

Organizing Committee

Dr. Suneesh C. V

(Assistant Professor and Head, Organizing Chairperson)

Dr. Sony George

(Associate Professor, Organizing Secretary)

Dr. S. M. A. Shibli (Professor)

Dr. Ani Deepthi (Assistant Professor)

Dr. T. S. Anirudhan (Emeritus Professor)

Dr Bhavya Bhadran

Dr Sameera S

Dr Deepa M.J

Dr Sandhya K S

Dr Ashitha K.T

Dr. Bhagya T. C

(Assistant Professor (c), Department of Chemistry,
University of Kerala)

Organizing Coordinators

Ms. Susan Varghese

Ms. Merin K Abraham

Ms. Greeshma Rajeevan

Ms. Arathy B.K

Mr. Ali Ibrahim Shkhair

Ms. Geneva Indongo

Registration details

MSc/MTech/BTech : Rs.500

PhD Scholars : Rs 1000

Faculty : Rs. 2000



About the Symposium

SENSORS 2024 is a national Symposium on Emerging Nanotechnologies for Sensors: Organization and Recognition Systems 2024. This bridging symposium is envisaged to break the latent boundaries and barriers between clinicians, scientists and engineers and create a converging constructive interference platform in various aspects of sensors in all walks of life, particularly in point-of-care (PoC) device fabrication and Industrial Internet of Things (IIoT). Attendees will have the opportunity to engage in networking sessions, oral presentations (offline only), and poster presentations. The International Interuniversity Centre for Sensing and Imaging (IIUCSI) at the Department of Chemistry, University of Kerala, is hosting its inaugural seminar, aiming to create a triangular network among clinicians, scientists, and engineers in the context of the latest advancements in sensors in biomedical, aerospace, and IIoT.

Thematic Areas

- Sensors for Medical Diagnosis
- Machine learning and AI for sensor applications
- Sensors & actuators for IIoT & aerospace applications
- Emerging sensor technologies

Google link for registration:

<https://forms.gle/U8d6ytVzEDHg2yRu9>

MODE OF PAYMENT

Account Name:

THE ORGANIZING SECRETARY SENSORS 2024

Account No: 120031605972

IFSC Code: CNRB0014021

Bank: CANARA BANK

Branch: KAZHAKKOOTAM

SENSORS 2024

(Symposium on
Emerging
Nanotechnologies for
Sensors- Organization
and Recognition
Systems 2024)

Organized by,
International Interuniversity Centre for
Sensing and Imaging (IIUCSI)
Department of Chemistry
University of Kerala

NOVEMBER 27-30, 2024

Venue:

C V Raman Hall, CLIF,
University of Kerala,
Kariavattom



Day 1: 27/11/2024

Theme: SENSORS FOR MEDICAL DIAGNOSIS

- 9:00 AM : Registration
9:30 - 10:00 AM : Inauguration
10.00 - 10.45 AM: Keynote Address:
"Application of Biosensor technology in Viral disease diagnosis: Advances and Challenges"
Dr. E. Sreekumar, Director
Institute of Advanced Virology (IAV), TVPM
10.45 - 11.30 AM: Plenary Lecture: "Advancement of Surface-Enhanced Raman Spectroscopy in Nano-theranostic Applications"
Dr. Kaustabh Kumar Maiti
Senior Principal Scientist, Chemical Sciences and Technology Division, National Institute for Interdisciplinary Science and Technology (NIIST), TVPM
11.30 - 11.45 AM: Tea break
11.45 - 12.30 PM : Invited Lecture: "Microfluidic devices: Navigating Fabrication Challenges for Market Viability"
Dr. Jose Joseph, Assistant Professor,
Digital University, TVPM
12.30 - 1.15 PM : Plenary Lecture: "Biosensors for blood-based biomarkers of Alzheimer's disease: Role of metallic nanostructures"
Dr Jayasree R S, Scientist G, Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), TVPM
1.15 - 2.15 PM : Lunch Break
2.15 - 3.00 PM : Plenary Lecture: "Innovations in point of care diagnostics of infectious Diseases"
Dr Anoop Kumar T, Scientist G,
Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), TVPM
3.00 - 3.45 PM : Plenary Lecture: "Genetically encoded sensors of cell death and signalling"
Dr. T. R. Santhoshkumar, Scientist G, Rajiv Gandhi Centre for Biotechnology (RGCBI), TVPM
3.45 - 4.00 PM : Tea break
4.00 - 5.00 PM : Oral presentation

Day 2: 28/11/2024

Theme: MACHINE LEARNING AND AI FOR SENSOR APPLICATIONS

- 9.30 - 10.15 AM : Plenary Lecture: "Lipophilic Dye Liquid: A Novel Dye Material for Use in Optical Chemical Sensing"
Prof. Dr. Hideaki Hisamoto, Professor
Osaka University, Japan
10.15 - 11.00 AM: Invited Lecture: "Stereoscopic Visualization: A Novel Approach to Anatomy Teaching and Procedural Planning"
Dr Arun Anirudhan V, Scientist F, Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), TVPM
11.00 - 11.15 AM: Tea break
11.15 - 12.00 PM : Invited Lecture: "AI for Data Processing: Time series data, Images, and Beyond"
Dr. Mahesh Mohan M.R, Assistant Professor Grade-II, Indian Institute of Technology (IIT), Kharagpur
12.00 - 1.00 PM : Oral Presentation
1:00 - 2.00 PM : Lunch Break

- 2.00 - 2.45 PM : Invited Lecture: "Integration of chemistry and engineering for product development"
Dr Manoj G, Scientist E, Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), TVPM
2.45 - 3.30 PM : Invited Lecture: "Neuromorphic Technology for next generation sensors"
Dr Jinesh K B, Professor, Department of Physics, Indian Institute of Space Science and Technology (IIST) TVPM
3:30 - 3.45 PM : Tea break
3.45 - 5.00 PM : Poster presentation

Day 3: 29/11/2024

Theme: SENSORS & ACTUATORS FOR IIoT & AEROSPACE APPLICATIONS

- 9:30 - 10:15 AM : Invited Lecture: "Silicon and Polymer Micromachines as Gas Sensors"
Dr. Seena V, Associate Professor, Department of Avionics, Indian Institute of Space Science and Technology (IIST), TVPM
10.15 - 11:00 AM : Invited Lecture: "Sensor Interface Circuits and Their Applications"
Dr Sreenath Vijayakumar, Assistant Professor
Indian Institute of Technology (IIT), Palakkad
11:00 - 11.15 AM: Tea break
11.15 - 12:00 PM: Invited Lecture:
"Design and Development of Gas Sensors for Human Space Program"
Dr. Palash Kumar Basu, Associate Professor,
Department of Avionics, Indian Institute of Space Science and Technology (IIST), TVPM
12.00 - 12.45 PM : Invited Lecture: "In situ thermal measurements of Planetary bodies"
Dr M Satheesh Chandran, Scientist SF
Vikram Sarabhai Space Centre (VSSC)
Thiruvananthapuram
12.45 - 2.00 PM : Lunch Break
2.00 - 2.45 PM : Invited Lecture:
"Sensor driven mobile app for Landslide early warning"
Dr. Sajin Kumar K.S, Assistant Professor
Department of Geology, University of Kerala, TVPM
2.45 - 3.30 PM : Invited Lecture: "The Feasibility of using proteins in solid-state electronic Gas Sensors"
Dr. Jerry A Fereiro, Assistant Professor Grade-I
Department of Chemistry,
Indian Institute of Science Education and Research (IISER), TVPM
3.30 - 4.15 PM : Invited Lecture:
"Magnetoplasmonic systems for sensing Applications"
Dr Pramod Gopinath, Professor, International School of Photonics, Cochin University of Science and Technology (CUSAT), Kochi
4.15 - 4.30 PM : Tea Break
4.30 - 5.00 PM : Oral presentation

Day 4: 30/11/2024


Theme: EMERGING SENSOR TECHNOLOGIES

- 9:30 - 10:15 AM : Plenary Talk: "Portable Spectroscopic Devices for Sensing Applications"
Dr Yoosaf Karuvath
Professor, Department of Applied Chemistry
Cochin University of Science and Technology (CUSAT), Kochi
10.15 - 11.00 AM: Invited Talk: "Point of care sensing device for Blood clot time Measurements"
Mr Sarath S Nair
Engineer F
Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), TVPM
11.00 - 11:15 AM: Tea Break
11.15 - 12.00 PM : Invited Lecture: "Translational research in sensors-challenges and opportunities"
Dr K. G. Sreejalekshmi
Professor, Department of Chemistry
Indian Institute of Space Science and Technology (IIST), TVPM
12.00 - 12.45 PM : Invited Lecture: "Transport of Fluids in Digital Microfluidics"
Dr Digendranath Swain
Scientist/Engineer SF
Vikram Sarabhai Space Centre (VSSC)
TVPM
12.45 - 2.00 PM : Lunch Break
2.00 - 2.45 PM : Invited Lecture: "Confronting unmet medical needs in India- the role of academia in advancing medical device innovation"
Mr. Joseph Tharion
Senior Research Scientist,
Digital University
2.45 - 3.30 PM : Invited Lecture: "From concept to patent: understanding the Patent Filing Journey"
Dr Mini Saraswathy, Professor
Department of Biochemistry,
University of Kerala
3.30 - 4.30 PM : Valedictory Function and Prize distribution
4.30 - 5.00 PM : Tea Break

BEST ORAL PRESENTATION AND POSTER PRESENTATION WILL BE AWARDED WITH Rs. 2500/-

Contact

**+91-9497329720, +91-9947605994,
+91-8075403621, 91-7034157696
+91-9539759202**

 **sensors2024@gmail.com**

