

# PROGRAMME

27 November 2024	
TIME	PROGRAMME
13.30-14.30	LUNCH
14.30-15.00	Registration
15.00-15.30	Inauguration
Session I	Chair: Prof. N. Ravishankar
15.30-16.00	<i>Prof. K. K. Nanda, IOP, Bhubaneswar</i> Introduction to the world of sensors
16.15-16.45	TEA
Session II	Chair: Prof. Shikha Varma
16.45-17.15	<i>Prof. B.K. Panigrahi, IOP, Bhubaneswar</i> Sensors and sensing technologies under the challenging environment of nuclear Reactors
17.15-17.45	<i>Prof. R.T. Rajendra Kumar, Bharathiar University</i> Nanoengineered carbon and metal oxide heterostructures for flexible and wearable human motion and breath disorder monitoring sensors
17.45-18.15	<i>Prof. Subhasish Basu Majumder, IIT Kharagpur</i> Development of air quality monitoring prototype
20.00 Onwards	BANQUET
28 November 2024	
Session III	Chair: Prof. B.K. Panigrahi
09.30-10.00	<i>Prof. N. Ravishankar, IISc, Bangalore</i> Sensing with ultrathin metal nanowires
10.00-10.30	<i>Dr. Bamaprasad Bag, CSIR IMMT, Bhubaneswar</i> Chemosensing strategies with rhodamines for selective detection of organophosphates
10.30-11.00	<i>Prof. Priyabrat Dash, NIT, Rourkela</i> Structural and morphological tuning of oxide nanostructures for efficient sensing of toxic gases
11.00-11.30	TEA

<b>Session IV</b>	<b>Chair: Prof. Subhasish Basu Majumder</b>
11.30-12.00	<i>Prof. S.B. Krupanidhi, IISc, Bangalore</i> Quantum structures of III-V compound semiconductors for IR detection
12.00-12.30	<i>Prof. Rajan Jha, IIT, Bhubaneswar</i> Optical sensors: Industrial applications to quantum leap
12.20-12.40	<i>Dr. Hemam Rachna Devi, IIT, Hyderabad</i> Wavelength-selective near-infrared photothermal absorber based on Gires–Tournois (GT) etalon
12.40-13.00	<i>Mr. Alok Kumar, IOP</i> Phase-dependent properties of stacked bilayer WS <sub>2</sub> : Insights into thermal conductivity and gas sensing applications in 2D semiconductors
13.00-13.20	<i>M. Sivakumar, NIT, Andhra Pradesh</i> Investigations on the thermal sensing potential of erbium-doped lithium yttrium fluoride phosphor material by TCLs, non-TCLs and CIE modalities
13.20-14.30	<b>LUNCH</b>
14.30-16.00	<b>POSTER-SESSION</b>
16.00-16.30	<b>TEA</b>
<b>Section V</b>	<b>Chair: Prof. S. B. Krupanidhi</b>
16.30-17.00	<i>Prof. S.P. Sahoo, IOP, Bhubaneswar</i> High responsivity in monolayer MoS <sub>2</sub> photodetector via controlled interfacial carrier trapping
17.00-17.30	<i>Prof. S. Rath, IIT, Bhubaneswar</i> CdSe/CdS nanolayered heterostructure devices as promising broad band photodetectors
17.30-18.00	<i>Dr. Arun Kumar Prasad, IGCAR, Kalpakam</i> Development of nanostructured materials for gas sensing
18.00-18.20	<i>Mr. Aminesh Mandal, IIT Kharagpur</i> Mxene and Ternary alloy composite for improved VOC gas response at room temperature
18.20-18.40	<i>Ms. Bhagyalaxmi Pothal, IIT, Madras</i> Tuning the structure and chemistry of transition metal dichalcogenides (TMDs) for sensing applications
20.00 Onwards	<b>DINNER</b>

## 29 November 2024

<b>Session VI</b>	<b>Chair: Prof. Priyabrat Dash</b>
<b>9.30-10.00</b>	<i>Prof. Shikha Verma, IOP, Bhubaneswar</i> <b>Nano-hybrids, organic nanomaterials and DNA as sensors</b>
<b>10.00-10.30</b>	<i>Prof. Sathish Sugumaran, VTU, Bangalore</i> <b>Role of plasmonic nanobiosensor and smart sensors in healthcare sectors</b>
<b>10.30-11.00</b>	<i>Dr. S.L. Shinde, IIT, Hyderabad</i> <b>Near-infrared photodetection using plasmonic titanium nitride</b>
<b>11.00-11.30</b>	<b>TEA</b>
<b>Session VII</b>	<b>Chair: Prof. S.P. Sahoo</b>
<b>11.30-12.00</b>	<i>Dr. Somnath Koley, CSIR CMRI, Durgapur</i> <b>Light sensing with artificial phototactic microswimmers</b>
<b>12.00-12.20</b>	<i>Mr. Gokul Raj, IISc, Bangalore</i> <b>A high entropy nano alloying strategy towards electrochemical high-performance non-enzymatic glucose sensing</b>
<b>12.20-12.40</b>	<i>Mr. Ashis Kumar Panigrahi, IOP, Bhubaneswar</i> <b>Synthesis and optical characterisation of 2D artificial semiconducting heterostructures for sensing applications</b>
<b>12.40-13.00</b>	<i>Ms. Savita. S. Mane, ICT, Mumbai</i> <b>Study of polymer nano-hybrid composites for Cd<sup>2+</sup> nanomolar Detection</b>
<b>13.00-13.20</b>	<i>Dr. S.N. Sarangi, IOP, Bhubaneswar</i> <b>Non-Enzymatic Optical Glucose Biosensor: A Possible Approach for Accurate Glucose Estimation</b>
<b>13.20-13.30</b>	<b>Concluding Remarks</b>
<b>13.20-14.30</b>	<b>LUNCH</b>