



## Details of the First Webinar to be held under the Flagship of Digital Education Hub (in memory of Sushama Basu), IIEST, Shibpur

**Title of the Talk:** Research Challenges in the IoT Paradigm

**Speaker:** Dr. Rajesh P Barnwal, Senior Scientist, CSIR-CMERI, Durgapur, WB

**Date & Time:** 2<sup>nd</sup> February, 2022 (Wednesday) at 4 pm

**Venue:** ONLINE mode (WebEx platform)

<https://iiests.webex.com/iiests/j.php?MTID=m213a430569720e47b4707ec098859644>

### **Abstract of the Talk:**

Internet of Things (IoT) is an interdisciplinary area of research which encompasses domain specific knowledge to utilize it to its fullest potential. In real life, IoT has a number of applications which can work to achieve the dream of Society 5.0 and can leverage the Sustainable Development Goals. The need is to identify the suitable problems which can be effectively solved by implementation of IoT technologies. However, beside the basic technological challenges, each application of IoT has its own associated research problems. In this talk, it is an endeavor to focus on the need of Society 5.0, different IoT applications in a connected society and their associated research problems.

### **Biography of the Speaker:**

Dr. Rajesh P. Barnwal is serving as Principal Research Scientist of CSIR-India and currently leading the AI & IoT Lab (as a part of the IT Group) at CSIR-Central Mechanical Engineering Research Institute, Durgapur, India. He has more than 16+ years of professional and R&D experience in the field of Information Technology and allied discipline. He has earned his MTech. and Ph.D. degrees, both from the Indian Institute of Technology (IIT), Kharagpur, India. He was awarded the Senior Member award by the Association of Computing Machinery (ACM), USA in the year 2013 for his significant contributions in the field of IT/ CSE. Dr. Barnwal has led several R&D and industrial consultancy projects funded by the Govt. of India in the field of Artificial Intelligence, Internet of Things, Data Informatics, and Cyber-physical Systems. He has a very good track record of handling multi-institutional, result-oriented, high-value projects which resulted in different field-deployable technologies. He has authored a number of research papers, book chapters and technical reports in SCI journals and International Conferences. He also has several copyrights and design registrations to his credit for his authored software and technological products. During the COVID19 era, he developed and filed a patent on IoT-based IntelliMAST (Solar-powered Intelligent Mask ATM cum Thermal Scanner) technology for the workplace, which attracted the attention of national/ international media. He is also associated with the Academy of Scientific and Innovative Research (AcSIR), India as its Associate Professor (Honorary). He is also serving as a reviewer for several high impact-factor SCI journals and served as a guest editor of the International Journal of Distributed Sensor Networks. His current areas of research interest include the Intelligent Machines, Internet of Things and Security of Cyber-physical Systems.