

## Technology Matchmaker on Sustainable Ingredients (SIMM) Showcase 1: Sustainable Ingredients for Food and Nutrition

-- Organized by Techex.in --

<b>Gains</b>	<ul style="list-style-type: none"> <li>Listen to pitches for available technologies by the innovators from RCM domain.</li> <li>Hand holding by TechEx.in team for taking innovation to market.</li> <li>E-Meet and network with innovators, enthusiasts and experts from India and abroad.</li> </ul>	
<b>Organized by</b>	<ul style="list-style-type: none"> <li>TechEx.in, a Technology Transfer Hub at Venture Center</li> </ul>	
<b>Supported by</b>	<ul style="list-style-type: none"> <li>BIRAC (<a href="https://birac.nic.in/index.php">https://birac.nic.in/index.php</a>)</li> <li>National Biopharma Mission (<a href="https://birac.nic.in/nationalbiopharmamission.php">https://birac.nic.in/nationalbiopharmamission.php</a>)</li> <li>Venture Center, Pune (<a href="http://www.venturecenter.co.in">www.venturecenter.co.in</a>)</li> </ul>	
<b>For whom</b>	<ul style="list-style-type: none"> <li>Individuals interested in knowing about the technologies</li> <li>For startups, entrepreneurs, small/ medium size companies, large companies/ corporate, investors.</li> </ul>	
<b>When</b>	<b>Friday, 3 February 2023   Time: 4.00 PM-6.30 PM (IST)</b>	
<b>Where</b>	All sessions will be held on an online platform	
<b>Contact</b>	<u>Technical queries:</u> Ms Pradnya A.   8805009010 <a href="mailto:pradnya@venturecenter.co.in">pradnya@venturecenter.co.in</a>	<u>Registration queries:</u> Ms Lipika Biswas   9156465137 <a href="mailto:eventsdesk@venturecenter.co.in">eventsdesk@venturecenter.co.in</a>
<b>Registration</b>	<p><b>FREE and on a first come first served basis, but registration is mandatory.</b></p> <p><u>Registration Process:</u></p> <ul style="list-style-type: none"> <li>Step 1: Interested participants need to fill in an online registration form at the following link.  <b>Register online at: <a href="https://tinyurl.com/showcase-feb">https://tinyurl.com/showcase-feb</a></b>            The registered attendees will be sent the link to join the online session a day prior to the seminar.</li> </ul> <p><u>Note:</u></p> <ul style="list-style-type: none"> <li>Tech Seekers (invitees and attendees) have an option to attend the event anonymously. To choose this option, please click the relevant tick box while registering.</li> <li>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.</li> </ul>	

## Introduction

We aim to initiate technology matchmaking in Sustainable Ingredients space. Showcase aims to facilitate technology matchmaking and potential tech transfer/ collaborative/ sponsored research projects.

## Instructions for the participants

- Welcome address from Director, VC
- Pitches by the innovators followed by a Q & A session
- Expert opinions

## Showcase 1 Schedule (Renewable Monomers, Polymers and Fuels)

Time	Duration	Topic	Lead 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	<ul style="list-style-type: none"> <li>• Premnath V, Director Venture Center</li> <li>• Pradnya Aradhya</li> </ul>
4:15- 4:25 PM	10 mins	<b>Sustainable Ingredient:</b> Trehalose	Dr Sudhir Singh, CIAB
4:25- 4:30 PM	5 mins	Q & A	
4:30- 4:40 PM	10 mins	<b>Sustainable Ingredient:</b> Xylo-Oligosaccheride	Dr Naseem Gaur, ICGEB
4:40- 4:45 PM	5 mins	Q & A	
4:45- 4:55 PM	10 mins	<b>Sustainable Technology:</b> Co-encapsulation technology	Dr Anirban Roy Chaudhary, CSIR-IMTECH
4:55- 5:00 PM	5 mins	Q & A	
5:00- 5:10 PM	10 mins	<b>Sustainable Ingredient:</b> Astaxanthin	Dr Shashi Rode, ICGEB
5:10- 5:15 PM	5 mins	Q & A	
5:15- 5:25 PM	10 mins	<b>Sustainable Ingredient:</b> Naphthoquinone red pigments	Dr Shashi Bhushan, CSIR-IHBT
5:25- 5:30 PM	5 mins	Q & A	
5:30- 5:40 PM	10 mins	<b>Sustainable Ingredient:</b> Tricomposite hydrogel	Dr Anirban Roy Chaudhary, CSIR-IMTECH
5:40- 5:45 PM	5 mins	Q & A	
5:45 – 6:30 PM	45 mins	Concluding session - Comments from experts, Instructions for next steps, Vote of thanks	<ul style="list-style-type: none"> <li>• Dr Guruswamy</li> <li>• Dr Sanjay Nene</li> <li>• Dr Vidya Gupta</li> <li>• Dr Premnath V</li> <li>• Dr Vilas Sinkar</li> <li>• Dr Satyanaryana</li> </ul>

**Speakers (in alphabetical order of last names)**


**Dr Shashi Bhushan**  
**Senior Principal Scientist, CSIR-Institute of Himalayan Bioresource Technology, Palampur**



**Dr Anirban Roy Chaudhary**  
**Senior Principal Scientist, CSIR-Institute of Microbial Technology, Chandigarh**



**Dr Naseem Gaur**  
**Group Leader, Yeast Biofuel, International Centre for Genetic Engineering and Biotechnology, Delhi**



**Dr Vidya Gupta**  
**Emeritus Scientist, CSIR-National Chemical Laboratory, Pune**

Dr Vidya Gupta, a fellow of NAAS, India was working in the area of plant biochemistry and molecular biology at CSIR-NCL, Pune for forty years. She superannuated from CSIR-NCL as Chief Scientist and Chair followed by CSIR Emeritus scientist. She has research experience in four areas, namely metabolomics, molecular markers based agro-economic trait analysis and genetic diversity, molecular host-pest/ pathogen interactions and genome organization. Currently, she has been associated with ICTRC, Pune as Research Adviser and involved in different capacities with various activities of CSIR, ICAR, DST and DBT. Her postgraduation and doctorate in biochemistry and chemistry, respectively are from Pune University and CSIR-NCL, Pune while postdoctoral research experience is from Texas A&M University, USA. She has 223 research publications in reputed journals with h index 55 and citations 10798. Nine national and internationally granted and four filed patents are to her credit. Thirty-seven Ph. D. scholars have received degree under her supervision. She has completed 33 projects from various national and international funding agencies. She has given more than 150 lectures in various national and international conferences and have also organized many such symposia. She has many academic awards and social honours to her credit.



**Dr Guruswamy Kumaraswamy**  
**Professor, Indian Institute of Technology, Bombay**

Guruswamy Kumaraswamy is currently a Professor of Chemical Engineering and INAE Abdul Kalam Technology Innovation Fellow at the Indian Institute of Technology Bombay. His research interests are in the area of sustainability and soft materials. His group has made important contributions to engineering the structure of soft matter, that have been translated into technologies.



**Dr Sanjay Nene**  
**CEO AND FOUNDING DIRECTOR AT INNOVATION BIOLOGICALS, PUNE**

Dr Nene is 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 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 the India’s leading IP management group based out of 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. V. 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.



**Dr Shashi Kumar Rode**  
**Group Leader, Metabolic Engineering, International Centre for Genetic Engineering and Biotechnology, Delhi**



**Dr Satyanarayana K V**  
**Vice President - Life Science Advisory, Sathguru Management Consultants, Hyderabad**

Satya leads the Food Processing and Retail Practice and focuses on 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. Satya has over a decade of industry experience. Prior to joining Sathguru, Satya 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 Sudhir Singh**  
**Scientist-D, Center of Innovative and Applied Bioprocessing (DBT-CIAB), Mohali, India**

Dr. Sudhir P. Singh is currently working as a Scientist-D in a national research institute, Center of Innovative and Applied Bioprocessing (DBT-CIAB), Mohali, India. 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 thermal-springs, and ethnic fermented food products, and 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,  $\beta$ -glucosidase, glutamate decarboxylase, xylose isomerase, and pectate lyase. Deploying these, he achieved the biosynthesis of dietary functional biomolecules, e.g., D-allulose, turanose, fructooligosaccharides, glucooligosaccharides, 4-galactosyl-kojibiose, levan, dextran, and resistant starch, utilizing the low-cost feedstock. His findings on D-allulose and Turanose are the first reports from India, on these rare sugars. He reported the most thermostable D-allulose 3-epimerase, characterized so far. Dr. Singh has published 58 research articles, 04 review papers, 4 books, and 05 granted patents to his credit. He is a selected member of the National Academy of Science, India. Moreover, he has been conferred Professor Hira Lal Chakravarty Award, by Indian Science Congress Association, DST, India. His team was conferred Gandhian Young Technological Innovation Award (GYTI) by SRISTI.






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

Education: B.Sc. & M.Sc. (University of Bombay); MS &Ph.D. (University of Rochester, USA). Post-Doctoral Research: Department of Biochemistry at University of Washington, USA. Last Positions Held: Retired as Vice President, Unilever Strategic Science and Head of Unilever R&D Bangalore. Earlier Positions: Director Programmers and Resource Unilever R&D Bangalore; Director, Unilever Food and Health Research Institute; Head, Environmental Safety Laboratory Hindustan Unilever; Director Skin Care Research Unilever R&D Bangalore; Director Beverages Research Unilever R&D Bangalore; Head Microbiology and Fermentation, Hindustan Lever Research Centre. Post Retirement: Actively working with Academia and various National Science Organizations in developing roadmap for science and applications of science. Have been on Research Advisory Councils of some National Labs and Non-Profit Organizations. Area of particular interest: Industry academia connects. While working as Vice President at Unilever R&D and earlier positions at Unilever set up several successful scientific collaborations with leading academic groups in India and abroad.

 <p>TechEx.in Tech Transfer Hub at Venture Center Supported by NBM - BIRAC</p>	 <p>VENTURE CENTER 15 years of service to the Nation</p>	 <p>nbm NATIONAL BIOPHARMA MISSION innovate in India for inclusiveness (i3)</p>	 <p>birac ignite innovate incubate</p>
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Organized by	
 <p>TechEx.in Tech Transfer Hub at Venture Center Supported by NBM - BIRAC</p>	<p><a href="http://techex.in">TECHEX.IN</a> 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 learning's, 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: <a href="http://techex.in">techex.in</a></p>

Supported by	
 <p>birac ignite innovate incubate</p>	<p>Biotechnology Industry Research &amp; 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: <a href="http://www.birac.nic.in">www.birac.nic.in</a></p>
 <p>nbm NATIONAL BIOPHARMA MISSION innovate in India for inclusiveness (i3)</p>	<p>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 :<a href="https://birac.nic.in/nbm/">https://birac.nic.in/nbm/</a></p>
 <p>VENTURE CENTER 15 years of service to the Nation</p>	<p>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 &amp; Technology's National Science &amp; 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 &amp; engineering. For more information, visit: <a href="http://www.venturecenter.co.in/">http://www.venturecenter.co.in/</a></p>

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