Call on 'Preclinical Disease Models(In vitro & In Vivo) for drug discovery in the areas of Metabolic Disorders, Infectious Diseases, Auto immune disorders, Genetic and rare diseases, Neurodegenerative diseases and Oncology was also launched as a part of the event.

BIRAC has over the years launched various initiatives to support, empower and recognize women entrepreneurs in biotech sector. BIRAC has also established three dedicated Incubation centres that are focused to enable women led enterprises.

As a part of 11th Foundation Day, BIRAC's TiE-WInER women entrepreneurs were felicitated in order to recognize & celebrate the exceptional women entrepreneurs whose innovative approach & path breaking ideas have created a positive impact in the biotech ecosystem in India.



Ms. Rupal Mehta, MedMarvel Software Solutions Pvt Ltd; Dr. Sugandhi Gopal, Carditek Medical Devices Pvt. Ltd; Ms. Vipasha Majithia, VIA Energicals; Dr. Pooja Goswami, Ramja Genosensor Pvt Ltd; Dr. Bhagyarathi Raman, Medaara Health Care Technologies; Dr. Sarika Gupta, Greenathon Technologies Pvt. Ltd., Dr. Rachna Dave, MicroGO; Dr. Smitha, VeriPure; Ms. Veena venu, BirthTech Innovations Private Limited; Ms. Swati Kohli, SM

Learning Skills Academy for Special Needs Pvt. Ltd.; Dr. Kalpana S. Joshi, CONNEXON BIOSOLUTIONS PVT. LTD.; Dr. Kumudha, Magnimous Info Tech Pvt Ltd; Ms. Santosh Jangir, Newndra Innovations Pvt Ltd; Dr. Deepti Saini, Protein Design Pvt. Ltd. and Ms. Manasa Gonchigar, PureScan AI were felicitated at the 11th Foundation Day.

Former Secretary, Department of Biotechnology, and former MD, BIRAC Dr Renu Swarup also graced the occasion. She lauded BIRAC's efforts for being an enabler, facilitator, and catalyst in nurturing the innovation ecosystem. She also encouraged the aspiring entrepreneurs to take up risks in order to reap greater rewards.

The event concluded with a cultural program which showcased the spirit of Unity in Diversity and exhibited dance forms belonging to different states.





## Industry – Academia Interaction on E- waste management

BIRAC organized an Industry – Academia interaction on “Approaches for E-waste Management” on 14th October 2022 which is also the International E-waste day. The meeting was conducted at CSIR Science centre, Lodhi Road and was attended by representatives from government bodies, industry and academic institutes such as IITs, TERI, CSIR-IIP and Jaypee Institute. The meeting was conducted in a hybrid mode to understand the challenges of the sector and possible solutions.



Discussion session between BIRAC officials and representatives from government bodies, industry, and academic institutes



Dr. Subhra R. Chakrabarti (Director Operations-BIRAC), Dr. PKS Sarma (Head Technical-BIRAC), and BIRAC officials with representatives from government bodies, industry, and academic institutes.



## 2-day Webinar Series on 'Fermentation: Interplay of Microbes, Immunity and Nutrition'

A two-day webinar series on, 'Fermentation: Interplay of Microbes, Immunity, and Nutrition', was organized during 3rd-4th February 2023, as part of the Industry/Academia mentoring of BIRAC in collaboration with the Dept. of RDAP, North-Eastern Hill University (NEHU), Tura Campus (Meghalaya). The webinar series featured speakers from academia and industries from various parts of India. The webinar was also streamed live through YouTube. More than 2000 participants (startups,



**DAY 01**



*Theme: Advances in Probiotics, Postbiotics, Prebiotics, and Nutraceuticals*

**DAY 02**



*Theme: Innovations and Regulatory Compliances in Fermented Foods*

Webinar session held during different modules between BIRAC officials and representatives from startups, entrepreneurs, MSMEs, faculties/scientists, PhD/Post-docs,

entrepreneurs, MSMEs, faculties/scientists, PhD/Post-docs) attended the 2-day webinar. Biotechnology Industry Research Assistance Council (BIRAC) also presented its role in fostering public-private partnerships for innovative product/technology development through its various schemes.

## 108th Indian Science Congress 2023 (ISC 2023)

108th edition of "Indian Science Congress" (ISC), was held in Nagpur from 03 to 07 January, 2023. The event was organized by the Indian Science Congress Association (ISCA) and hosted by Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU). This is India's oldest and prestigious annual event for the scientific fraternity of the country. The theme of this year's event was "Science and Technology for Sustainable Development with Women Empowerment."



**108<sup>th</sup> INDIAN SCIENCE CONGRESS**  
RTMNU, Nagpur University, Amravati Road, Nagpur, Maharashtra, (India)  
03 - 07 January 2023  
**Pride of India - Mega Science Expo**

**PRIDE OF INDIA™**  
—Frontier Science & Technologies—  
Mega Expo  
INDIA'S MOST PRESTIGIOUS EVENT

Science & Technology  
for Sustainable  
Development with  
**Women  
Empowerment**

Host:  

Event Managed By: **MM ACTIV**  
Sci-Tech Communications  
Media | Events | Planning | Advisory

**VIGYAN JYOT**

HALL of PRIDE | **V50H**

The event was inaugurated by Hon'ble Prime Minister-Gol, Shri Narendra Modi (virtual mode) and Pol Expo by, Hon'ble Union Minister of State (Independent Charge), Science & Technology and Earth Sciences-Gol, Shri Jitendra Singh, in the presence of Deputy CM, Shri Devendra Fadnavis, Dr. Subhash R. Chaudhari, Vice Chancellor – Nagpur University and other dignitaries.

The "Pride of India ISC Expo", one of the major attractions of the Indian Science Congress, showcased India's development in science and technology in different fields. BIRAC also received interest in its exhibition booth that showcased BIRAC's schemes & programs, supported technologies, innovations and Partners. BIRAC officials - Ms. Poonam Bishnani, Officer – ASF-EQ and Ms. Himanshi Sharma-Consultant participated in the event.





The POI Expo depicted the confluence of new ideas, innovations, and products covering the entire canvas of the scientific world. It was a splendid display of cutting-edge technologies, leading scientific products and services, path breaking R&D initiatives.

The five-day event saw participation from leading public and private sector organisations, government departments, PSUs, research labs, educational institutions, corporate, defence agencies etc. On the concluding day of ISC, at the "Valedictory Function," exhibitors were presented with excellence awards in various categories.



## BioAsia 2023



The 20th edition of BioAsia 2023 was held at HICC Hyderabad on 24-26 February 2023. The three-day annual global forum was organized by the Government of Telangana and was inaugurated by Mr. KT Rama Rao, Hon'ble Minister for Industries and Commerce, Government of Telangana in the presence of distinguished dignitaries Dr. V. K. Paul, Hon'ble

Member (Health), NITI Aayog, Mr. Jayesh Ranjan, IAS Principal Secretary (I&C), Government of Telangana, Dr. Vas Narsimhan, CEO, Novartis, Mr. Satish Reddy, Chairman,

Dr. Reddy's Laboratories, Dr. Samit Hirawat, EVP & CMO, BMS, Mr. Gareth Wynn Owen,

British Deputy High Commissioner to Telangana, Mr. Jayant Nadiger, Trade and Investment

Commissioner of Flanders and other dignitaries. With the theme of 'Advancing For One', BioAsia 2023 focussed on Shaping the next generation of humanized healthcare. BioAsia 2023 witnessed over 2,015 delegates from CROs, CMOs of global biotech, pharma & medtech companies, researchers, academicians, Government & Regulatory Authorities, Venture Capitals and Investors, and start-ups representing 50 countries in addition to over 500 visitors.

The event hosted over 70 eminent global leaders from the life sciences industry during the conference. BioAsia also hosted an international tradeshow where about 175 organizations like Dr. Reddy's Laboratories Ltd, Novartis, Hetero Biopharma Ltd, Aragen Life Sciences, Aurobindo Pharma, Rx Propellant, Gland Pharma Ltd, Laurus Labs, Kewaunee Labway India

Pvt Ltd, Tofflon Pvt Ltd., Cytiva, Corning, GSBTM, among many others exhibited their innovations and developments from the fields of med-tech, pharma, biotech, life sciences and

health-tech. The exhibition consisted of an innovation zone comprising of 76 startups in the Startup Stage Pavilion and 10 incubators in the Incubator Pavilion. Around 25 companies exhibited in the MSME pavilion organized in partnership with the Ministry of Micro, Small & Medium Enterprises, Government of India and 11 companies exhibited in the Med-tech pavilion organized in partnership with the Department of Pharmaceuticals, Government of India.



Dr. Sanjay Saxena, Dr. Vishwadeep Kapare and Ms. Diksha Rathore from BIRAC participated in this event. The exhibition was inaugurated on day 1 of the event. BIRAC stall received a high response from start-ups, students, academicians and researchers showing great interest to know about the various schemes, initiatives of BIRAC and possibilities of collaborations in different capacities. The exhibition also had representation from many BIRAC-supported incubators and start-ups.



BIRAC co-sponsored the BioAsia 2023 Startup Stage Awards during the Valedictory Ceremony. Chief Guest Mr. KT Rama Rao, Hon'ble Minister for Industries & Commerce, Government of Telangana, Mr. Karolis Žemaitis, Hon'ble Vice Minister, Ministry of Economy and Innovation of the Republic of Lithuania, H.E. Ms. Katrin Kivi, Estonia's Ambassador to India, Mr. Ashok Chandra Panda, Hon'ble Minister of S&T Department, Government of Odisha among other distinguished dignitaries, handed over startup awards to top five start-ups selected from over 76 shortlisted companies. The top 5 awardees receiving this prestigious award Exobot Dynamics Pvt Ltd, LambdaGen Therapeutics, Pratibha Healthkon Private Limited, RAMJA Genosensor Pvt Ltd and Satyarx Pharma Innovations Pvt Ltd. The startups were also given an opportunity to pitch their innovative solutions to the global audience of BioAsia 2023.



# BIRAC sensitization workshop on Bio-Entrepreneurship and Intellectual Property & Technology Management in Life Sciences

A one-day workshop on “Bio-Entrepreneurship and Intellectual Property & Technology Management in Life Sciences” was organized by BIRAC & BITS-Pilani, Rajasthan at BITS-Pilani Campus on 8th February, 2023. An overwhelming and enthusiastic response was received from the participants. This workshop was designed for the researchers, entrepreneurs & start-ups to make them aware of the various aspects of Grant Writing, Funding programs of BIRAC's and IP & Technology Management.



The first session of this workshop was dedicated on the “Art of Grant Writing & BIRAC's Funding Opportunities” The second session of this workshop was dedicated for “Intellectual Property & Technology Management”. The speakers highlighted various important nuances on the Grant writing, How to conduct patent searches & Role of Intellectual Property & Technology Management. Approx 40 Researchers & young entrepreneurs were benefitted from this workshop. The workshop was appreciated by all the attendees.



## Akash for Life (National Conference)

To shape the solutions to the challenge of climate change and associated environmental concerns based on the synergy of Indian philosophical tradition and modern science, a National Conference on "Akash for Life" was organised by Vijnana Bharati in association with various science Ministries/Departments and Uttarakhand State during November 4-7, 2022, at Uttarakhand University, Dehradun, Uttarakhand. The event was inaugurated by Dr. Jitendra Singh, Union Minister of State (Independent Charge) Science and Technology, Minister of State (Independent Charge) Earth Sciences, MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space.

The curtain raiser event was felicitated by Principal Scientific Advisor, Prof Ajay Kumar Sood, Chairman ISRO, S.Somnath, Secretary Science & Technology, Dr. S Chandrashekhar, Secretary, Earth Sciences, Dr. M Ravichandran, Secretary Biotechnology, Dr. Rajesh S Gokhale and DG CSIR Dr. N. Kalaiselvi.



*The Union Minister of State of Science and Technology, Dr. Jitendra Singh visiting the DBT-BIRAC Stall.*



*Dr. Rajesh S. Gokhale (Secretary-DBT and Chairman-BIRAC) and Dr. Alka Sharma (Sr. Advisor DBT and MD-BIRAC) along with DBT and BIRAC officials at the DBT-BIRAC stall.*



Eminent scientists, thought leaders, academics, traditional knowledge experts, practitioners, industry leaders, social and field workers, and students actively participated in the conference. The event ensured an excellent opportunity to interact and initiate collaborations at the academic, industrial, and social levels.



*BIRAC officials in interaction with delegates, scientists, and students in the DBT-BIRAC stall.*

### Partnering with CBT-IIT Delhi for organizing training workshop/course series

BIRAC had partnered with CBT-IIT-Delhi as a part of mentoring support for enhancing the research and innovation capabilities of the Indian biotech industry, particularly start-ups and SMEs. CBT-IIT Delhi conducted a training workshop/course series during 12th-15th December 2022, on different modules for industry, academia, and regulatory agencies to facilitate the creation of an ecosystem that delivers affordable biotech therapeutics to India and to the world. There was a total of 12 modules running in this course like QbD, PAT, Chromatography, DoE, MVDA, MAM, Mass Spec and AI/ML etc.



*Inauguration of the training workshop/course series at CBT-IIT Delhi*



*: Workshop sessions held during different modules*



## Women's Day 2023

International Women's Day is celebrated every year to spread the message of gender equality and to work together in making a better society where there is no gender bias. The theme for this year's Women's day was "DigitALL: Innovation and technology for gender equality". To celebrate the event and to make the day fun filled for the women employees at BIRAC, few games were organized in BIRAC Office. The activities were executed successfully and all officials participated in the event with great enthusiasm.

Dr. Rajesh Gokhale (Secretary DBT & Chairman BIRAC) and Dr. Alka Sharma (Sr. Advisor DBT & MD BIRAC) addressed employees on the occasion of Women's Day. The session had a brief presentation on "women Achievers" followed by cultural program which consisted of Comedy/Mimicry/Group Song/Instrumental. Quiz was also organised during the session. The program ended with concluding remarks from Dr. Rajesh Gokhale (Secretary DBT & Chairman BIRAC).



<p><b>1344</b> Beneficiaries supported</p> 	<p><b>75</b> Bioincubator's supported</p> 	<p><b>4</b> Regional &amp; Entrepreneurship Development Centres</p>	
	<p><b>₹4000 cr</b> Funding Support by BIRAC</p>	<p><b>₹ 1444 Cr.</b> Industry Commitment</p>	
<p><b>344</b> Academic Institutes Supported</p>	<p><b>Ignite Innovate Incubate</b></p>		<p><b>₹ 4242 Cr.</b> Total Funding</p>
<p><b>10000+</b> People enhanced skills and accessed networks</p>		<p><b>713132</b> sq. ft. of incubation space</p>	<p><b>₹190.5 Cr.+</b> The total fund of all 3 Equity schemes ACE, SEED &amp; LEAP Fund committed Funds</p>
	<p><b>781</b> Companies Supported</p>		<p><b>16</b> Bioincubators Supported under Equity based SEED fund</p>
<p><b>314</b> Patents filed</p>		<p><b>750</b> Products &amp; Technologies</p>	<p><b>3500+</b> Start-ups Entrepreneurs and SMEs</p> 

For further information please contact:  
**Biotechnology Industry Research Assistance Council (BIRAC)**  
 1<sup>st</sup> Floor, MTNL Building, 9, CGO Complex, Lodhi Road, New Delhi-110003, INDIA  
 Tel: +91-11-24389600 | Fax: +91-11-24389611  
 E-mail: [birac.bdt@nic.in](mailto:birac.bdt@nic.in) | Web: [www.birac.nic.in](http://www.birac.nic.in)  
 Follow us on Twitter : @BIRAC\_2012