



GURU NANAK COLLEGE (AUTONOMOUS), CHENNAI

International Conference on "Frontiers of Sustainable Research in Health Care, Food, Agriculture, and Environmental Management" (ICSURE-2024)



Embracing a holistic consciousness rooted in Sikhism's profound wisdom fosters a deep reverence for the universe, inspiring us to transcend anthropocentrism and nurture the planet for future generations.
Manjit Singh Nayar
General Secretary & Correspondent



Multidisciplinary research is the cornerstone of sustainability, weaving together diverse perspectives and expertise to address complex challenges with holistic solutions.
Dr. Marlene Morais
Advisor



Research without a conscience is mere knowledge. Let us infuse our research endeavors with the values of sustainability, for it is through knowledge tempered with compassion that we truly make a difference.
Dr. T.K. Avvai Kothai
Principal



As academics, our mission is clear: to harness the power of research for the betterment of society. Let us align our efforts with the Sustainable Development Goals and be agents of positive change.
Dr. Swati Paliwal
Dean Academics



Envision a world where every bite of food, every breath of air, and every step on the earth contribute to a cycle of sustainability.
Dr. S.E. Noorjahan
Convener - ICSURE-24



Celebrating innovation, fostering resilience - ICSURE 24 is where ideas converge and solutions emerge.
Dr. E. Gayathiri
Organising Secretary - ICSURE-24



Prof. Dr. T. Arumugam, Vice Chancellor of Thiruvalluvar University, in the Inaugural address stated that research is the corner stone of global advancement, but its true impact is realized when translated into tangible solutions through patents, driving commercialization and real-world change.

Dr. R. Velraj, Vice Chancellor of Anna University, underscored in his valedictory address that the disorderliness caused by the rapid pace of global development is the primary source of the environmental problems we are confronted with at present. By implementing cutting-edge technologies and utilizing renewable energy sources, we establish a foundation for future generations to inherit a more resilient and robust environment.

Porous Activated Cermet for Environmental Applications. He highlighted the importance of monitoring the high levels of greenhouse gas emissions from untreated wastewater released by municipalities and industry.

Dr. Ponmuran Karuppiah, from the Department of Botany and Microbiology at the College of Science, King Saud University, Riyadh, Kingdom of Saudi Arabia, presented on unraveling the intricate relationships among soil microbial communities and their significant impact on plant health, yield, and environmental sustainability. His talk highlighted the necessity for cross-disciplinary efforts to secure food sustainability and protect the environment.



BEST PAPER AWARD - Offline Category Winners

S. No.	Name	Department	College	Topic
1.	Mr. Santhosh. S Ms. K. Priyadarshini Mr. Akash. R Ms. M. Dharani	IV B. Tech Student, Pharmaceutical Technology	Paavai Engineering College	Formulation and Optimization of Herbal Tea Mix for Treating insomnia
2.	Ms. C. Vanitha	Assistant Professor, Department of Chemistry	R.V.Govt. Arts College, Chengaipet.	Oyster shells derived Hydroxyapatite Decorated with Fe 3 O 4 /GO Ternary Composites as a Photocatalytic Dye Degradation System
3.	Ms. Lubna Jasmine	Research Scholar, Department of Zoology	Bangalore University, Bangalore	Exploring the Impact of IN-UTERO DEHP Exposure on Oxidative Stress Indices in cortex and Hippocampus of Prepubertal Rats
4.	Ms. Rebecca Cathrine Jayakumari. D	Research Scholar, Department of Zoology	Dr. Ambedkar Government Arts College, Vyasarpadi, Chennai, Tamil Nadu	Determination of microplastics in Japanese threadfin bream (Nemipterus japonicus), Indian Mackerel (Rastrelliger kanagurta) from Kasimedu Landing Centre, Chennai, Catfish (Arius sp.) and Mud Crab (Scylla olivacea) from Ennore Creek, Chennai, India: A comparative study using ATR-FTIR spectroscopy
5.	Mr. Pruthvi Raj S	II B.E., Information Science and Engineering	RNS Institute of Technology, Bangalore, Karnataka, India	Remote Patient Monitoring System With Replaceable Sensors
6.	Ms Ankita Barla	Research Scholar, Botany	Centurion University of Technology and Management, Bhubaneswar, Odisha	Potentiality of de-oiled seed cake of Madhuca longifolia (L.) J.F. Macbr. For sustainable utilization

International Conference on "Frontiers of Sustainable Research in Health Care, Food, Agriculture, and Environmental Management" (ICSURE-2024) was organized by Guru Nanak Centre for Research.

The International Conference, commenced with remarkable insights and discussions on pressing issues concerning healthcare, agriculture, food, and environmental management. Distinguished speakers shed light on the urgent need for innovative and sustainable solutions to combat the challenges posed by climate change and environmental degradation.

Dr. Roshan Kumar Yadav, a member of the Nepal National Commission for UNESCO, Ministry of Education, Science and Technology, Govt. of Nepal, shared valuable insights on the medicinal plants of Nepal and the importance of their conservation. Dr. Yadav highlighted the strong links between health, agriculture, and environmental management, stressing the significance of sustainable practices in protecting our natural resources.

Dr. F. Aruna, Senior Principal Scientist, said ICT, Hyderabad, researchers employ bioinspired greener synthesis of pharmaceutically relevant natural products, biopesticides from neem, custard apple seed oil and karanja seeds for crop management. Integrating pest control with nontoxic, efficient pheromone technology for rice, sugarcane, cotton, brinjal,

groundnut and fruit crops is the Centre for Semiochemicals' focus. For organic waste, IICT developed anaerobic gas lift reactors and fast composting. Environmental solutions from the energy and environmental engineering department include biogas, compressed biogas, biohydrogen, green hydrogen, bioethanol, biomethanol, microbial fuel cells, biomass valorisation, wastewater treatment, waste management, and CO₂ sequestration.

Dr. Sinnadurai Jameson Arasakesary, Senior Lecturer in Grade I at the University of Jaffna in Sri Lanka, brought attention to the sustainable resources that are accessible in Sri Lanka. **Dr. Sonam Tashi**, from the College of Natural Resources at the Royal University of Bhutan, highlighted the significance of SDGs through sustainable research, necessitating ongoing collaboration and partnership across various fields, sectors, and locations. Various sectors, including governments, academia, industry, civil society, and international organizations, were urged to collaborate towards a common goal of creating a more sustainable, equitable, and improved world.

Dr. G. Sekaran, Industrial consultant, and a former Chief Scientist, CLRI, discussed Nano

BEST PAPER AWARD - Offline Category Winners



A pivotal moment of the day was the release of the conference proceedings, encapsulated in the "Book of Abstracts." The first edition comprised 133 abstracts, showcasing the diverse array of research contributions received from across the country. A total of 297 papers were submitted, highlighting the broad interest and 457 registered participants in the conference.

The ICSURE 24 conference has announced a special issue in Environmental Science and Pollution Research, with impact factor of 5.8 (Springer). The other publication partners are Journal of Turkish Chemical Society Section A: Chemistry (JOTCSA), Environmental Research and Technology, Natural Resources for Human Health, and IJONS.

BEST PAPER AWARD - Online Category Winners

S. No.	Name	Department	College	Topic
1.	Dr. Ritu Jain	Assistant Professor, Department of Geography	National P. G. College, Lucknow National P.G. College Lucknow Uttar Pradesh, India	Assessment of Pre-Monsoon, Monsoon, and Post-Monsoon Water Quality for Gomti River, Lucknow City, Uttar Pradesh, India
2.	Dr G Sathya Priyadarshini	Assistant Professor	PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu	Activity of Novel 1,2,3-triazolo quinolines against SARS-CoV-2- A Molecular docking approach
3.	Mrs. S.Geetha	Senior Scientist, Ecotoxicology	International Institute of Biotechnology and Toxicology Padappai, Chennai Tamil Nadu	Toxicity Assessment of Dimethoate 30% EC on Earthworm, Eisenia fetida using Earthworm Avoidance Test
4.	Dr.A.Nirmala	Biotechnology	Aarupadi Veedu Institute of Technology	Investigation of Salivary Biochemical Parameters for Diagnosis of Type-II Diabetes Mellitus - A Non-Invasive Approach
5.	Dr. Keshava Joshi	Associate Professor Chemical Engineering	SDM College of Engineering and Technology, Dhavalgiri, Karanataka.	Hydrodynamic and Mass Transfer studies in a draft tube spouted bed bioreactor reactor for denitrification.
6.	Ms. M.Mirra Rajalakshmi	CRMI, MBBS	Government Chengalpattu Medical College, Chengalpattu, Tamil Nadu	The Role of Epigallocatechin Gallate (EGCG) in Chemoprevention

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