## International Symposium on Instrumentation – 03 National Symposium on Instrumentation-43 7<sup>th</sup>-9<sup>th</sup> October, 2021 : Highlights

Plenary Talks (2):

**Systems** 

Development of Light Combat Aircraft-- Role of Test facilities & Technologies Padma Shri **Dr. Kotaharinarayana**, Program Director-LCA, <u>Aeronautical Development Agency</u>

Deep space optical coatings Dr. T. G. K. Murty, Former Distinguished Scientist and Program Director at ISRO Headquarters, *ISRO* 

ISOI Sponsored Talks (5): Prof. Satish Dhawan Memorial Lecture: Nanostructured Chemiresistive Gas Sensors Prof. Navakanta Bhat, Dean Interdisciplinary Sciences, <u>CeNSE, IISc Bangalore</u>

**Prof. M.R. Rao endowment lecture**: Effects of Atmospheric Turbulence on Directed Energy System for Anti-UAV Applications

Dr. Jagannath Nayak, Director, Centre for High Energy Systems and Sciences, DRDO

**ISOI Young Engineer Awardee Lecture:** Improving optoacoustic imaging by incorporating optical and acoustic modeling**Dr. Jayaprakash**, Assistant Professor, *Instrumentation and Applied Physics, IISc Bangalore* 

Tribute to Prof. K. L. Chopra Lecture: Dr. Milind Acharya, Founder and Executive Director, Milman Thin Film

Tribute to Prof H. A. Macleod Lecture: Dr. K. Balasubramanian, Jet Propulsion laboratory, NASA

## Invited Talks (14): CoViD-19, Biomedical Instrumentation, Sensors & Transducers, Electro-optics, Automation and Control, AI Application

Design of protein subunit Covid-19 vaccines Prof. Raghavan Vardharajan, Professor, <u>Molecular Biophysics Unit, IISc, Bangalore</u>

Indigenous oxygen concentrator **Prof. Praveen C Ramamurthy**, Professor, <u>Department of Materials Eng., IISc, Bangalore</u>

Multi-modal Imaging: Photoacoustic Imaging Plus More **Prof. Chulhong Kim**, Young Distinguished Professor and Mueunjae Chair Prof. <u>Medical Device Innovation Center</u>, <u>POSTECH, S. Korea</u>

Fiber optic point-of-care and array biosensor device and technology development **Prof. Raghavendra Sai V. V**, Associate Professor, Biomedical Eng., <u>Department of Applied Mechanics, IIT M</u>

Optical Coherence tomography for applications in Gastroenterology **Prof. Renu John**, Professor and Head, <u>Dept. of Biomedical Eng.</u>, <u>IITH</u> Optical techniques for non-invasive precision metrology **Prof. Gannavarpu Rajshekhar**, Associate Professor, <u>*Electrical Eng., IITK*</u>

Smartphone based electro-optic sensing for medical diagnosis **Prof. Satish Kumar Dubey**, Associate Professor, <u>SENSE, IITD</u>

Thin Film Bulk Acoustic Resonator Sensors: from Engineering to Applications **Prof. Andrew Flewitt**, Head of Division, Electrical Eng., <u>University of Cambridge, UK</u>

Fibre Optic Sensors for Industrial Applications **Prof. Keneth Grattan**, OBE FREng, Royal Academy of Engineering - George Daniels Professor of Scientific Instrumentation, <u>Electrical & Electronic Eng., City University of London</u>

Photonic Meta-materials, Multi-beam Interference Lithography & Super-resolution Imaging **Prof. Joby Joseph**, Professor and Head of the <u>Optics and Photonics Centre, IIT Delhi</u>

Nanoscale photonic devices for linear and nonlinear applications **Prof. S. K. Varshney**, Associate Professor, *Electrical Eng., IITKGP* 

Advanced Interfacing Techniques for Sensors **Prof. Boby George**, Professor <u>*Electrical Eng.*</u>, *IITM* 

Unobtrusive sensing in Industry 4.0 **Dr. Tapas Chakravarthy**, Principal Scientist, <u>*TCS Research*</u>

Listening to the sound of COVID-19 - Developing diagnostic methods using acoustics **Prof. Sriram Ganapathy**, <u>*Electrical Eng.*</u>, <u>*IISc Bangalore*</u>

Deep Learning-enabled Computational Microscopy and Sensing **Prof. Aydogan Ozcan**, Chancellor's Professor and Volgenau Chair for Engineering Innovation, <u>Electrical &</u> <u>Computer Eng., Bioeng., UCLA</u>

Industrial Talks (6): TCS, St. Gobain glass, Openwater, ShanMukha Innovations, Voxelgrids, Renalyx Forus Health

Number of Contributed Talks: 35

**Number of Poster Presentations: 8** 

**Post-Doctoral and Doctoral Research Talks: 15** 

Chairs: Jayaprakash, Tapajyoti Das Gupta

**Executive Council of ISOI:** S. Asokan, Sai Siva Gorthi, K. Phaneendra K Yalavarthy, Vasanth Kini, G.R. Jayanth, Mukartihal G. B.