
2021 IEEE 2ND INTERNATIONAL CONFERENCE ON SMART TECHNOLOGIES FOR POWER, ENERGY AND CONTROL (STPEC) #52385

(19th Dec to 22ndDecember 2021)



Department of Electrical & Electronics Engineering
Chouksey Engineering College
Bilaspur, India

The **2nd IEEE International Conference on Smart Technologies for Power, Energy and Control (STPEC 2021)** will be held in the Department of Electrical and Electronics Engineering, Chouksey Engineering College, Bilaspur, Chhattisgarh, during 19th to 22nd December 2021. The conference is Financially Co-sponsored by IEEE Industry Applications Society (IAS) and IEEE Power Electronics Society (PELS) & Technically Co-sponsored by IEEE Industrial Electronics Society (IES) and IEEE Bombay Section. It will be jointly organized by IEEE Bombay Section Joint Chapter of PELS/IES and Chouksey Engineering College, Bilaspur, C.G. India.

The objective of the conference is to offer a platform for electrical as well as electronics and computer science engineers and researchers to present their research work and to share experiences and ideas in the area of power, energy, control, communication and related engineering applications. The conference program will be having plenary sessions, technical paper presentations and poster presentations. Distinguished speakers will be invited to deliver keynote speeches on emerging technologies in power, energy and control engineering.

Due to Current Pandemic situation, STPEC 2021 is planned in Online Mode.

Prospective authors are invited to submit a maximum of 6 pages full paper on the following tracks (but not limited to):

- Power Systems and Smart Grids
- Electrical Machines and Drives
- Power Electronic Converters
- Renewable Energy and Energy Storage Systems
- Transportation Electrification and Automotive Technologies
- Control Systems and Applications
- Machine Learning & Signal Processing in Power & Energy Applications
- Semiconductor Devices and Circuits
- Artificial Intelligence and Neural Networks in Power & Energy Applications
- Cloud computing and Internet of Things in Power & Energy Applications
- Computer Network, Distributed Technology and Image Processing in Power & Energy Applications

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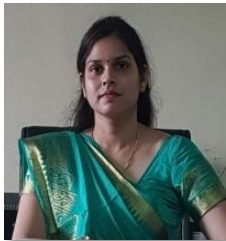
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Keynote Speakers

Prof. Biplab Sikdar



Biplab Sikdar is an Associate Professor in the Department of Electrical and Computer Engineering at the National University of Singapore where he also serves as the Vice Dean in the Faculty of Engineering. He received the B. Tech. degree in electronics and communication engineering from North Eastern Hill University, Shillong, India, in 1996, the M.Tech. degree in electrical engineering from the Indian Institute of Technology, Kanpur, India, in 1998, and the Ph.D. degree in electrical engineering from the Rensselaer Polytechnic Institute, Troy, NY, USA, in 2001. He was an Assistant Professor from 2001-2007 and Associate Professor from 2007-2013 in the Department of Electrical, Computer, and Systems Engineering at Rensselaer Polytechnic Institute from 2001 to 2013. He is a recipient of the NSF CAREER award, the Tan Chin Tuan fellowship from NTU Singapore, the Japan Society for Promotion of Science fellowship, and the Leiv Eiriksson fellowship from the Research Council of Norway. His research interests include IoT and cyber-physical system security, network security, and network performance evaluation. Dr. Sikdar is a member of Eta Kappa Nu and Tau Beta Pi. He served as an Associate Editor for the IEEE Transactions on Communications from 2007 to 2012, IEEE Transactions on Mobile Computing from 2014-2017, and IEEE Internet of Things Journal from 2021.

Title of Keynote

Defending Smart Grids against Cyber Attacks

Prof. Anurag K Srivastava



Anurag K. Srivastava is a Raymond J. Lane Professor and Chairperson of the Computer Science and Electrical Engineering Department at the West Virginia University. He is also an adjunct professor at the Washington State University and senior scientist at the Pacific Northwest National Lab. He received his Ph.D. degree in electrical engineering from the Illinois Institute of Technology in 2005. His research interest includes data-driven algorithms for power system operation and control including resiliency analysis. In past years, he has worked in a different capacity at the Réseau de transport d'électricité in France; RWTH Aachen University in Germany; PEAK Reliability Coordinator, Idaho National Laboratory, PJM Interconnection, Schweitzer Engineering Lab (SEL), GE Grid Solutions, Massachusetts Institute of Technology and Mississippi State University in USA; Indian Institute of Technology Kanpur in India; as well as at Asian Institute of Technology in Thailand. He is serving as chair of the IEEE Power & Energy Society's (PES) PEEC committee, co-chair of the microgrid working group, vice-chair of power system operation SC, chair of PES voltage stability working group, chair of PES synchrophasors applications working group, co-chair of distributed optimization application in power grid, vice-chair of tools for power grid resilience TF, and member of CIGRE C4C2-58 Voltage Stability, C4.47/ C2.25 Resilience WG. Dr. Srivastava is serving or served as an editor of the IEEE Transactions on Smart Grid, IEEE Transactions on Power Systems, IEEE Transactions on Industry Applications, and Elsevier Sustainable Computing and guest or past editor for numbers of other IEEE Transactions and IET Journal. He is an IEEE fellow and the author of more than 300 technical publications including a book on power system security and 4 patents

Title of Keynote

Event Detection and Classification for Cyber-Power Grid

Prof. Vinod Khadkikar

Vinod Khadkikar (Senior Member, IEEE) received the M.Tech. degree in power electronics, electrical machines, and drives from the Indian Institute of Technology (IITD), New Delhi, India, in 2002, and the Ph.D. degree in electrical engineering from the École de Technologie Supérieure, Montral, QC, Canada, in 2008. From December 2008 to March 2010, he was a Postdoctoral Fellow with the University of Western Ontario, London, ON, Canada. In 2010, he was a Visiting Faculty with the Massachusetts Institute of Technology (MIT), Cambridge, MA, USA. He is currently a Professor with the Department of Electrical Engineering and Computer Science, Khalifa University, Abu Dhabi, UAE. His research interests include applications of power electronics in distribution systems and renewable energy resources, grid interconnection issues, power quality enhancement, active power filters, and electric vehicles. Dr. Khadkikar is currently an Associate Editor for the IEEE Transactions on Industrial Electronics, IEEE Transactions on Industry Applications, and IET Power Electronics.

Title of Keynote**Electric Vehicle to Vehicle (V2V) Charging****Dr. Dinesh Kumar**

Dinesh Kumar received Master of Technology (M. Tech) in power system engineering from Indian Institute of Technology (IIT) in 2004, Roorkee and Ph.D. degree in power electronics from the University of Nottingham, U.K., in 2010.

From 2004-2005, he served as a Lecturer in the Electrical Engineering Department at National Institute of Technology, Kurukshetra, India. In 2006, he joined Technical University Chemnitz, Germany as a Research Fellow in Power Electronics. Since 2011, he has been with the Global R&D Center at Danfoss Drives, Denmark, where he is involved in many research and industrial projects. He is a member of the IEC standardization Working Group in TC77A, TC22 and System Committee on LVDC. His current research interests include motor drive, harmonic analysis and mitigation techniques, power quality and electromagnetic interference in power electronics. He is the Editor-in-Chief of International Journal of Power Electronics and the Associate Editor of IEEE Transaction on Industry Applications, IEEE Access Journal, and member of IEEE Transportation Electrification eNewsletter.

Title of Keynote**Reflection on Power Quality Indices for the Assessment of Power Electronic Systems**