Technology Showcase For Sustainable Ingredients Matchmaker (SIMM)

Showcase 3: Sustainable Ingredients For Functional Foods & Additives

-- Organized by TechEx.in --

POTENTIAL GAINS	● Listen to technology pitches and interact with the innovators. ● E-Meet and network with innovators, enthusiasts and experts from India and abroad. ● Hand holding by TechEx.in team for taking innovation to market.
ORGANIZED BY	● TechEx.in, a Tech transfer hub at Venture Center
SUPPORTED BY	● Venture Center ● National Biopharma Mission ● BIRAC
FOR WHOM	● Business development professionals from functional foods, nutraceuticals and food additives manufacturers. ● Startups, entrepreneurs, investors, small/ medium and large-scale companies/ corporates looking for sustainable technologies and green products. ● Individuals interested in knowing about the technologies
WHEN	**Thursday, 26 October 2023| Time: 4:00 PM-6:00 PM (Indian Standard Time)**
WHERE	All sessions will be held on an online platform.
CONTACT	**Technical queries:** Ms Pradnya A. | tto@venturecenter.co.in **Registration queries:** Mr Vineet Joshi | eventsdesk@venturecenter.co.in
REGISTRATION	● FREE and on a first come first serve basis**, but registration is mandatory.** ● **Register here: https://forms.gle/XnJBbt3hLwfyoJAM6** ● Industries can choose to maintain anonymity and opt out from TechEx's publicity for event attendance by companies. To choose this option, please click the relevant tick box while registering. Please note: ● The registered attendees will receive the link for the online session one day prior to the event. ● Organizers reserve the right to select participants so as to optimize the group for better interaction and ensure benefit to as many relevant participants as possible.

Introduction
We aim to initiate technology matchmaking in the sustainable ingredients space. Showcase aims to facilitate technology matchmaking and potential tech transfer/ collaborative/ sponsored research projects.

Showcase includes
● Welcome address from Director, Venture Center ● Pitches by the innovators followed by a Q & A session ● Expert opinions

Showcase 3 Schedule

Time	Duration	Session title	Speaker
4:00- 4:05 PM	5 mins	Introduction to Venture Center and TechEx.in	Kavita Parekh
4:05- 4:15 PM	10 mins	Set the stage for the showcase	● Premnath V, Director Venture Center ● Pradnya Aradhye
4:15- 4:25 PM	10 mins	**Probiotic Spores Encapsulated In Polysaccharide Hydrogel Beads**	Dr Anirban Roy Choudhury CSIR - IMTECH
4:25- 4:30 PM	5 mins	Q & A	
4:30- 4:40 PM	10 mins	**Exopolysaccharides For Probiotic Fortification And Food Processing**	Dr Madhavan Nampoothiri CSIR - NIIST
4:40- 4:45 PM	5 mins	Q & A	
4:45- 4:55 PM	10 mins	**Novel Enzyme And Process For Biosynthesis Of D-Allulose**	Dr Sudhir Singh DBT - CIAB
4:55- 5:00 PM	5 mins	Q & A	
5:00- 5:10 PM	10 mins	**One-Pot Biosynthesis of Kojibiose On An Industrial Scale**	Dr Sudhir Singh DBT - CIAB
5:10- 5:15 PM	5 mins	Q & A	
5:15 –6:00PM	45 mins	Concluding session - Comments from experts, Instructions for next steps and Vote of thanks	● Dr Vilas Sinkar ● Dr Sanjay Nene ● Dr Sathyanarayana ● Dr Premnath V

About the Speakers (in alphabetical order of last names)	
	**Dr Anirban Roy Choudhary** **Senior Principal Scientist, CSIR-Institute of Microbial Technology (IMTECH), Chandigarh** Dr Anirban Roy Choudhury is a Senior Principal Scientist in the field of microbiology and biotechnology at CSIR- Institute of Microbial Technology which is one of the premier CSIR labs based out of Chandigarh. With more than 2 decades of experience in the industry and academia, Dr Anirban is an adept researcher in Bioprocess Development and Scale up; Fermentative production of polysaccharides and Polysaccharide based biomaterials. The main areas of his research domain include fermentative production of various commercially important biomolecules and his laboratory is actively working on polysaccharides which are one of the most abundant but relatively less exploited biomolecules. He is extensively involved in the research of polysaccharides ranging from screening, production and scale up of polysaccharide fermentation to developing biomaterials which has diverse applications.
	**Dr Madhavan Nampoothiri** **Senior Principal Scientist, CSIR - National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram** Dr K. Madhavan Nampoothiri, PhD FBRS, is presently working as Senior Principal Scientist and Head of Biprocesses and Product Section of the Microbial processes and technology division of CSIR-NIIST, Trivandrum. Dr. Madhavan took his graduation and Post graduation in Zoology from University of Kerala. In 1997, he obtained his PhD in Microbial Biotechnology from Cochin University of Science and Technology (CUSAT). After the doctoral studies, he worked as Research Associate in Indian Institute of Science (IISc), Bangalore; as Alexander von Humboldt (AvH) Post-doctoral fellow at IBT 1 , Forschunzentrum , Juelich in Germany and as Wellcome Trust Postdoctoral fellow in the University of Newcastle upon Tyne, England. In 2001 he joined CSIR-NIIST. He is actively involved in Microbial Biotechnology R&D and his research interests are in the areas of functional genomics, bioprocess and microbial products, infectious diseases, therapeutic enzymes and inhibitors, probiotics and biopolymers etc. Dr. Madhavan has one Indian patent and six US patents. He has also made about 40 NCBI gene sequence submissions. In 2003, he received the Young scientist award from Biotech Research Society of India and was the recipient of outstanding performance award for the year 2008-09 from CSIR-NIIST. In 2016, he was elected as Fellow of the BRSI. Dr. Madhavan has research collaborations with institutes and universities in Germany, France, Hungary and Mexico.
	**Dr Sudhir Singh** **Scientist-D, DBT - Center of Innovative and Applied Bioprocessing (CIAB), Mohali** Dr. Sudhir Singh is currently working as a Scientist-D in DBT-CIAB, Mohali. The main focus of his research is gene mining, biocatalyst engineering and enzyme characterization for the development of approaches for the production of value-added bio-products from the low-cost feedstock. His research group generated metagenomic resources from the thermal-springs and ethnic fermented food products. They also discovered novel genes encoding enzymes with superior catalytic properties of high value to the food industry, e.g., D-allulose 3-epimerase, amylosucrase, xylanase,endoglucanase, type I pullulanase etc. By deploying these enzymes, his

	team has achieved biosynthesis of various dietary functional molecules from low-cost feedstock. Dr. Sudhir's findings of D-Allulose and Turanose are the first reports from India on these rare sugars. He has five granted patents to his credit and has been conferred the Professor Hira Lal Chakravarty Award by the Indian Science Congress Association, DST, India. He is a selected member of the National Academy of Science, India and his team also received the Gandhian Young Technological Award (GYTI) by SRISTI.

About the Experts (in alphabetical order of last names)	
	**Dr Satyanarayana K V** **Vice President - Life Science Advisory, Sathguru Management Consultants Pvt Ltd** Dr Satyanarayana leads the Food Processing and Retail Practice at Sathguru Management Consultants Pvt Ltd. His focus areas include research strategy, portfolio optimization, technology commercialization, technical due diligence for M&A and regulations in the food sector. He is actively involved in technology landscaping and scouting of progressive technologies from leading global research bodies and licensing them to clients. He is also involved in project management of development focused public – private partnership projects involving technology transfer. Dr Satyanarayana has over a decade of industry experience. Prior to joining Sathguru, he worked with Tata Innovation Centre in the areas of industrial biotechnology and food ingredients. Satya holds undergraduate and postgraduate degrees in Agriculture from ANGRAU and a Ph.D in Biotechnology from CFTRI/ University of Mysore and is a certified Lead Instructor for the FSPCA Preventive Controls For Human Food.
	**Dr Sanjay Nene** **CEO and Founding Director at Innovation Biologicals, Pune** Dr Nene is the CEO and Founding Director at Innovation Biologicals, a startup incubated at Venture Center. He was with CSIR-NCL as Chief Scientist and Head of Biochemical Engineering Unit, Chemical Engineering & Process Engineering Division. He is M.Tech (Biochemical Engineering) from IIT, Delhi and PhD (Tech: Chemical Engineering) from Mumbai University. His areas of expertise include production of vaccines and biologicals, fermentation for production of enzymes (CGTase, alkaline protease, polyphenol oxidase), recombinant proteins (phytase and lactoferrin), chemicals from renewable resources (Lactic and Pyruvic acid), energy/bioremediation (Algal cultivation), recovery of natural products: Stevioside from Stevia leaves, processing of fruit juices and natural beverages (Neera) and membrane processing, chromatography, aqueous two phase extraction, biotransformation of drug intermediates etc.

Dr Vilas Sinkar
Ex-Vice President R&D, UNILEVER

Dr Vilas Sinkar is Ex- Vice President of R&D at Unilever, Bangalore. He is currently actively working with Academia and various National Science Organisations in developing roadmap for science and applications of science. He has been on Research Advisory Councils of National Labs and Non-Profit Organizations. One of his areas of interest includes fostering Industry academia connections. While working as Vice President at Unilever R&D and earlier positions at Unilever, he has set up several successful scientific collaborations with leading academic groups in India and abroad.

With many years of experience in the industry, Dr Sinkar has held various positions at Unilever including Director of Programmes & Resource at Unilever R&D Bangalore, Director of Unilever Food & Health Research Institute, Head of Environmental Safety Laboratory at Hindustan Unilever, Director of Skin Care Research at Unilever R&D Bangalore, Director of Beverages Research at Unilever R&D Bangalore and Head of Microbiology & Fermentation at Hindustan Lever Research Centre.His educational qualifications include B.Sc. & M.Sc. from University of Bombay, MS & Ph.D. from University of Rochester, USA and Post-doctoral research in the Department of Biochemistry at University of Washington, USA.

Dr V Premnath
Director Venture Center, Head NCL Innovations & Scientist, Polymer Science Division, CSIR-National Chemical Laboratory Pune

Dr V. Premnath is currently the Head, NCL Innovations – the group within National Chemical Laboratory (NCL), charged with the responsibility of championing the cause of technology innovation within NCL. He also provides leadership for the Intellectual Property Group at NCL – one of India's leading IP management groups based out of the research institutions. Dr. Premnath is also the Director of the Venture Center – a Technology Business Incubator at NCL campus. He is also a Scientist, Polymer Science & Engineering Division at NCL with an interest in technology development for biomedical products.

Dr Premnath is the founder and first Director of Venture Center, CSIR-Tech (a technology commercialization company), Orthocrafts Innovations (degradable synthetic polymer based biomed products startup) and BiolMed Innovations (silk-based biomaterials startup).

Dr Premnath holds a B. Tech. from the Indian Institute of Technology – Bombay and a Ph.D. from the Massachusetts Institute of Technology, USA. He has also been a Chevening Technology Enterprise Fellow with the Centre for Scientific Enterprises, London Business School and Cambridge University, UK. He brings with him considerable experience in technology development and commercialization (two successfully commercialized families of biomedical products), incubation and innovation management, working with startup companies (in Cambridge-UK and India) and engaging with large corporations on research and consulting projects as a project leader.

Organized by	
TechEx.in Tech Transfer Hub at Venture Center Supported by NBM - BIRAC	TECHEX.IN is a Technology Transfer Hub operated by Venture Center, Pune, India and supported by the National Biopharma Mission, BIRAC (Govt of India). TECHEX.IN aims to help technology developers and technology commercialization entities find each other's, forge partnerships and advance the technology closer to the market in a win-win partnership. In this mission, TECHEX.IN will build upon the learnings, methods and experiences of NCL Innovations (department of CSIR-NCL championing innovations), IPFACE (IP Facilitation Center) and Venture Center (technology business incubator). The TECHEX.IN is based in the western part of India. While its focus is on organizations in Maharashtra, Gujarat and Goa states of India, it welcomes technology developers and technology commercialization entities from any part of the world. For more information please visit: techex.in
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nbm NATIONAL BIOPHARMA MISSION	National Biopharma Mission (NBM) is a Mission of the Government of India approved by the Cabinet for implementation in May 2017. The NBM's mission is to make India a hub for design and development of novel, affordable and effective biopharmaceutical products and solutions. The NBM has an allocation of US$ 250 million and is jointly funded by the Government of India and the World Bank in equal measure. The NBM is officially known as "An Industry-Academia Collaborative Mission of Department of Biotechnology (DBT) for Accelerating Early Development for Biopharmaceuticals". Biotechnology Research Assistance Council (BIRAC) is the implementation partner of the Government of India for the Mission. For more information, visit: https://birac.nic.in/nbm/
birac Ignite Innovate Incubate	Biotechnology Industry Research & Assistance Council (BIRAC)is a new industry-academia interface and implements its mandate through a wide range of impact initiatives, be it providing access to risk capital through targeted funding, technology transfer, IP management and handholding schemes that help bring innovation excellence to the biotech firms and make them globally competitive. For more information, visit: www.birac.nic.in
VENTURE CENTER	Entrepreneurship Development Center (Venture Center) – a CSIR initiative – is a Section 25 company hosted by the National Chemical Laboratory, Pune. Venture Center strives to nucleate and nurture technology and knowledge-based enterprises by leveraging the scientific and engineering competencies of the institutions in the Pune region in India. The Venture Center is a technology business incubator supported by the Department of Science & Technology's National Science & Technology Entrepreneurship Development Board (DST-NSTEDB). Venture Center's focuses on technology enterprises offering products and services exploiting scientific expertise in the areas of materials, chemicals and biological sciences & engineering. For more information, visit: http://www.venturecenter.co.in/