



Mixer on Waste: Opportunities for Impact

- Organized by Venture Center -

Potential gains	 Get an overview of key issues/ challenges and emerging opportunities Explore potential industry-academia/research fraternity partnerships in technology development and advancement to address Waste-related issues prevalent in India. Meet and network with innovators, enthusiasts and experts in Western Maharashtra region. Learn about recently announced and upcoming funding opportunities 	
Organized by	Venture Center's SPARSH Center, Social Innovation Initiative	
Supported by	 Biotechnology Industry Research and Assistance Council (BIRAC) Venture Center 	
For whom	 Innovators and technologists NGOs and Social Innovators Industry professionals Researchers and students Entrepreneurs/ startups with interest in Waste to Value issues Impact/ Social Investors with interest in venture financing for Waste to Value issues. We especially welcome budding entrepreneurs who wish to work on Waste to Value themes 	
When	Saturday, 11 January 2020 Time: 1330 - 1800	
Where	Training Room, Venture Center, 900 NCL Innovation Park, Dr. Homi Bhabha Road, Pune	
Contact	Ms. Lipika Biswas Phone: +91-20-2586-5877 Email: eventsdesk@venturecenter.co.in	
Cost	Free event. Registration is mandatory Maximum 50 seats; First-come-first-serve. Registration form available at - https://tinyurl.com/11janmixer More info on: https://www.venturecenter.co.in/socialinnovations Registrations close on 8 Jan 2020 or till 50 seats are filled. Note: • Attendance only on confirmation of registration.	





Introduction

This Mixer aims to network all stakeholders to help initiate useful projects, start-ups etc in Waste valorization space. Sub-themes that will be explored include:

- waste reduction
- circular economy
- sustainability
- waste to value.

This Mixer is part of the Social Innovation Initiatives at Venture Center. It is aligned with the announcement of a funding program, the **S**ocial Innovation Immersion **P**rogram (SIIP) so as to help facilitate startup creation.

The Mixer aims to:

- Explore potential industry-academia/research partnerships in technology development and advancement.
- Foster networks with industry/academic experts/ entrepreneurs
- Introduce upcoming funding opportunities like the BIRAC-SPARSH-SIIP call for "Waste to Value".

Mixer Outline

Mixer shall consist of:

- Invited Talks
- Panels
- Networking sessions

Mixer includes

- Includes tea/ snacks
- Membership in mailing list to follow-up on workshop

*Please note, the participants will have to arrange for their own travel/local transport and accommodation and dinners.

- For accommodation (standard and budgeted hotels) please visit: <u>http://www.venturecenter.co.in/puneguide/standard.php</u>
- For accommodation (deluxe and luxury hotels) please visit: <u>http://www.venturecenter.co.in/puneguide/deluxe.php</u>
- For local transport details visit: http://www.venturecenter.co.in/puneguide/taxi.php





Schedule		
Time	Session title	Faculty
1330-1400	Registration : Foyer Area	
1400-1415	Welcome to Venture Center Introduction to the Mixer	Dr. V. Premnath (Director, Venture Center) Dr. Mugdha Lele (Sr. Manager – Social Innovations)
1415-1445	Invited Talk I: From biomass to value-added products: Technology development, innovation opportunities and Praj Matrix Initiatives	Dr. Pramod Kumbhar (President and Chief Technology Officer, Praj Industries Ltd)
1445-1530	Panel 1: Fuels, Chemicals and Materials	 Dr. Paresh Dhepe (NCL) Dr. S. Kadhiravan (NCL) Mr. Amol Nisal (AVP, Praj Industries Ltd) Dr. Rohit Sharma (NCCS-NCMR) Dr. Prakash Wadgaonkar (NCL) Moderator: Dr. M. V. Shankar
1530-1600	Networking Tea/Coffee: Foyer Area	
1600-1645	Panel 2: Food, beverages and nutritional products	 Dr. Sandeep Kale (Managing Director, QbD Purples Advanced Technologies) Mr. Nilesh Lele (Director, Exelon Foodbio Advisors Pvt. Ltd) Dr. Sanjay Nene (Director, Innovation Biologicals) Dr. Vishal Sardespande (CTARA, IITB) Moderator: Dr. Priya Nagraj
1645-1715	Invited Talk II: The bio-ethanol and biofuels opportunity: Market, industry and emerging technologies	Mr. Ghanshyam Deshpande (President - Technology and Engineering)
1715-1745	An overview of SIIP-SPARSH fellowship scheme from DBT-BIRAC focused on Waste to Value theme	Ms. Sonia Gandhi (Sr. Manager – Investments, BIRAC, New Delhi) on Skype
1745	Networking Tea/Co	offee and Snacks break: Foyer Area





Speakers and Panelists (in alphabetical order of last names)

Ghanshyam Deshpande	Deshpande is President and presently heading Technology and Engineering division in Praj Industries Ltd. He is Masters in Chemical Engineering from ICT, Mumbai. He has more than 30 years experience in Designing, Engineering and commercialization of Biofuel and Beverage Ethanol technologies globally. He has more than ten filed patents and is actively involved in commercialization of Praj's 2 nd Generation Smart Bio refinery.
Paresh Dhepe	Paresh is currently a Senior Scientist in Senior Scientist in Catalysis And Inorganic Chemistry Division at CSIR-NCL. He is Ph.D in Green Chemistry: Heterogeneous Catalysis from Hokkaido University, Japan. His areas of expertise include Green chemistry where he has worked on conversion of biomass (renewable feedstock) into value-added chemicals using environmental green pathways. He also specialized in catalyst designing here he has worked on synthesis and characterization of silico-aluminophosphate (SAPO), supported metal oxides, carbonaceous catalyst, mesoporous silicas, supported metal nanostructures, solid acids, solid bases. He also works on varied catalysis processes like hydrolysis, hydrogenolysis, hydrogenation, hydroxylation, oxidation, dehydrocyclization, isomerization reactions by heterogeneous catalysts. He has several ongoing National and International collaborative projects, publications, awards and patents to his credit.
Sonia Gandhi	Sonia is working as Chief Manager for Investments with BIRAC, New Delhi. She leads the SPARSH scheme of BIRAC under which she is also responsible for managing the Social Innovation Immersion Program, the flagship fellowship program at BIRAC. She is also involved in technical guidance and mentoring of start-ups and Entrepreneurs in Life sciences sector. Prior to BIRAC, Sonia was managing the Quality Assurance of Bio-pharmaceuticals at Reliance Life Sciences. She has participated as delegate and speaker in various national and International workshops and has been part of various new initiatives at BIRAC, like First Hub, designed to promote government initiatives on Start-up India & Make in India and provide mentoring on regulatory pathways and regulation, funding and investment opportunities, market access, industry-academia partnerships and intellectual property.
S. Kadhiravan	Kadhiravan is currently a Senior Scientist in the Polymer Science and Engineering Division of CSIR-NCL. His research research is primarily focused on bio-inspired stimuli responsive nanocomposites for medical implants, electrospinning polymer nanofibres, biopolymer composites and bio-derived materials. He is B.Tech in Textile Technology from Anna University (Chennai), M.S from University of Massachusetts Dartmouth, USA and Ph.D in Macromolecular Science and Engineering from Case Western Reserve University, USA. His post-doctoral research was at The University of Texas at Austin, USA. He has authored several publications and patents and the significance of his work has been recognized by several awards from various scientific communities including Material Research Society (USA), and the American Chemical Society (ACS).
Sandeep Kale	Sandeep is Managing Director at Qbd Purple Advanced Technologies Pvt. Ltd. He is M.Tech in Bioprocess Technology and Ph.D. (Tech) in Chemical Engineering from ICT, Mumbai. He has over 10 years of experience in technology development and translation with 25 patents. He is also member Board of Director of "Abhay Nutrition Pvt. Ltd., Jalna, India. He has earlier worked as associate professor and coordinator of M Tech Bioprocess Program at ICT, Mumbai. He is recipient of 'Young Scientist Award in Biochromatography' from SBCN, France. He has also received Dr. PD Sethi award and Dr. R.K. Khanna Memorial award for best research papers. He has commercialized multiple technologies. At ICT, Mumbai he has guided 26 Masters and 11 PhD students. He has active collaboration with various industries in India and abroad. He has developed several new technologies for the industries e.g. herbal/natural

Venture Center: <u>http://www.venturecenter.co.in/</u> Contact No: 020 2586 5877; Email: <u>eventsdesk@venturecenter.co.in</u> Facebook Page: <u>https://www.facebook.com/venturecenterpune?ref=hl</u>





	products purification, Oil seed meal processing, various protein purification and hydrolysis, omega fatty acid purification by chromatography, glycerol refining, sugar and oligosaccharide
	purification, stevia extraction and purification, antioxidant extraction and purifications related to cancer, diabetes, inflammation, autism, skin care, brain development etc.
Pramod Kumbhar	Kumbhar is President and Chief Technology at Praj Matrix –R&D center leading a team of 90+ scientists and engineers. After working for more than 20 years in petrochemical (hydrocarbon) industry he shifted to biotechnology led renewable fuels and chemicals industry, where he is driving innovations in biotechnology to make biofuels and bio chemicals. Kumbhar is Ph.D. in Chemical Engineering from Institute of Chemical Technology, Mumbai and has done Post- doctorate from CNRS laboratories in Montpelier and Institute of Catalysis, Lyon in France. He is a fellow of Maharashtra academy of sciences and has received the ICI process development award from Indian Institute of Chemical Engineers. Prior to Praj, he has worked at General Electric R&D Centre in Bangalore and SI Group (formerly Schenectady chemicals, USA) in various positions including R&D director for Asia Pacific. He has several publications and more than 30 International patents to his credit.
Mugdha Lele	Mugdha is Sr. Manager - Social Innovations at Venture Center with a Ph.D in Health Sciences from Pune University. She drives the Social Innovation initiatives at Venture Center. She is nominee director on the board of Synthera Biomedical Pvt Ltd (a dental biomaterials startup) incubated at Venture Center. She was a Chevening Rolls Royce Science, Innovation, Policy and Leadership Programme (CRISP) Fellow at the Saïd Business School, University of Oxford, UK in 2016. In 2018 she has also been part of the Aritra Accelerator Program for Leadership in the Social Sector at IIM Bangalore with Phicus Solutions and Dr. Reddy's Foundation.
	Nilesh is Founder and Managing Director at Exelon Foodbio Advisors Pvt. Ltd. His company provides Technical and Management Consultancy to SMEs. He is also the Proprietor of Exelon Basket, which is into manufacturing of beverages since 2012. He holds a Chemical Engineering Degree from ICT (formerly called UDCT) and has completed his MBA from The United States of America. He has worked as Vice President at MNC Banks such as Barclays Capital and Deutsche Bank in India and USA. Nilesh is a Hon. Secretary of Association of Food Scientists and
Nilesh Lele	Technologists India (AFSTI). He is also on the Board of Governors for UDCT Alumni Association. 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, alkalineprotease, 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.
Priya Nagraj	Priya is Bio incubation Manager at Venture Center. She holds a M.S. in Biochemistry from MS University, Baroda and a Ph.D. in Cell Biology from University of Virginia, USA. She has worked with Advinus Therapeutics Ltd, a pharmaceutical drug discovery company for over 5 years. She has research experience in biochemistry, cell biology, developmental biology, molecular biology and drug discovery. At Venture center she is the nodal person for the Bio-Incubation activities including the BioIncubator project. She is also responsible for mentoring entrepreneurs especially relating to fund raising activities, sharpening their proposals/pitches/business plans, creating a pipeline of potential and signed-up incubatees for the Bioincubator, conceptualizing

Venture Center: <u>http://www.venturecenter.co.in/</u>

Contact No: 020 2586 5877; Email: <u>eventsdesk@venturecenter.co.in</u> Facebook Page: <u>https://www.facebook.com/venturecenterpune?ref=hl</u>





	and executing technical workshops and assisting in planning and organizing events of use to
Amol Nisal	entrepreneurs, start-ups, budding entrepreneurs etc. Amol is currently Asst Vice-President at Praj Industries. He is M.S. in Mechanical Engineering from University of Toledo, Ohio, USA and MBA from IIM Ahmedabad. He is experienced in navigating businesses through global complexities and entering into new markets, has deep understanding of global biofuels market, advanced biofuels and Chemicals & regulations/policies. His areas of interest include market development (B2B) & business strategy, technology commercialisation, project conceptualization, feasibility studies, financial modelling & techno-commercial viability studies, project costing and proposal development, commercial & legal aspects of contract, technology sales, contract negotiations and project management.
Vishal Sardeshpande	Vishal is founder of SARVAAY Solutions and also working as an adjunct associate professor at Centre for Technology Alternatives for Rural Areas (CTARA), IITB. He is M.Tech and Ph.D from Department of Energy Science and Engineering, IITB. He specializes in product development, industrial energy studies and applications. He has been associated with Thermax, A.T.E. Enterprises, National Dairy Development Board (NDDB), Ministry of New and Renewable Energy (MNRE) Govt. of India and Forbes Marshall and has more than 22 years of experience in industry and consulting engineering. He is currently working on scale-up of jaggery and turmeric processing plant and farm-based biomass dryer. He is developing solar process heat applications in dairy, community cooking and solar roasting. He is a certified energy auditor from the Bureau of Energy Efficiency, Govt. of India. He has also been a Chevening Rolls-Royce Science, Innovation and Leadership fellow at the Saïd Business School, University of Oxford, UK.
M V Shankar	Shankar is Vice President - Technology Innovation & Knowledge Management, Dean Mahindra Technical Academy at Mahindra & Mahindra, Chennai. He is a technology innovation leader. He is passionate about facilitating technology innovations in India. He excels in mentoring inventors to grow their ideas into innovations. He is a scientist and technology manager with strong technical expertise and experience in translating technical ideas into technology innovations. Experienced in identifying new technologies for potential business opportunities with a proven track record in 'Innovation for New Product Development'. Successful innovator track record with numerous granted patents, technical publications and presentations and the ability to lead global multi-functional teams with focus on delivery of business strategy. Technology scout for global ventures and business development.
Prakash Wadgaonkar	Wadgaonkar is Emeritus Scientist at Polymer Science and Engineering Division, CSIR-NCL and has been with NCL since 1982. He is a Ph.D from Pune University. His areas of expertise include controlled polymerization methods, monomers and polymers from renewable resources, high performance polymers, polymers for optoelectronics, associating polymers, polymeric materials for gas separation, self-healing polymers, click chemistry, PDMS elastomers for maxillofacial prostheses and UV curable coatings. He has more than 200 publications and 20+ National and International patents to his credit. He has also been consulting various industries during his NCL tenure.
Premnath Venugopalan	Premnath is currently the Head- NCL Innovations, Head -Intellectual Property Group at NCL, Scientist-Polymer Science & Engineering Division at NCL and Director-Venture Center. He has helped found and be the first Director of Venture Center, CSIR-Tech (a technology commercialization company), Orthocrafts Innovations (degradable synthetic polymer based biomed products start-up) and BiolMed Innovations (silk based biomaterials start-up). He holds a B.Tech from IIT-B and a Ph.D. from the MIT, 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

Venture Center: <u>http://www.venturecenter.co.in/</u> Contact No: 020 2586 5877; Email: <u>eventsdesk@venturecenter.co.in</u> Facebook Page: <u>https://www.facebook.com/venturecenterpune?ref=hl</u>





development and commercialization (two successfully commercialized families of biomedical
products), incubation and innovation management, working with start-up companies (in
Cambridge-UK and India) and engaging with large corporations on research and consulting
projects as project leader.

Organized by



Venture Center is committed to Social innovation and entrepreneurship. We actively nucleate and nurture enterprises that focus on solving socially important problems and build sustainable entities (for profit or not-for-profit) to deliver the solutions to society. Focus areas at Venture Center include affordable health and nutrition, empowering farmers, clean energy, sustainable resource utilization, environment and circular economy, water, sanitation, hygiene and any other social sectors that can leverage Venture Center's innovation ecosystem.

Venture Center is supported as a SPARSH Center by the Biotech Industry Research Assistance Council (BIRAC), Government of India. The **S**ocial Innovation Immersion **P**rogramme (SIIP) is a fellowship program conceptualized by BIRAC, as part of its SPARSH (Social Innovation Programme for Products: Affordable & Relevant to Societal Health) scheme. SIIP intends to create a pool of "Social Innovators" who can identify needs and gaps within communities and then can help bridge the gaps either through an innovative product development or services. Venture Center is an implementation partner for this BIRAC funded program. Focus of this call is on the theme of "Waste to value".

For more information visit http://www.venturecenter.co.in/socialinnovations

Supported by		
birac Ignite Innovate Incubate	Biotechnology Industry Research & Assistance Council 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: <u>www.birac.nic.in</u>	
	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 enterprises offering products and services exploiting scientific expertise in the areas of materials, chemicals and biological sciences & engineering.	

Venture Center: <u>http://www.venturecenter.co.in/</u> Contact No: 020 2586 5877; Email: <u>eventsdesk@venturecenter.co.in</u> Facebook Page: <u>https://www.facebook.com/venturecenterpune?ref=hl</u>