Event Activity Report
2021-2022

School Name	**:** School of Science
Event Title	**:** International Conference on "Current Trends in Waste Treatment, Reuse and Valorization"
Event Date	**:** 25.02.2022 to 27.02.2022
Time	**:** 09:45 am to 06:00 pm
Duration in days	**:** 3 Days
Mode of conduction	**:** Online
Level of Program	**:** International
Event Resource Person Details	: Dr. Sachin Munde, Associate Dean, School of Science, Sandip University, Nashik. (Mob: 8007806419) Email: deansci@sandipuniversity.edu.in
Name of Event Coordinator with details	**:** Dr. Razia Kutty, Head, Dept of Microbiology and Life Science, Sandip University, Nashik. Mob: 9822794581 Email: razia.kutty@sandipuniversity.edu.in
Number of participants attended	**:** 160+

Event Outline, Objective and Outcome of the event:

Outline of Program:

Sandip University's School of Science had taken initiative to host an International Conference regarding "Current Trends in Waste Treatment, Reuse and Valorization" in association with Society for Green Environment, New Delhi, India. The Themes to be discussed in the conference were:

- Emerging Pollutants Characterization
- Current trends in physicochemical methods of remediation
- Microbial remediation
- Hybrid treatment technology in remediation
- Pollutant removal from bio-waste, reuse & recovery of value-added by-products

The conference was hosted for 3 days. Many eminent Speakers were called for the expert talks from India and Abroad. Also, the international e-conference invited abstracts from the delegates. The conference solicited high quality research contributions in the areas of Bioremediation and Waste Reuse and Valorization. Selected abstracts were to be published as proceedings/souvenir.

Objective of Program: The School of Science intended to raise knowledge and create awareness in the society in association with the Society for Green Environment about conservation, reuse and management of all form of air, water, and soil waste. The Society for Green Environment (SGE) is a non-profit, non-government, multi-disciplinary membership based-national organization of Government of India, and principally dedicated to the enhancement of public awareness on conservation and up-gradation of environment and management of all form of air, water, and soil for the development of the happy and healthy society. The society is involved in various activities conducting organizing national/ international conferences, symposia, conferences, workshops, seminars, training, meeting as well as distributing publications on the theme of environmental concern. Society also recognizes young scientists and environmentalists for their contribution to environmental protection and safety.

Outcome:

Day 1: The conference was inaugurated by Dr. Rajendra Sinha, Vice Chancellor, Sandip University, Nashik following addressed by Dr. Chetan Choudhary, Registrar, Sandip University. Dr. Pankaj Chowdhary, President, Society of Green Environment, New Delhi, India briefly introduced with the SGE. Prof. Sunil Kumar, Professor and Head, Waste Water Reprocessing Division, CSIR-NEERI, Nagpur, Maharashtra, India was invited as the keynote speaker. The Session for keynote speaker was chaired by Dr. Raunak Dhanker Assistant Professor, GD Goenka University, Haryana, India.

Sr.No.	Name of the Speaker	Title of Talk
Moderator: Ms. Manasi V. Damale, Assistant Professor, Department of Microbiology, School of Science, Sandip University, Nashik. **Session Chair: Dr. Ravikiran Pagare,** Associate Professor, Department of Life Science, School of Science, Sandip University, Nashik		
1	**Dr. Garima Kaushik,** Assistant Professor, Central University of Rajasthan, India	Bioremediation of Emerging Contaminants: Pharmaceutical Compounds
2	Dr. Jastin Samuel	Phyco-remediation: A green approach and Sustainable Solution
3	**Dr. Srijoni Banerjee,** Assistant Professor, Department of Biotechnology, School of Life Science and Biotechnology, Admas University, Kolkata	Sustainable Approach of Microalgal Biomass and Biofuel Production through Biorefinery Approach with Concomitant Wastewater Remediation
Moderator: Ms. Muskan D. Sharma, Assistant Professor, Department of Microbiology, School of Science, Sandip University, Nashik. **Session Chair: Dr. Sachin Munde,** Associate Dean, School of Science, Sandip University,Nashik		

4	**Prof. V. P Sharma** Chief Scientist & Prof. AcSIR CSIR-Indian Institute of Toxicology Research, Lucknow, India	Safeguard Future Generation: Emerging Pollutants and Waste Management
5	**Prof. (Dr.) Dinesh Yadav** Professor Coordinator Centre for Genomics & Bioinformatics and Nodal officer IPR cell Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur, Uttar Pradesh, India	Cost Effective Production of Industrially Important Microbial Enzymes Using Agro-Wastes
6	**Prof. Cristiano José de Andrade** Professor Department of Chemical Engineering and Food Engineering, Federal University of Santa, Catarina, Florianópolis, 88040-900, SC, Brazil	Hydrophobic Inducers to Enhanced Surfactin Production Using Cassava Wastewater as Low-Cost Culture Medium: A Prospection on New Homologues

Speaker's Sessions followed Oral/Poster Presentation of Students from different Universities and Colleges.

Day 2:

Sr. No.	**Name of the Speaker**	**Title of Talk**
Moderator: Ms. Paurnima Bhagwat, Assistant Professor, Department of Chemistry, School of Science, Sandip University, Nashik. **Session Chair:** Dr. Leena Patil, Head of Department of Chemistry, School of Science, Sandip University, Nashik.		
1	**Dr. Bholu Ram Yadav** Scientist CSIR-National Environmental Engineering Research Institute (NEERI), Nagpur, Maharashtra, India	Digitalization in Wastewater Management
2	**Dr. Angana Sarkar** Assistant Professor National Institute of Rourkela, Odisha	Microbial Dye Degradation: A Clean Approach Of Dye Removal From Pharmaceutical Wastewater
3	**Dr. Sukdeb Pal** Sr. Principal Scientist Wastewater Technology Division, CSIR-National Environmental Engineering Research Institute, Nagpur 440020, India	Inorganic Nanostructure For Multifunctional Applications In Water Treatment
4	**Dr. Achlesh Daverey** Assistant Professor Doon University, Uttarakhand	Valorization of waste pine needles for environmental remediation
5	**Dr. N.K.S. More** Assistant Professor Babasaheb Bhimrao Ambedkar University, Lucknow, India	
6	**Dr. Dipankar Ghosh**	Systems Biology Approach to Screen and Identify

		Algal Phosphatases for Detecting Heavy Metals: A sustainable platform
Moderator: Ms. Savita Patil, Assistant Professor, Department of Chemistry, School of Science, Sandip University, Nashik. **Session Chair: Dr. Nissar Reshi,** Assistant Professor, Department of Life Science, School of Science, Sandip University, Nashik		
7	**Dr. Kuldeep Boudh** Assistant Professor Central University of Jharkhand, Ranchi, India	Remediation of Metal Contaminated Soil using an Industry Important Plant *Ricinus communis*
8	**Dr. Sourish Bhattacharya** Senior Scientist Process Design and Engineering Cell, CSIR-Central Salt and Marine Chemicals, Research Institute, Bhavnagar, India.	Circular Economy Model for Bioremediation Of Industrial Wastewater Through Biorefinery Approach
9	**Dr. Simranjeet Singh** Postdoctoral Researcher, Indian Institute of Science (IISc), Bangalore-560001, India	Adsorption, Kinetic and Thermodynamics Behavior of Cr (VI) by novel GO/UiO-66-NDC Nanocomposite from Wastewater
10	**Dr. Soumya Pandit** Assistant Professor Lovely Professional University, Punjab	Investigating the Performance Of Datura Peels Derived Biochar-Based Anode For Improved Power Output In A Microbial Fuel Cell Application

Speaker's Sessions followed Oral/Poster Presentation of Students from different Universities and Colleges.

Day 3:

Sr. No.	Name of the Speaker	Title of Talk
Moderator: Ms. Vishakha G. Tomar, Assistant Professor, Department of Microbiology, School of Science, Sandip University, Nashik. **Session Chair: Dr. Ravikiran Pagare,** Associate Professor, Department of Life Science, Sandip University, Nashik		
1	**Prof. (Dr.) Vinod Kumar Garg** Professor and Dean Department of Environmental Science and Technology Central University of Punjab, Bathinda, Punjab, India	Nutrient Recovery From Solid Wastes Using Verm technology
2	**Dr. Sudipti Arora** Scientist and Assistant Director, Dr. B. Lal Institute of Biotechnology, Jaipur	Potential of Earthworms In Removal Of Antimicrobial Resistant (AMR) Bacteria And Antibiotic Resistance Genes (ARGS) During Verm filtration Technology For Domestic Wastewater Treatment

3	**Dr. Ritu Singh**	Application of Nanotechnology in Environmental Remediation
4	**Dr. Sonia Maurya** Assistant Professor, Lovely Professional University, Punjab	Valorization of Food Waste and Value Addition
5	**Dr. Abhay Raj** Principal Scientist CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, India	Exploring the Sustainable Approach Towards Bio mitigation of Contaminants in Paper Industry Effluents

Speaker's Sessions followed Oral/Poster Presentation of Students from different Universities and Colleges. The Valedictory Function was addressed by Dr. Razia Kutty, Head of Department of Microbiology and Life Science.

The team School of Science extended great support in hosting and smoothly conducting this International e-conference.

Event photos/ Screenshots such as (photos of Inauguration, felicitation, event conduction and valedictory ceremony:

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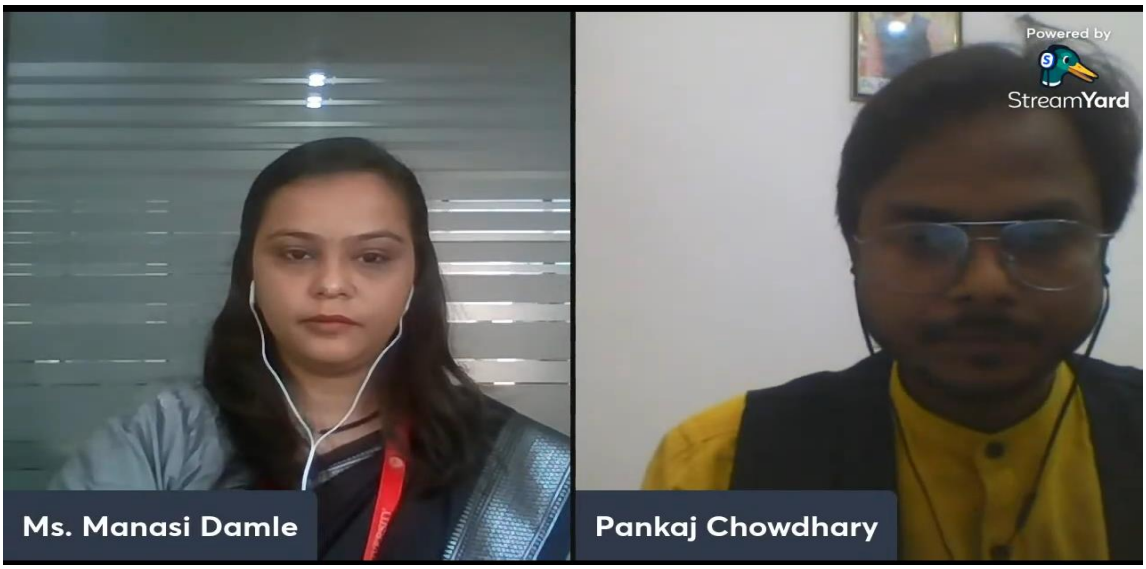

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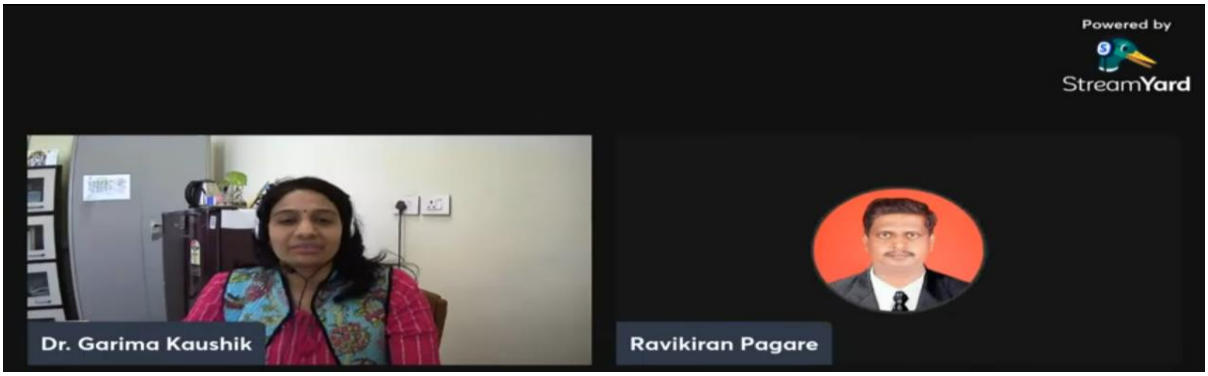

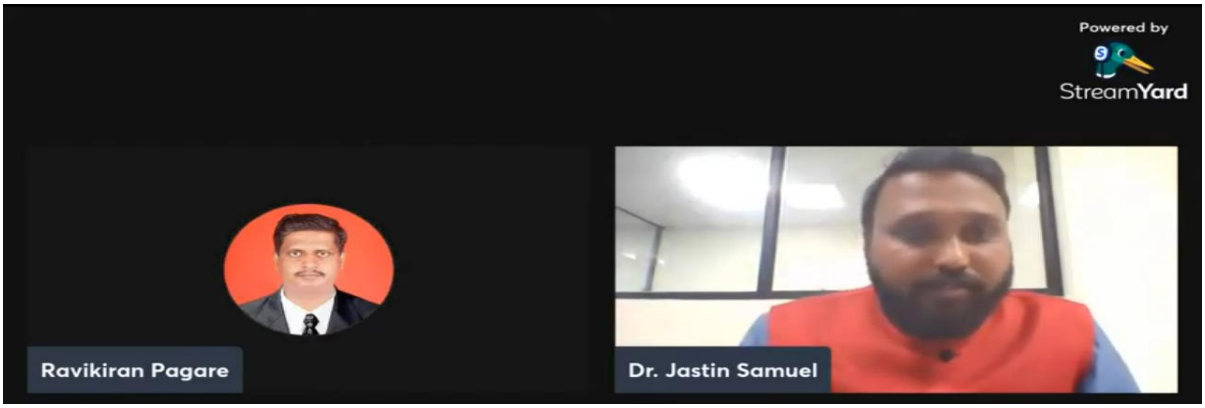

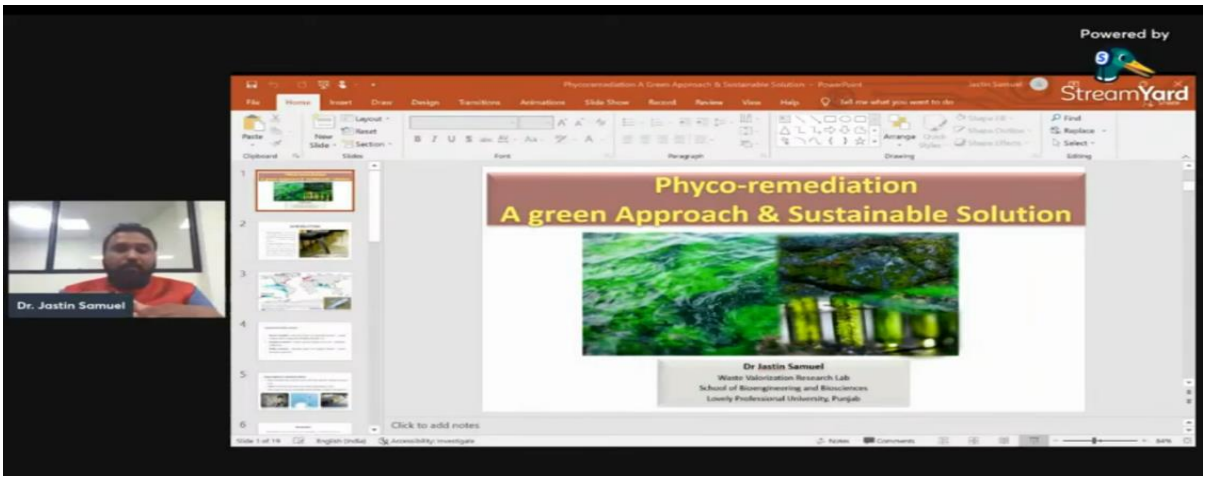

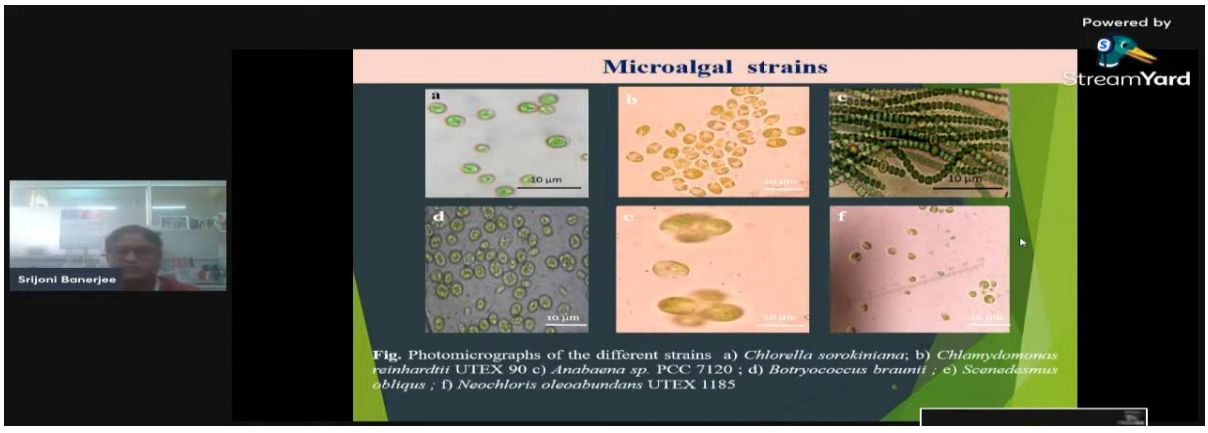

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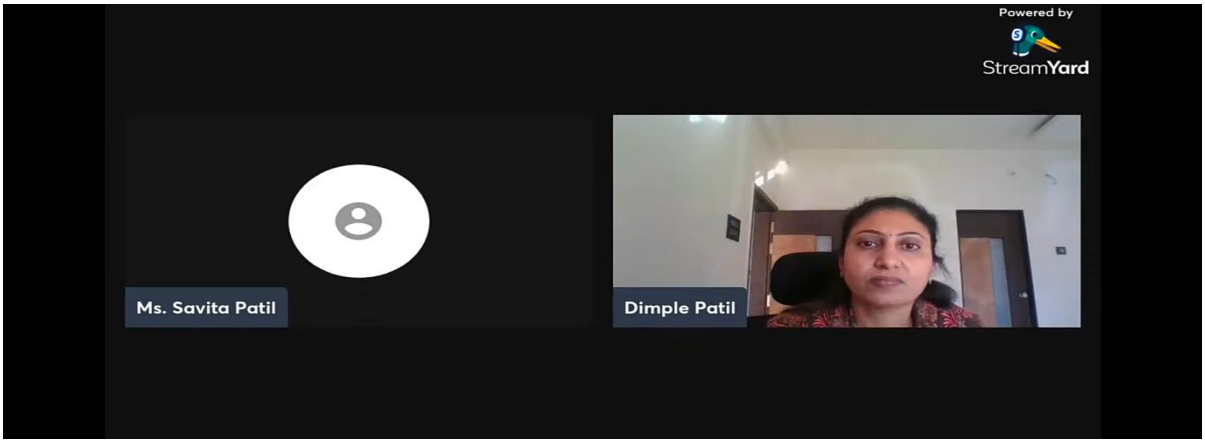

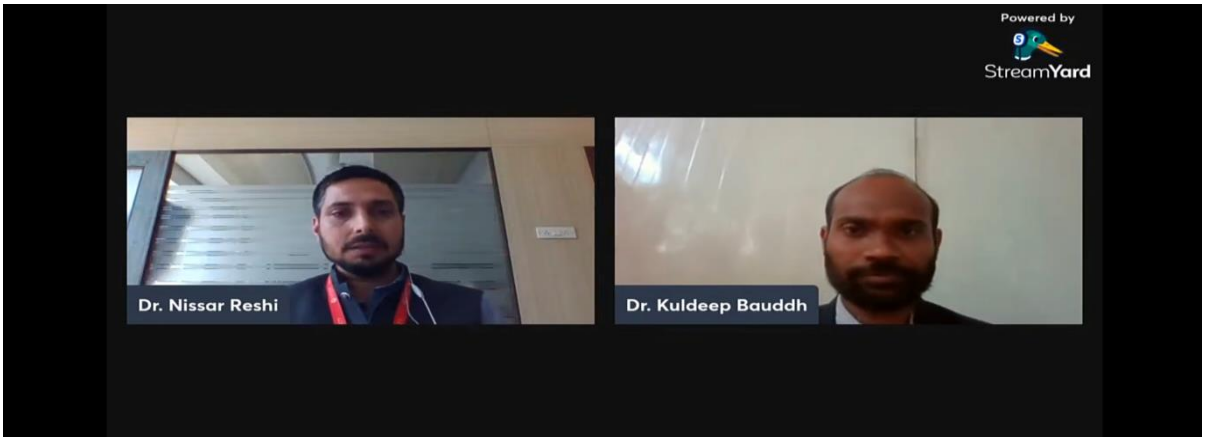

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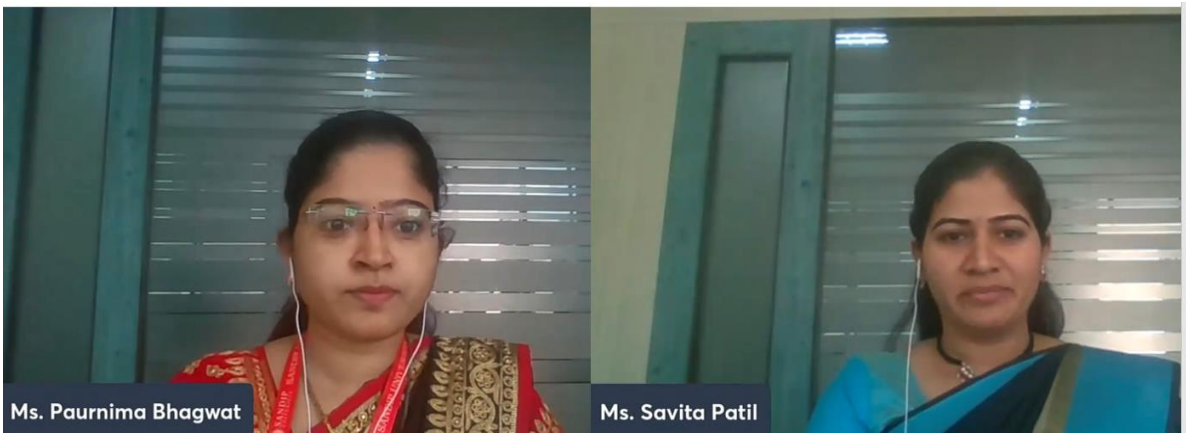

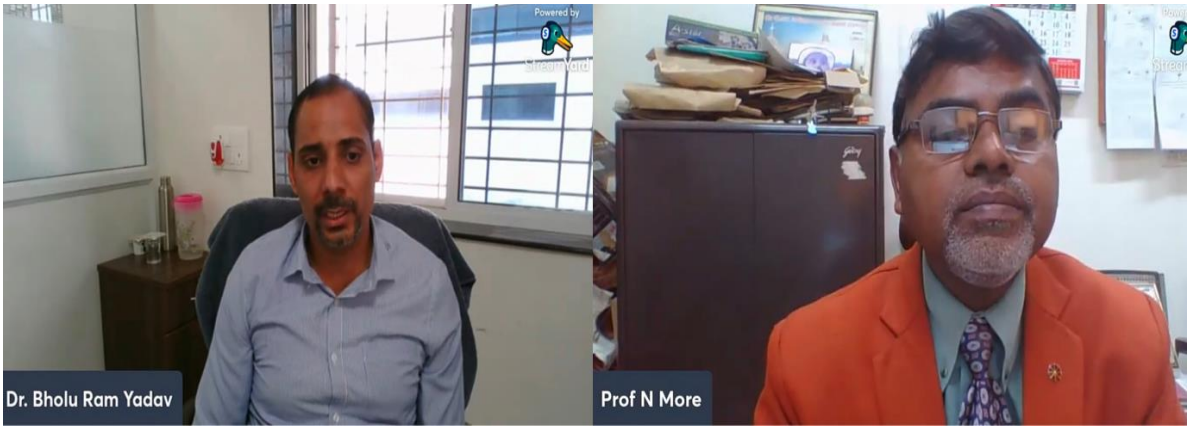

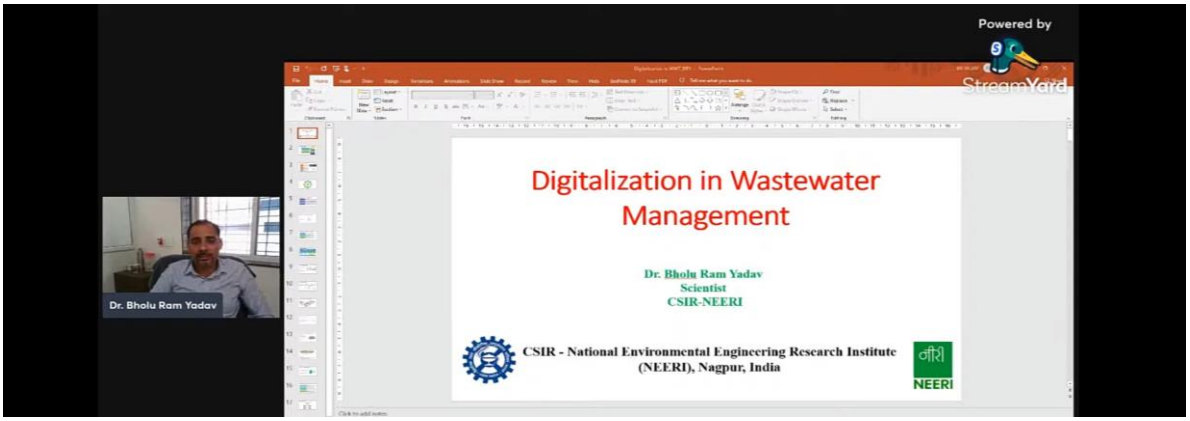

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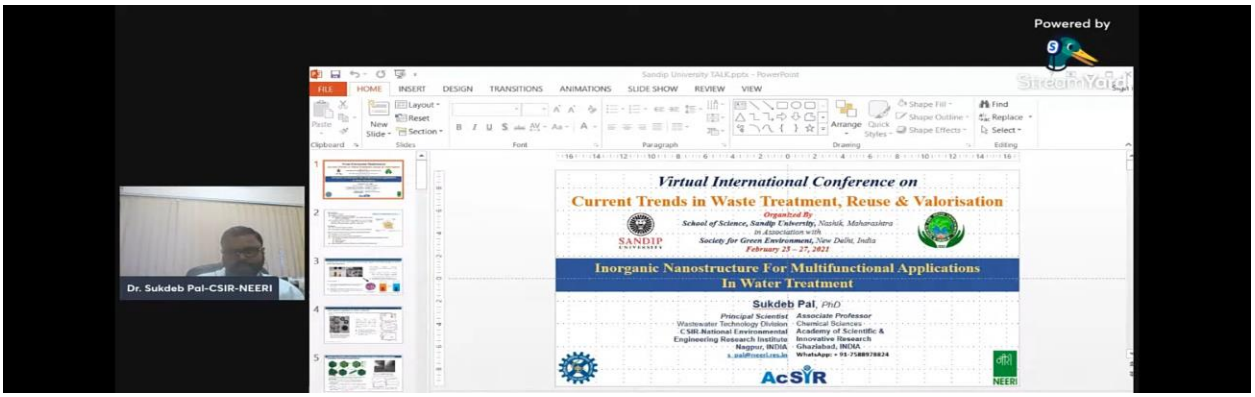

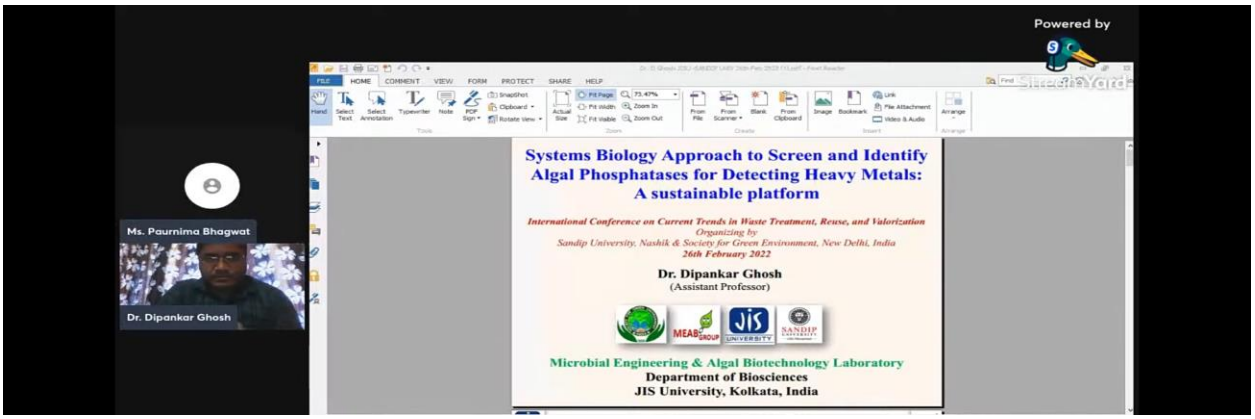

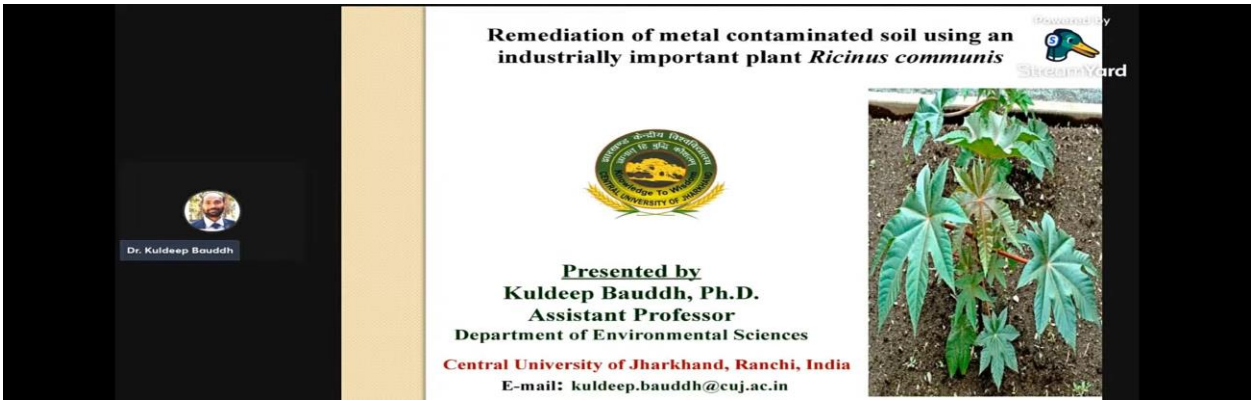

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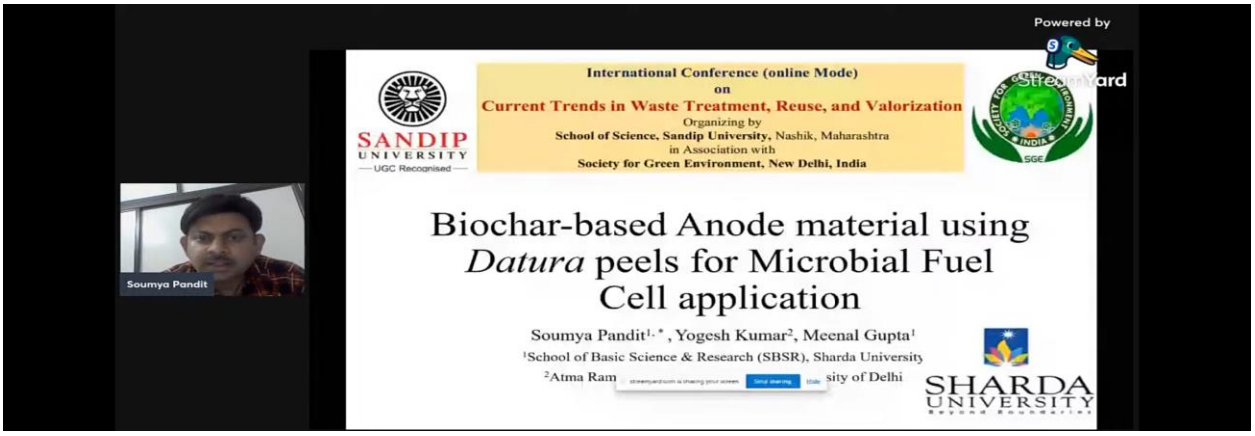

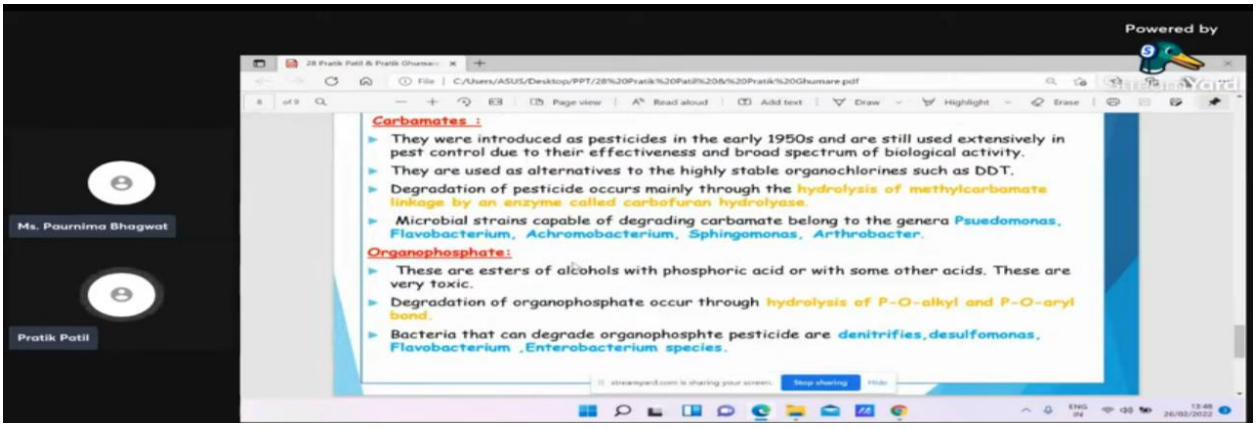

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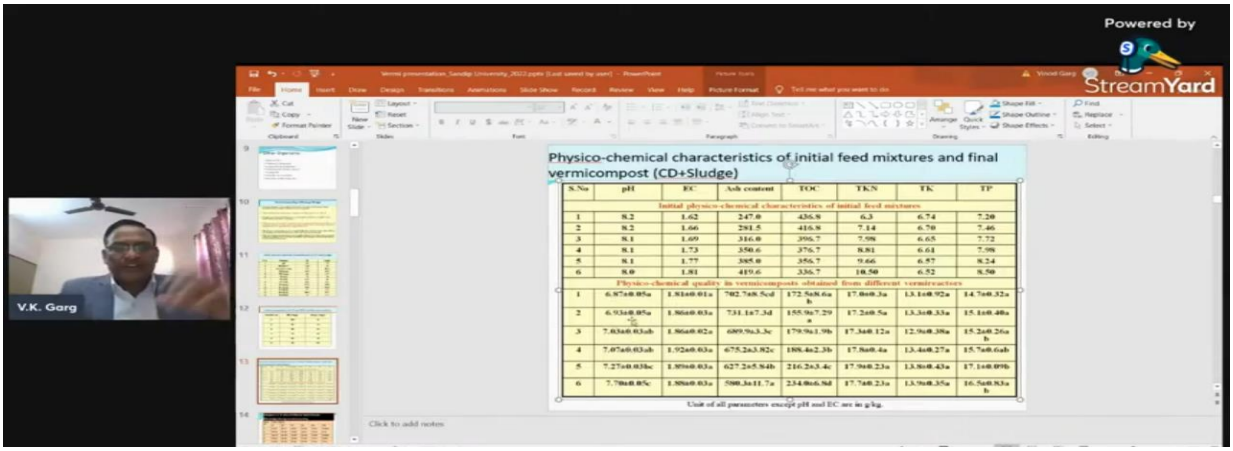
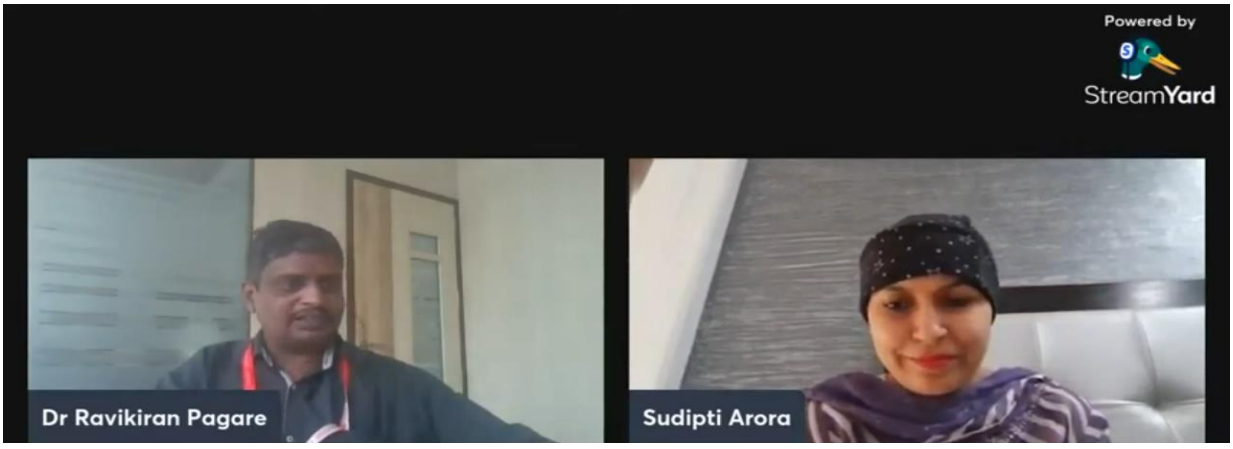
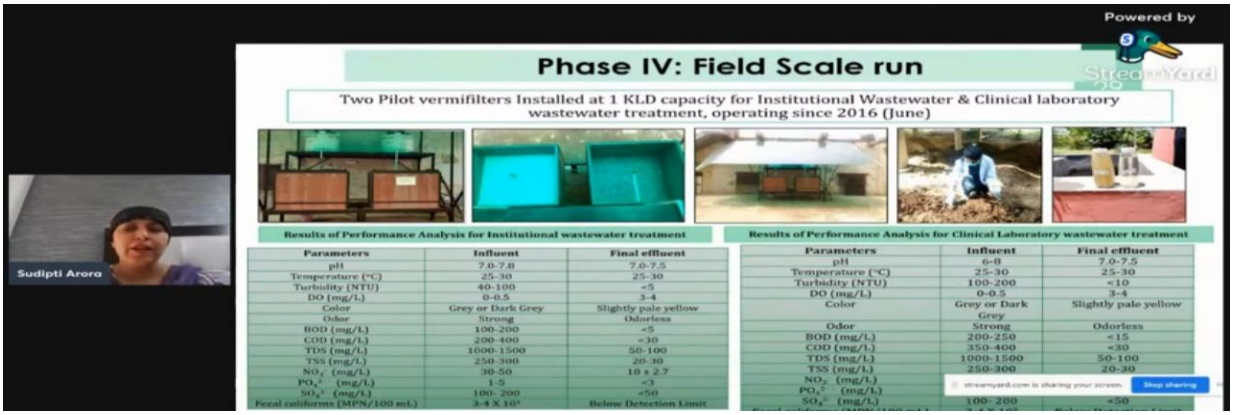


S.No	pH	EC	Ash content	TOC	TKN	TK	TP
Initial physico-chemical characteristics of initial feed mixtures							
1	8.2	1.62	247.0	436.8	6.3	6.74	7.20
2	8.2	1.66	281.5	416.8	7.14	6.70	7.46
3	8.1	1.69	316.0	396.7	7.98	6.65	7.72
4	8.1	1.73	350.6	376.7	8.81	6.61	7.98
5	8.1	1.77	385.0	356.7	9.66	6.57	8.24
6	8.0	1.81	419.6	336.7	10.50	6.52	8.50
Physico-chemical quality in vermicomposts obtained from different vermireactors							
1	6.87±0.05a	1.81±0.01a	702.7±8.5cd	172.5±8.6a b	17.0±0.3a	13.1±0.92a	14.7±0.32a
2	6.93±0.05a	1.86±0.03a	731.1±7.3d	155.9±7.29 a	17.2±0.5a	13.3±0.33a	15.1±0.48a
3	7.03±0.03ab	1.86±0.02a	689.9±3.3c	179.9±1.9b	17.3±0.12a	12.9±0.38a	15.2±0.26a b
4	7.07±0.03ab	1.92±0.03a	675.2±3.92c	188.4±2.3b	17.8±0.4a	13.4±0.27a	15.7±0.6ab
5	7.27±0.03bc	1.89±0.03a	627.2±5.84b	216.2±3.4c	17.9±0.23a	13.8±0.43a	17.1±0.09b
6	7.70±0.05c	1.85±0.03a	580.3±11.7a	234.0±6.8d	17.7±0.23a	13.9±0.35a	16.5±0.83a b

Unit of all parameters except pH and EC are in g/kg.





Parameters	Influent	Final effluent
pH	7.0-7.8	7.0-7.5
Temperature (°C)	25-30	25-30
Turbidity (NTU)	40-100	<5
DO (mg/L)	0-0.5	3-4
Color	Grey or Dark Grey	Slightly pale yellow
Odor	Strong	Odorless
BOD (mg/L)	100-200	<5
COD (mg/L)	200-400	<30
TDS (mg/L)	1000-1500	50-100
TSS (mg/L)	250-300	20-30
NO_3^- (mg/L)	30-50	10 ± 2.7
PO_4^{3-} (mg/L)	1-5	<3
SO_4^{2-} (mg/L)	100- 200	<50
Fecal coliforms (MPN/100 mL)	3-4 X 10^5	Below Detection Limit

Parameters	Influent	Final effluent
pH	6-8	7.0-7.5
Temperature (°C)	25-30	25-30
Turbidity (NTU)	100-200	<10
DO (mg/L)	0-0.5	3-4
Color	Grey or Dark Grey	Slightly pale yellow
Odor	Strong	Odorless
BOD (mg/L)	200-250	<15
COD (mg/L)	350-400	<30
TDS (mg/L)	1000-1500	50-100
TSS (mg/L)	250-300	20-30
NO_3^- (mg/L)		
PO_4^{3-} (mg/L)		
SO_4^{2-} (mg/L)	100- 200	<50

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