From the Desk of President





www.ableindia.in

July 2022 | Issue 0004

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Biotech Industry gets PM's attention

The biotech industry and ABLE members are very happy that Prime Minister Mr Narendra Modi graced the 10th Foundation of Day of BIRAC on June 9, 2022 and inaugurated the first Biotech Start-up Expo, that showcased products from 300 innovative start-ups. It was the Prime Minister's first in person interaction with the biotech industry in eight years. Prime Minister highlighted that the national BioEconomy has grown 8 times to \$ 80 billion in 2021 and praised the entrepreneurial efforts of the 5300+ start-ups that exist now. The numbers are based on the India BioEconomy Report prepared by ABLE for BIRAC.

Apart from PM's presence, the BIRAC Day was an opportunity for key ABLE members to interact with the new DBT Secretary, Dr

Rajesh Gokhale, during a CEO round table organized as part of the BIRAC Foundation Day. Dr Gokhale has promised to interact with the industry, understand their concerns and together plan to achieve the national goal of \$150 billion BioEconomy by 2025. To achieve this, the industry performance has to nearly double in the next four years and ABLE members have shortlisted the new growth areas that will help the industry reach the \$150 billion target

Now that the Covid-19 pandemic has receded, we in the industry are meeting in person more frequently, while we continue to use the hybrid model of in person and online meetings to continue our interactions, to take forward the growth agenda. Some of our recent activities: 1. An in-person meeting to create biotech awareness among students at KLE University in Belagavi, 2. Two workshops to mark the World Microbiome Day on June 27 in collaboration with Merck and Yenepoya University and a 90-minute Webinar on highlighting the importance of Microbiome, in association with Biotecknika. The monthly webinar was a blockbuster 90-minute session on how Stem cells products are now ready for commercial use and the event was supported by member companies, Stempeutics and Eyestem Research.

Prior to that ABLE participated in the Assam Biotech Conclave conducted by the Guwahati Biotech Park in late May, apart from the Keynote address during the inaugural session, had some of our members participating in various individual sessions. We had the opportunity to showcase to the Assam Chief minister the key activities of the Biotech industry and explain how Assam could benefit from using the latest tools in biotechnology in some of the traditional sector and make better use of the state's abundant natural resources. ABLE will be helping Assam, Madhya Pradesh and Gujarat governments in the coming months to spread the message of their state's Biotechnology policy and showcase their strengths to the industry.

During the Vision group meeting in June, ABLE members had the opportunity to share their ideas on how we could organise the biotechnology track in the forthcoming 25th edition of Bengaluru Technology Summit (November 16-18,2022). This year too Dr Vijay Chandru will chair the biotech conference committee and will be assisted by ABLE members. We look forward to a great event in November.

G S Krishnan President, ABLE

IN THIS

INDUSTRY NEWS

- Prime
 Minister Modi
 hails biotech
 startups,
 praises \$80
 billion
 BioEconomy
- Number of female entrepreneurowned Biotech companies has seen an exponential rise in the last 8 years: Dr Jitendra Singh

BIOTECH GETS PM'S PRAISE

Prime Minister Modi hails biotech start-ups, praises \$80 billion BioEconomy



The 10th Foundation Day of BIRAC was an occasion for the Prime Minister Mr Narendra Modi to praise the efforts of India's vibrant \$80 billion BioEconomy that grew by 14% during the Covid Pandemic in 2021.

Inaugurating the country's Biotech Start Up Expo at Pragati Maidan in Delhi on June 9 to celebrate the 10th Foundation Day of BIRAC (Biotechnology Industry Research Assistance Council), Prime Minister Modi congratulated the spirit of entrepreneurship that saw the forming more than 1100 startups in 2021.

"In the last 8 years, the country has witnessed the formation of over 70,000 technology startups and more than 5,000 of these are in the biotech sector," Mr Modi said. Also, the national BioEconomy has grown by 8 times in the last years to \$ 80 billion in 2021, he said. These numbers are part of the India BioEconomy Report 2021 (IBER 2021) produced by Make in India Cell of BIRAC. ABLE (www.ableindia.in) has assisted with the production of IBER 2021.

Before the formal speech Mr Modi inaugurated the country's Biotech Startup Expo that displays a wide range of innovative products developed by over 300 biotech startups funded by BIRAC under the Department of Biotechnology (DBT).

"The Biotech Startup Expo is a reflection of the country's rapid expansion in the biotech sector," Mr Modi said.

Prime Minister Narendra Modi, in his speech, said that the country's first Biotech Startup Expo is a reflection to the country's rapid expansion in the biotech industry.



Mr Modi pointed out that the world is looking at India as land of biotech opportunity due to five key factors: a diversified population, varied climates and a talented workforce, initiatives to relax corporate regulations and a growing demand for bio goods.

He mentioned that the world admires the manufacturing and distribution prowess of India in producing over 2 billion (200 crore) doses of Covid vaccines within the country and even

exporting to the world belying critics about the country's ability to handle such massive vaccination scale.

The biotech sector was further set to expand with the increasing use of biofuels. The Prime Minister said his government's decision to double the blending of biofuels in petrol from 10 to 20% by 2025 will spur huge demand for the green fuel and help the country to reduce dependence of fossil fuel exports. The country is gearing up setting up nearly dozen bioethanol plans to meet the growing demand for the green fuel.

The two-day event also saw the release of a Book on 75 Women in Biotech and 75 Biotech products produced by innovative startups in the country, to mark the forthcoming 75th anniversary of India's Independence.

By Narayanan Suresh

Union Minister Dr Jitendra Singh says India is moving from women-specific to women-led projects



Union Minister of Science & Technology, Earth Sciences (I/C); MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh said that in the Biotech Start-ups sector, India is moving from women specific to women-led projects. He said India is looking at a growth of the Biotech sector from \$70 Billion to \$150 Billion in the next 4 years and added that this cannot be accomplished without the active participation of women.

After releasing a book based on "Compendium of 75 Women Biotech Entrepreneurs" at Biotech Start-up Expo at Pragati Maidan here, Dr Jitendra Singh was addressing the session "The Way Forward". He said, in the past 8 years of Modi Government, the number of female entrepreneur-owned Biotech companies has seen an exponential rise and this can be aptly described as women-led empowerment, rather than women empowerment only.

Dr Jitendra Singh said, the DST and DBT in the Union Ministry of Science & Technology have special schemes to attract women scientists and to provide employment opportunities to the unemployed women scientists. The Minister said, market conditions, access to varied business opportunities, and female entrepreneurs' readiness to jump into the world of business ownership create a winning trifecta.

Dr Jitendra Singh revealed that the number of Biotech Start-Ups in the country has increased from 50 to over 5,000 in the last 8 years, because of the support and enabling milieu provided by Prime Minister Narendra Modi ever since he took over in 2014. It is expected to cross the figure of 10,000 by 2025, he added. He further added that Biotechnology is the key enabling technology driving bio-economy that is recognized as a sunrise sector. He informed that India is

ranked 12th in the world in biotech, 3rd in Asia-pacific and the largest vaccine manufacturer in the world.

Dr Jitendra Singh said, the Department of Biotechnology (DBT) launched the BioCARe program to enhance the participation of women scientists in biotech research and for building capacities. He said, BIRAC launched the WinER Award (Women in Entrepreneurial Research) in association with TiE Delhi, to reward women in biotech entrepreneurship. This initiative of BIRAC along with the Women Specific Bio-incubators will be important to help all women startups to excel in their field.

Dr Jitendra Singh released two publications, "75 Biotech products developed during 75th year of Independence" and "Compendium of 75 Women Biotech Entrepreneurs" on the occasion. He said, the booklet "Biotech Start-up Products" featuring exemplar list of product and technologies is a testimony of the unconditional support and handholding provided to different stakeholders eventually converting the efforts of innovators and entrepreneurs into tangible products.

The Minister congratulated for the wonderful effort made by the entire biotech startup fraternity. Onus is on the stakeholders including Industry, Investors, and Agencies, Public procurement bodies to help them nurture and grow.

Dr. Rajesh S. Gokhale, Secretary DBT thanked Prime Minister Shri Narendra Modi for sparing valuable time to preside over Biotech Start-up Expo-2022 and for inspiring the young minds to take up the challenge to innovate to make our country 'Atma Nirbhar'. Dr. Gokhale also thanked Union Minister Dr Jitendra Singh for his support and leadership and that the DBT will make all efforts to ensure that this momentum is taken forward in the right direction.

On second day of Biotech Start-up Expo, B2B meetings were organized along with the Startup pitching sessions in front of eminent panelists and corporate leaders, Manufacturers, Investors, business mentors, Industrial representatives from ABLE, CII, FICCI, FSII, AiMed, Academic directors & professors and business mentors (TiE) were a part of the pitching session.

ABLE WEBINAR

IN THIS ISSUE ABLE WEBINARS

 Commercializing Cell Therapy Products in India

Commercializing Cell Therapy Products in India June 24, 2022



The webinar "Commercializing Cell Therapy Products in India" was scheduled on 24th June, 2022. This webinar had Cell Therapy Researchers and India's leading Cell Therapy companies – Stempeutics Research and Eyestem Research who are scaling cell therapy platform to share their experiences towards advancing this therapy which has tremendous



potential to transform lives. Welcome & Introduction was done by Mr G S Krishnan, Hon. President, ABLE We had talks by Prof. Polani B. Seshagiri, Dept. of Molecular Reproduction, Development & Genetics, IISc, Bengaluru; Dr. B N Manohar, MD & CEO, Stempeutics Research; Dr. (Lt. Col.) Pawan Kumar

Gupta, Sr. Vice President - Medical & Regulatory Affairs, Stempeutics Research; **Dr. Jogin Desai**, Founder & CEO, Eyestem Research and **Dr. Rajani Battu**, Co-founder &, Chief Medical Officer, Eyestem Research.

The talk was not only informative but also had elucidated a clear road map for how one should approach in developing & commercializing stemcells -based products in India adhering to both Indian and USFDA regulatory guidelines. The webinar recording can be viewed at https://youtu.be/1YOrNgdKlqU

ABLE EVENTS

IN THIS ISSUE ABLE EVENTS

- World Microbiome Day – Workshop & Webinar
- Interaction & Dinner with visiting Biocom, California CEO

World Microbiome Day - Workshop & Webinar June 27, 2022



On World Microbiome Day, ABLE had supported the conduct of hands-on workshops with simultaneous sessions at Bengaluru & Mangaluru by its members viz., Merck Life Sciences, Bengaluru and Yenepoya Research Centre, Mangaluru. Also, in collaboration with another member BioTecNika Info Labs, Bengaluru it brought

together academic and industrial professionals to discuss how the human microbiome, which is sometimes referred to as a "mystery organ," might be better understood. The current technological advancements that allow for the development of a new generation of biotherapeutics were discussed.



Workshop was on "Microbiome Analysis: Tools and Practices" was done simultaneously in Yenepoya Research C entre and Merck Life Science. Hands-on training and sessions on how essential are the Microbiomes, the role of microbiota in humans, soil and water and Microbiome analysis and the workflow were also discussed.

Webinar was on "Understanding Microbiome, Our Mystery Organ" which was conducted live in Youtube by Biotechnika. The speakers were **Narayanan Suresh**, COO, ABLE; **Dr. P. M. Murali**, Hon. President, Council of Presidents, ABLE; **Dr. Rekha**

P.D., Prof. & Director, Yenepoya Research Centre, Yenepoya University, Mangaluru; **Mr. Kumar Sankaran**, CEO, Leucine Rich Bio Pvt. Ltd., Bengaluru; **Dr Gautam Das**, Co-Founder & Managing Partner, miBiome Therapeutics LLP, Mumbai & **Dr. Vinod Kumar Gupta**, Microbiome Program, Mayo Clinic's Centre for Individualized Medicine, Minnesota, U.S.A.

The webinar recording can be viewed at https://www.youtube.com/watch?v=QVGCVCgVzZc

Interaction & Dinner with visiting Biocom, California CEO

June 21, 2022







Biocom California, the leading advocate for life science industry growth worldwide, sees Indian biotech companies cannot be ignored at this point. This is because the country is on the life sciences radar for global companies because of its manufacturing prowess and scientific acumen.

ABLE had assisted visiting officials of Biocom, a large Biotech/Life sciences industry trade group in California, USA to have

meetings with Heads of prominent biotech organizations in Bengaluru & Hyderabad and to connect them to the California Biotech Ecosystem. In this connection, Biocom, California had organized an Interaction and Dinner with Mr. Tim Scott, Chairman of Biocom's Board and Mr. Joe Panetta, CEO of Biocom at Taj, MG Road, Bengaluru.

ABLE MEMBERS IN NEWS

IN THIS
ISSUE

ABLE
MEMBERS IN
NEWS

- Immuneel
 Therapeutics
 announces
 India's first
 Phase II
 patient trials
 for CAR-T
 cancer
 therapies.
- Bugworks has been putting its first promising candidate in Phase – I clinical trials.
- Serum
 Institute's
 qHPV vaccine
 recommended
 against
 cervical
 cancer
- Praj tops
 Fortune
 India's THE
 NEXT 500 in
 Engineering
 Sector

Immuneel Therapeutics announces India's first Phase II patient trials for CAR-T cancer therapies alongside a USD 15 million Series A financing

ABLE Member company, Immuneel Therapeutics has begun patient dosing in a CAR-T trial named "IMAGINE". This phase II trial is the first industry sponsored CAR-T trial in India and is now actively enrolling patients at Narayana Hrudayalaya, Bengaluru.



Founded in 2019 by Biocon founder and chairperson Kiran Mazumdar-Shaw, Dr. Siddhartha Mukherjee, eminent U.S oncologist, and Dr Kush Parmar, Immuneel is on a mission to bring cell and gene therapy programs, especially with clinical data, to India at an affordable cost. With a focus on maintaining global standards, the company is developing cutting edge programs, delivered through partnerships with leading hospitals. In 2021, the

company had established the first cGMP-approved integrated cell therapy development and manufacturing facility at the Mazumdar-Shaw Cancer Centre at Narayana Health City (Bengaluru).

"This trial marks an important step forward for us in delivering transformational cell-based immunotherapies to patients, truly enabling our patients with potential cure. IMAGINE opens a world of possibilities," commented Dr. Arun Anand, Director & Chief Operating Officer, Immuneel Therapeutics.

ABLE Member Bugworks featured in Forbes

ABLE Vice President & Treasurer, Dr Anandkumar's journey to founding his drug discovery company, Bugworks, out of India and the US, is a long one, observed *Forbes* magazine. Over the last six months or so, however, Anandkumar and his co-founders Santanu Datta, Shahul Hameed and Balasubramanian V, have been engaged in the first significant step towards making a new broad-spectrum antibiotic that might kill bacteria already resistant to other antibiotics and medicines.



Fighting Superbugs: How an Indian Avenger is building a life-saving weapon

If they succeed, it will be the first time in more than 60 years that a new class of antibiotics will come to the market to combat 'superbugs.' And it will also be a significant milestone for drug discovery out of India.

Since November, Bugworks has been putting its first promising candidate, a molecule the founders have named BWC0977, through the first phase of clinical trials. The tests are being conducted in Australia. If all goes well, then, by around October this year, they will be ready to move into Phase 2 trials.

Source: www.forbesindia.com

ABLE Member Serum Institute's qHPV vaccine recommended against cervical cancer

The government advisory panel NTAGI is learnt to have recommended India's first quadrivalent human papillomavirus (qHPV) vaccine against cervical cancer, developed by the Serum Institute of India. A separate HPV working group of the National Technical Advisory Group on Immunisation (NTAGI) had examined on June 8 the clinical trial data and usefulness of the vaccine for inclusion in the national immunisation programme, they said.

In the meantime, Serum Institute of India (SII) Director for Government and Regulatory Affairs Prakash Kumar Singh applied to the Drugs Controller General of India (DCGI) seeking market authorisation for the vaccine after the phase 2/3 clinical trial was completed with the support of the Department of Biotechnology to ensure its early availability in the country.

According to official sources, based on this application, the subject expert committee of the Central Drugs Standard Control Organisation (CDSCO) had recommended on June 15 granting market authorisation to the jab. The approval of the DCGI is still awaited.

According to the application submitted by Singh, the vaccine, CERVAVAC, has demonstrated robust antibody response that is nearly 1,000 times higher than the baseline against all targeted HPV types and in all doses and age groups.

The application mentioned that lakhs of women are diagnosed every year with cervical and a few other types of cancer and the death ratio is very high. Cervical cancer in India ranks as the second most frequent cancer among women between 15 and 44 years of age.

"Also, it is noteworthy that presently our country is fully dependent on foreign manufacturers for the HPV vaccine. In line with the philosophy of our group and under leadership of our CEO, Dr Adar C Poonawalla, it has always been our endeavour to make available high quality 'Made in India' vaccines at affordable price for people of our country and world at large," Singh had said in the application.

In another development, Serum Institute has also sought the Centre's approval to export 32.4 lakh doses of the COVID-19 jab Covovax under the brand name Nuvaxovid to the US, which will be the first vaccine to be exported to the country by any Indian manufacturer.

Source: Indian Express

Praj tops Fortune India's THE NEXT 500 in Engineering Sector

ABLE Member Praj Industries won the prestigious Fortune India's THE NEXT 500 Award in the Engineering sector. Mr Shishir Joshipura, CEO & MD of Praj received the accolade from Mr Sarbananda Sonowalat, Union Minister for Ports Shipping and Waterways & Minister of Ayush. Also present as guest of honour was Mr. Arjun Ram Meghwal, Union Minister of State for Parliamentary Affairs & Minister of State for Culture at the gala ceremony held at The Lalit, New Delhi on Friday, 24 June 2022. The Fortune India Next 500 is a ranking of the top five hundred midsize corporations in India compiled based on the latest sales and gross revenues. These are India's largest emerging companies and are viewed as the core of the nation's economic strength & wellbeing.

SOME OF THE KEY EVENTS IN RECENT MONTHS

IN THIS ISSUE

Key events in recent months

- Seminar on "Karnataka Biotechnology Industry & Entrepreneurship Development"
- Workshop on "Secure Trade and Transfers of Biotechnology Regulations and Good Practices in India"
- Circular Economy for Seafood Processing Industry - Value Additions using Biotechnology
- ABLEs BioEconomy India Conclave 2022

Participated in Assam Biotech Conclave 2022 May 21-22, 2022



GUWAHATI GUWAHATI GOOD ARK DISCHOOL BOOK ARK

ASSAM BIOTECH CONCLAVE

2022

21st MAY | 4.30 PM | Conference Centre 01, IIT Guwahati



Glimpses from the 'India at the cusp of MedTech Revolution' & 'Smart Protein Opportunities in India'. Panel Discussions at the Assam Biotech Conclave 2022

where the session deliberated on the topics of Exploring the potential role, NE-India may take in, for becoming a R & D and manufacturing hub for new age vaccines and other advanced medtech and the key steps / actions to bring this to fruition. Also, discussion on what are the Key opportunities and Major challenges faced and what are the need of the day in med-tech innovation. The session was moderated by ABLE President, Mr G S Krishnan.

Also, ABLE COO, Mr Narayanan Suresh participated in a panel discussion on "Decoding Mentorship for Start-ups".

The conclave was held to bring together Biotech

Entrepreneurs, Industry Leaders, Researchers, Academicians, Policy Makers, Innovators and Investors on a single platform to explore the possibilities of Biotechnology in North East India.

Seminar on "Karnataka Biotechnology Industry & Entrepreneurship Development"

May 13, 2022





ABLE organized a highly successful event to promote Karnataka's Biotechnology industry and entrepreneurship develop in Belagavi in North Karnataka on Friday, 13th May 2022. It was attended by nearly 150 biotech entrepreneurs, students, academics and industry representatives in the region. This is the first in the series of such events to be conducted by ABLE, as the Knowledge Partner to the Karnataka Innovation and Technology Society (KITS), under the Department of IT, BT

and S&T, Government of Karnataka. The event was organized in association with KLE Pharmacy, a constituent unit of KLE Academy of Higher Education & Research (Deemed to be University), based in Belagavi. The event was a part of ABLE's mandate to promote biotechnology in Karnataka by creating awareness about the major activities and benefits of various biotechnology products and services.

The speakers were **Dr. Vinay Konaje**, Shilpa Biologics; **Mr. Manas Ranjan Samwal**, Alfanzyme Life Sciences; **Mr. Manoj Ramesh**, Sudhalgae; **Dr. Nagaraja D**, KITS, Government of Karnataka; **Mr. Narayanan Suresh**, ABLE & **Dr. Sunil Jalalpure**, KLE College of Pharmacy, Belagavi.

The key aim was to promote biotech entrepreneurship in the society, particularly among students. The seminar aimed to deliberate on the trends in the biotechnology sector post COVID pandemic and showcased the success stories of regional biotech companies in Tier 2 Cities.



The webinar recording can be viewed at https://youtu.be/RRWjnJo6058

Workshop on "Secure Trade and Transfers of Biotechnology Regulations and Good Practices in India" April 26, 2022



Sri Balaji Vidyapeeth University (SBVU) and ABLE, in collaboration with The Henry L. Stimson Center (USA) are organizing a one-day workshop on "Secure Trade and Transfers of Biotechnology: Regulations & Good Practices in India". The workshop was scheduled for 26th April, 2022 in Shangri-La, Bangalore.

The purpose of the workshop was to bring key Indian regulators to guide the Indian bioindustries on the latest Govt regulations on export control of SCOMET items and

compliance thereunder following best practices. It facilitated them to engage in more value-added R&D, manufacture, and enhance their domestic and global market share.

Experts from DOE, USA, DGFT, DBT and other GOI officials concerned and about 100 bioindustries had participated in the workshop.

The recording can be viewed at https://www.youtube.com/watch?v=UKrEjk9ZqME

Circular Economy for Seafood Processing Industry - Value Additions using Biotechnology April 22, 2022



The webinar "Circular Economy for Seafood Processing Industry - Value Additions using Biotechnology" was held on 22nd April, 2022. The webinar was moderated by Suchitra Tripathy, Head Future Food, Connect & Innovate, Novozymes South Asia Pvt Ltd. Introduction was given by Mr N Suresh, COO, ABLE followed by Welcome address by Mr GS Krishnan, ABLE, President. We had Guest of Honour: Prof. B N Thorat, Senior Professor, Chemical Engineering at Institute of Chemical Technology, Mumbai & Chief Guest: Dr Joykrushna Jena, Deputy

Director General (fisheries), ICAR.



The Speakers for the webinar were: **Dr Rekha Singhal**, Head, Food Engineering and Technology Department, Institute of Chemical Technology, Mumbai; **Dr C. N. Ravishankar**, Director, ICAR-Central Institute of Fisheries Education (CIFE); **Mr Amit Satyen Ravi**, Regional Business Manager of Food and Protein Industry, Novozymes South Asia Pvt Ltd. & **Dr Shivakumar M**, Dean, College of Fisheries, Mangaluru & Head, Advanced Biotech Innovation Centre for Aqua-marine.

The webinar recording can be viewed at https://www.youtube.com/watch?v=UKrEjk9ZqME

ABLEs BioEconomy India Conclave 2022

Powerful address in the Inaugural session



The BioEconomy India Conclave started off on March 22 at 11 AM in The Taj, MG Road, Bengaluru. We had our Guest of Honor: **Dr C N Ashwath Narayan**, Minister of Higher Education, IT, BT and S&T, Government of Karnataka was the Guest of Honor who shared insights of how to drive a self-sustainable economy.

Our Chief Guest: **Prof. K VijayRaghavan**, Principal Scientific
Adviser to the Government of India,
Appreciated Karnataka's initiatives.

Dr E V Ramana Reddy, IAS, ACS,

Government of Karnataka shared his thoughts on How Karnataka has emerged.

Dr Kiran Mazumdar-Shaw, Hon. Non Executive Chairman ABLE & Executive Chairperson, Biocon & Biocon Biologics presented on how the Industry is transforming digitally.

Mr G S Krishnan, President, ABLE & Director Stakeholder relations, Novozymes gave the audience an overview on how BioEconomy has progressed in India

Session on Bioclusters



The session gave updates on significant initiatives with funding & infrastructure support to nurture biotech entrepreneurship in Karnataka, Odisha & Basel Area (Switzerland) by Smt. Meena Nagaraj C N, IAS, Director IT & BT, Department of IT, BT and S&T, Government of Karnataka &

MD, KITS; **Ms Krishna Bhatia**, Chief Representative - India, Basel Area Business & Innovation and **Dr Mrutyunjay Suar**, CEO, KIIT-TBI, DG R&D, KIIT University.

Session on "Wishlist by ABLE"

Dr P M Murali, President-ABLE Council of Presidents, Chairman-Golden Jubilee Biotech Park and CMD-Jananom Pvt Ltd addressed the audience by sharing insights about the Bioeconomy progress in India and segment wise growth. He also stated the future emerging sectors.





Session on Industrial Biotech "New Innovations and emerging opportunities"



Ravi, General Manager, Marketing, Laurus Bio.

Discussion was on new innovations and emerging opportunities in Enzymes, Bioenergy, Smart Protein & Synthetic biologymoderated by Mr G S Krishnan, President, ABLE with speakers Mr Krishna Mohan Puvvada, Regional President, Novozymes South Asia Pvt Ltd; Dr Pramod Kumbhar, President and CTO Praj Matrix - R&D Center, Praj industries Ltd.; Mr Varun Deshpande, Managing Director, The Good Food Institute India and Mr Aditya

BioPharma: "The Next Decade"



Development, Syngene International Limited.

Discussion was on Transition from traditional pharma to digital pharma & emerging new technologies was discussed and moderated by **Dr P M Murali**, President-ABLE Council of Presidents with speakers **Dr Kiran Mazumdar-Shaw**, Hon. Non Executive Chairman ABLE & Executive Chairperson, Biocon & Biocon Biologics; **Dr Vijay Chandru**, Member, Council of Presidents and CMD, Strand Life Sciences and **Ms Sridevi**, Vice President
Biopharmaceutical

BioAgri: "Technological Support to farmers to double their income"



Discusion on Emerging technologies to facilitate farmers improve their yield & address challenges was moderated by **Dr K K** Narayanan, Member, ABLE Council of Presidents and Director, AgriGenome Labs with speakers Dr C L Laxmipathi Gowda, ex-DDG ICRISAT & Cofounder, GRSV Consulting Services and Dr D J Bagyaraj, NASI Hon. Scientist & Chairman, Centre for Natural Biological **Resources and Community** Development (CNBRCD).

Biotech Startups: "Current Landscape and Opportunities"



Discussion was on Startup landscape & how to make it vibrant from an investment point was moderated by **Dr Anand Anandkumar**, Hon Vice

President, ABLE and Co-Founder and CEO, Bugworks Research India Private Limited. An Overview of the Biotech Startup ecosystem was given by **Dr Taslimarif Saiyed**, CEO and Director, Centre for Cellular and Molecular Platforms (C-CAMP); **Dr Jitendra Kumar**, Managing Director, Bangalore

Bioinnovation Centre (BBC) and **Dr Mrutyunjay Suar**, CEO, KIIT-TBI, DG

R&D, KIIT University.

For the panel discussion we had **Dr Manish Diwan**, Head – Strategic Partnership & Entrepreneurship Development, & Make In India Facilitation Cell for Biotech sector, BIRAC, DBT, Govt. of India; **Dr Kavitha Iyer Rodrigues**, CEO, Zumutor Biologics Inc; **Mr Ranjith Menon**, Managing Director, Chiratae Ventures India Advisors; **Ms Tejasvi Ravi**, Principal, Lightrock and **Dr Aditya Kulkarni**, Founder and Chief Scientific Officer, Avammune Therapeutics.

Round Table on Regulatory issues, Biodiversity Act and Food Safety



Srivastava, Partner, Remfry & Sagar.

Expedited approvals, Regulatory simplifications & refined Biodiversity laws was discussed and moderated by Mr Ravi Bhola, Hon. General Secretary, ABLE and Patent Chair, K&S Partners. There was a panel discussion with Dr. Rubina Bose, Deputy Drugs Controller (I), Central Drugs Standard Control Organization; Dr S R Rao, Vice President, Sri Balaji Vidyapeeth University & Co-founder, APAR; Dr Satish Kulkarni, Former Head, ICARNDRI and Consultant, Dairy and Food Industries and Ms Neha

ASSOCIATION OF BIOTECHNOLOGY LED ENTERPRISES (ABLE)

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