



L'INSTITUT INDO-CANADIEN SHASTRI INDO-CANADIAN INSTITUTE



A SYMPOSIUM

on

Sustainable Developments in Local Land and Food Systems: Socioeconomic, Technological, and Environmental Aspects

Funded by:
Shastri Indo-Canadian Institute (SICI)



Research and Innovation

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SCHEDULE

Inaugural Address : 9:00-9:15 am (IST)
Head, ESED, IIT Bombay, India &
Dean, Faculty of Land and Food Systems, UBC, Canada

Talk 1: 9:15-9:30 am (IST)
Prof. Sumeet Gulati, UBC
Growing human-animal conflict around food production



Talk 2: 9:30 – 9:45am (IST)
Prof. Anurag Garg, IIT-B
Food-processing effluent characteristics and treatment



Talk 3: 9:45- 10:00 am (IST)
Prof. Srinidhi Balasubramanian ,IIT-B
The food we eat impacts the air we breathe – linkages Between the global food system and air pollution



Talk 4: 10:00 -10:15 am (IST)
Prof. Anubhav Pratap Singh, UBC
Innovations driving sustainable food systems



Talk 5: 10:15 -10:30 am (IST)
Prof. Munish Kumar Chandel, IIT-B
Solid waste management at food processing facilities



Talk 6: 10:30 -10:45 am (IST)
Prof. Tabish Nawaz, IIT-B
Resource recovery opportunities from food-processing wastewater



Talk 7: 10:45 -11:00 am (IST)
Prof. Amritanshu Shriwastav, IIT-B
Microplastics and food



Panel Discussion: 11:00- 11: 40 am (IST) All Speakers
Valedictory Ceremony : 11:40- 11: 50 am (IST)

Shastri Indo Canadian Institute

Vote of Thanks: 11:50- 12:00 pm (IST) Prof. Tabish Nawaz &
Prof. Anubhav Pratap Singh

ABOUT

The Shastri Indo-Canadian Institute (SICI) is a unique bi-national organization, mandated by governments of India and Canada to promote, facilitate and nurture academic linkages, collaborations & exchanges, research partnerships, and networks on bi-national corridors. With its physical presence in New Delhi, India and Calgary, Canada, and a strong base of 131 Indian and 37 Canadian member institutions, for past 52 years, SICI is the only organization in the Canada-India higher education corridor that is instrumental in building and strengthening intellectual and cultural relationship through research and dialogue. Funded by the Ministry of Education, Government of India, it supports diverse disciplines including Social Sciences, Humanities, Science & Technology, Biotechnology, Agriculture, Arts, Literature, Culture, Law, Business, Economic Reform, etc. and covers all levels of higher education from undergraduate to postdoc and from faculty to collaborative research.

ABSTRACT

Rising population, urbanization and climate change have affected land-use patterns and per capita food availability. The resulting pressure on food systems creates issues of economic inequality, food insecurity. There is a growing human-animal conflict around food production, resulting in a cost of conflict to farmers in proximity of wildlife reserves. Technological innovations can drive sustainability in land and food systems by developing efficient technologies for agricultural applications and food preservation, mitigation of emissions and up cycling of food wastes generated in the processes. This symposium takes an interdisciplinary approach to investigate and suggest solutions to the problems. Interdisciplinary experts will discuss both economic and environmental aspects, as well as technological advancements for ensuring sustainable local land and food systems in India and Canada.

SPEAKERS BIODATA

Prof. Sumeet Gulati, is a Professor in Environmental and Resource Economics at the University of British Columbia (UBC). He jointly runs the Wildlife and Conservation Economics Laboratory, and serves as program director for the Food and Resource Economics at UBC. He studies the economics of negative interactions between humans and wildlife.

Prof. Anurag Garg, is an MPCB Chair Professor in Environmental Science and Engineering Department at IIT Bombay. He received PhD in Environmental Engineering from IIT Roorkee. His research interest includes nutrient removal from wastewater using physicochemical and biological processes, advanced oxidative processes for removal of persistent organic and inorganic compounds from industrial wastewaters, treatment of leachate using physicochemical processes, mechanical biological treatment of municipal solid waste, energy recovery from solid recovered fuel.

Prof. Srinidhi Balasubramanian, is an Assistant Professor in Environmental Science and Engineering Department at IIT Bombay. She is an alumna from the same department, and went ahead to receive her PhD in Civil and Environmental Engineering from the University of Illinois at Urbana-Champaign. She recently completed a postdoctoral research stint at the University of Minnesota. Her research is in the field of air quality with focus on linkages with reactive nitrogen, sustainability of agricultural and food systems, and climate change. She enjoys teaching and academic outreach, and her work led her to adopt and advocate for plant-based lifestyles.

- **Prof. Anubhav Pratap Singh**, Faculty of Land & Food Systems, UBC Vancouver, Canada, explores emerging technologies for sustainable food production, food waste upcycling, plant-based food development, and nanomaterials for bioceuticals. Dr. Anubhav holds the BC Ministry of Agriculture Food & Fisheries (MAAF) Endowed Professorship in Food & Beverage Innovation, and leads the coordination committee of the British Columbia Food Hub Network.
- **Prof. Munish Kumar Chandel**, is an Associate Professor at Environmental Science and Engineering Department, Indian Institute of Technology Bombay. His research interest includes solid waste management, waste to energy, sustainable development, climate and transport, greenhouse gas mitigation, water-energy nexus. Prof. Chandel received Ph.D. in Environmental Engineering from I.I.T. Delhi. He was Assistant Professor at Civil Engineering Department, I.I.T. Roorkee before joining I.I.T. Bombay. Before that he was Research Scientist at Duke University, N.C., U.S.A. and Postdoc with Ecole des Mines de Nantes, France and Dalhousie University, Halifax, Canada. Prof. Chandel has more than 15 years of research and teaching experience. He has published more than 75 research publications in different journals and conferences.
- **Prof. Tabish Nawaz**, is an Assistant Professor in Environmental Science and Engineering Department at IIT Bombay. He received PhD in Environmental Engineering from University of Massachusetts Dartmouth, USA. His area of research interest includes electrocoagulation, resource recovery, remediation of emerging contaminants through ion exchange and adsorption systems .

Prof. Amritanshu Shrivastav, is an Assistant Professor in Environmental Science and Engineering Department at IIT Bombay. He completed his PhD from IIT Kanpur where he worked on Algal-Bacterial Photobioreactors for Nutrient Removal. During his Post-Doctoral research, he worked on various approaches to optimize the algal biorefinery concept. He further worked on Cr contamination from Chromite Ore Processing Residue (COPR). He joined IIT Bombay as Assistant Professor in 2016, and where he is currently working on sonophotocatalytic oxidation processes for emerging contaminant removal, visible light photocatalysis, and occurrence of microplastics in the environment .

DETAILS

Registration : [Link](#) (Deadline 20th March, 2022)

Symposium Date : 22nd March, 2022

Posters Link: [Click](#)

Time: 9 AM to 1 PM [Meeting Link](#)

VOLUNTEERS

Darakhshan Nayyar	194186005@iitb.ac.in
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CONVENERS

Prof. Tabish Nawaz
Indian Institute of Technology
Bombay, India

Prof. Anubhav Pratap Singh
University of British Columbia,
Canada



A SYMPOSIUM
on



Sustainable Developments in Local Land and Food Systems: Socioeconomic, Technological, & Environmental Aspects

HIGHLIGHTS

- Human animal conflict
- Innovations in food technology
- Environment foot prints of food systems
- Circular economy in food production

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IIT Bombay, India

Faculty of Land and Food Systems, UBC, Canada

SPEAKERS

Prof. Sumeet
Gulati, UBC



Prof. Anurag
Garg, IITB



Prof. Munish K.
Chandel, IITB



Prof. Srinidhi
Balasubramanian, IITB



Prof. Amritanshu
Shriwastav, IITB



Prof. Tabish
Nawaz, IITB



Prof. Anubhav P.
Singh, UBC



CONVENER

Prof. Tabish Nawaz

Prof. Anubhav Pratap Singh

CONTACT

Darakhshan Nayyar (194186005@iitb.ac.in)

Pramod Kumar (214186001@iitb.ac.in)

Credits:

1. FAO and INRAE. 2020. Enabling sustainable food systems: Innovators' handbook. Rome. <https://doi.org/10.4060/ca9917en>
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A SYMPOSIUM on

Sustainable Development in Local Land and Food Systems: Socioeconomic, Technological, and Environmental Aspects

TITLE OF THE TALK

Growing human-animal conflict around food production

HIGHLIGHTS

- Negative interaction with wildlife for farm life
- Cost associated with crop and livestock
- Fatal human-animal interactions
- Life threat to human and animal

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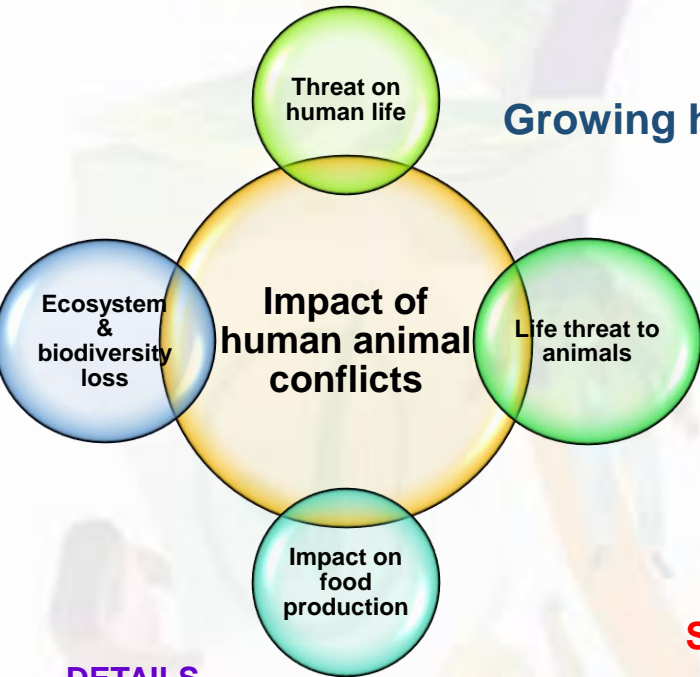
CONTACT

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SPEAKER



Prof. Sumeet Gulati,
Environmental and Resource
Economics,
UBC



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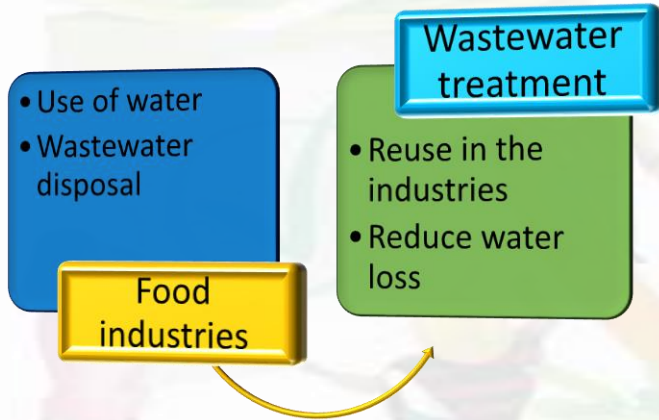
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TITLE OF THE TALK
Food-processing Effluent Characteristics and Treatment

HIGHLIGHTS

- Variation in organic load in food industry wastewater
Different methods of wastewater treatment.
Possibilities in the wastewater treatment
Future of wastewater treatment



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SPEAKER



Prof. Anurag Garg,
Environmental Science and
Engineering Department,
IIT Bombay

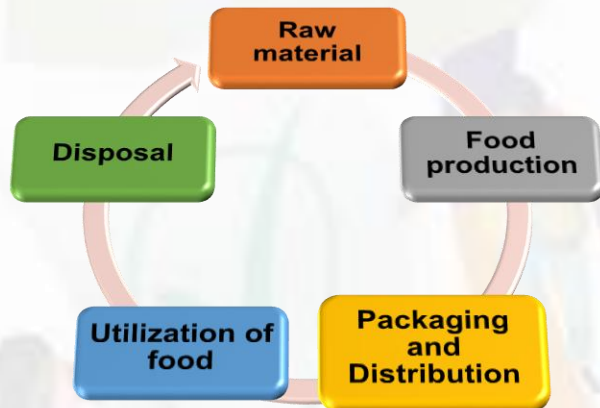


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TITLE OF THE TALK

The food we eat impacts the air we breathe – linkages between the global food system and air pollution



HIGHLIGHTS

- Food production and consumption activities effect on environment
- Life cycle approach for global food system
- Local to global scale solutions required

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SPEAKER



Prof. Srinidhi Balasubramanian
Environmental Science and
Engineering Department,
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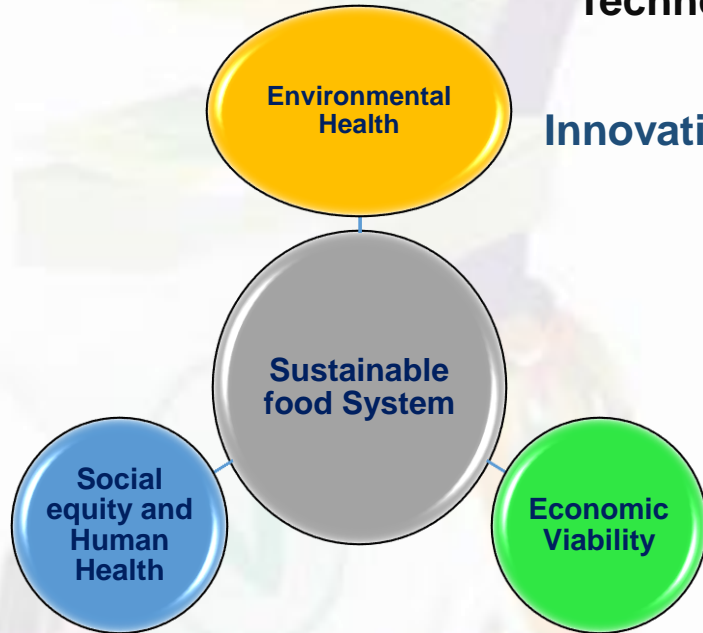
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TITLE OF THE TALK
Innovations driving Sustainable food systems

HIGHLIGHTS

- Drivers of sustainable food system
- Environmental health
- Innovations in food technology
- A holistic approach to a problem

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Prof. Anubhav Pratap Singh,
Faculty of Land & Food Systems,
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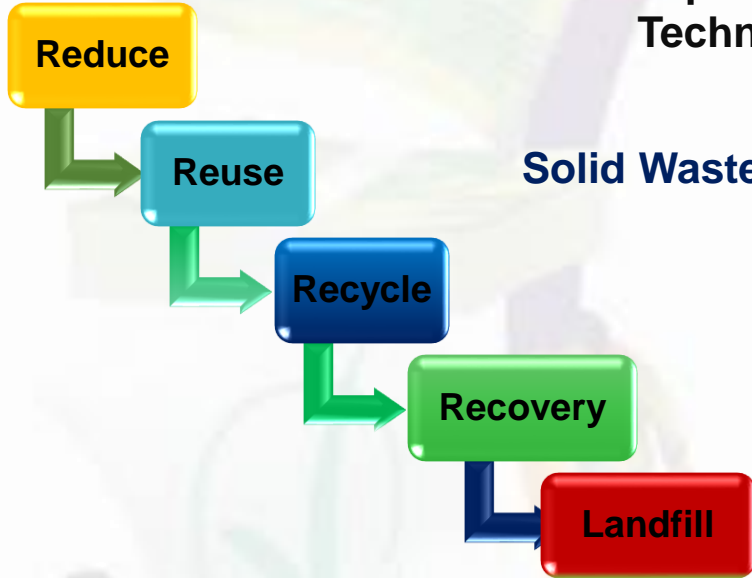
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TITLE OF THE TALK

Solid Waste Management at Food Processing Facilities

HIGHLIGHTS

- Substantial amount of waste generation in food processing activities
- 4R approach, step towards circular economy
- Waste to fuel technologies

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TITLE OF THE TALK

Resource recovery opportunities from food processing wastewater

HIGHLIGHTS

- Circular economy
- Sustainability
- Nutrient recovery from wastewater
- Energy recovery and water reuse

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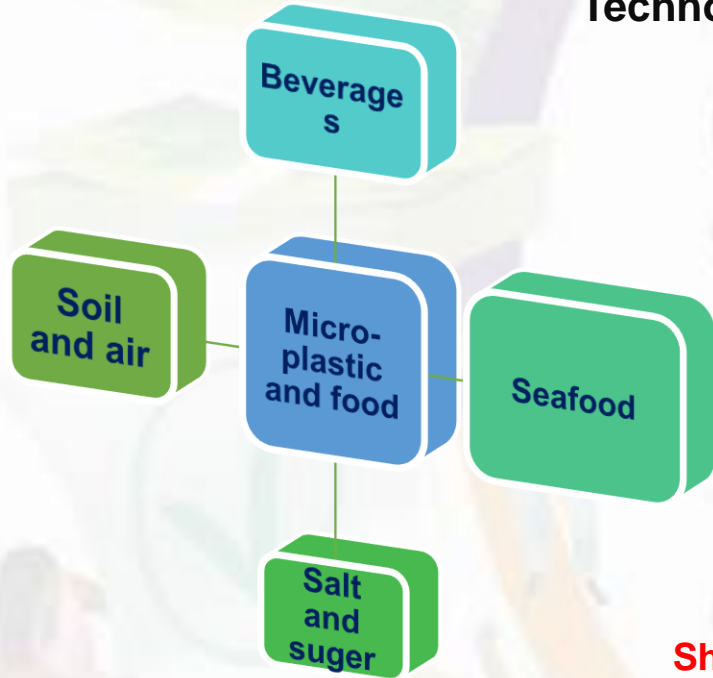
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TITLE OF THE TALK
Micro-plastics and Food

HIGHLIGHTS

- Microplastic in food- A major environmental concern
- An emerging contamination in food and water
- Potential health concerns related to such human exposure of microplastics.



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SPEAKER



Prof. Amritanshu Shrivastav
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