Speakers' Profile

Dr.Ajeet Bajpai
Director General,
National Critical Information Infrastructure Protection Centre (NCIIPC), GoI

Dr. Ajeet Bajpai is a veteran with 40 years of rich operational experience in the field of Information Technology, Information Warfare and Cyber.

An alumnus of IIT (Delhi), scholar from Cranfield University and a Fellow of IETE, he holds a Ph.D in the field of 'Probabilistic Modelling'. He has received several awards for his academic excellence, innovation and research work.

He is a member of various Apex Committees on Technology and Cyber Security at the National Level and represents India in several strategic International Joint Working Groups.

Dr Ajeet Bajpai is presently the Director General, NCIIPC which is the National Nodal Agency under NTRO for Protection of Critical Information Infrastructure of the Nation.

Dr S A V Satya Murty
Former Director,
IGCAR, DAE
Director, Vinayaka Mission's Research Foundation (VMRF)

Dr. S.A.V. Satya Murty is a Distinguished Scientist & Former Director of Indira Gandhi Centre of Atomic Research, Kalpakkam, the second largest multidisciplinary R&D institute of Department of Atomic Energy, Government of India. Prior to that he held various senior Positions in IGCAR viz. Head, Networking Section, Head, Computer Division, Associate Director, Electronics & Instrumentation Group, Director, Electronics, Instrumentation & Radiological Services Group and has an excellent R&D career. Subsequent to his superannuation, he held Raja Ramanna Fellowship for two years.

Dr. Satya Murty had a distinguished academic career. He did his B.Tech from Jawaharlal Nehru Technological University and was awarded Gold Medal for getting University First Rank. Subsequently he did one year Orientation Course in Nuclear Science & Technology at the training school of Bhabha Atomic Research Centre and was awarded Homi Bhabha Award for getting First Rank. He did his Ph.D from Homi Bhabha National Institute.

He has more than 200 Publications in peer reviewed Journals and international & national conferences, Four book chapters, many design reports etc. He is the Editor of Two International Journals and one national journal.

Dr. Satya Murty was conferred many awards including INS Outstanding Service Award 2011 from Indian Nuclear Society in the category of Nuclear Reactor Technology including Reactor Safety, Group Achievement award as Group Leader in the years 2011, 2012, 2014 from DAE, Life Time Achievement Award by Institute of Engineers (Kalpakkam Chapter) in the year 2016.

Dr. S.A.V Satya Murty is currently working as Director (Engineering & Technology Research) in Vinayaka Mission's Research Foundation (A Deemed to be University) & as Campus Director of AVIT Campus, VMRF.
TOPIC:
Cyber Security for Critical Infrastructure: Challenges & Way Forward

  Prof.R.K.Shyamasundar **JC Bose National Fellow &** **Distinguished V. Professor,** **IIT Bombay**	Prof. R K Shyamasundar is a Fellow of IEEE, a Fellow of ACM, Distinguished ACM Speaker, a Distinguished Alumnus of Indian Institute of Science, served as IEEE Distinguished Speaker, and was the founding Dean of School of Technology and Computer Science at the Tata Institute of Fundamental Research. Currently, he is JC Bose National Fellow, Distinguished V. Professor at the Department of Computer Science, IIT Bombay where he is the principal investigator of the Information Security Research and Development Centre(ISRDC) from Ministry of Electronics and Information Technology (MeiTY) from the Govt. of India and also directs the Centre of Excellence by Ripple. He was awarded the 2014 SN Mitra award for excellence in research by the Indian National Academy of Engineering. Since 2015, he holds the distinguished position of Scholar-in-Residence at IIT Jodhpur. He is a Distinguished Fellow at the Institute of Development and Research for Banking Technology (IDRBT). He has more than 300 peer reviewed publications in Journals and proceedings, 8 patents, 8 books and guided more than 37 PhD students. He has been a visiting faculty at UIUC, UCSD at LaJolla, IBM Research, Max Planck Inst, JAIST, University of Linkoping. He had also been an Adjunct Faculty at School of Computing at NUS, Singapore, had been invited faculty at Technological University of St Peterseburg, Russia, and Distinguished Fellow of the UK Royal Academy of Engineering at the Computer Group, University of Cambridge as well as City University of London. He is a Fellow of Indian Academy of Sciences, Indian National Science Academy, National Academy of Sciences, National Academy of Engineering, India and a Fellow of the Academy of Sciences of the Developing world (TWAS), Trieste, Italy. He serves on the IEEE Fellow selection committee on Product safety. He is also a recipient of Diamond Jubilee medal from IETE and also its' Fellow. He has served on IEEE Esterel Standards Committee and serves on the Editorial board of Journal of Paralleland Distributed Computing, the Editor-in-Chief for Sadhana-Journal of Engineering Sciences of the Indian Academy of Sciences for the Computing and Data Sciences. **TOPIC:** IoT: Classification, Identification and Security Enforcement
  Shri. P K Agarwal **CISO POSOCO, Director**	A power system engineer by profession having more than three decade of experience with passion to information technology. Worked in areas of power system like construction/O&M of EHV transmission lines, grid substation and HVDC systems. Got executed the SCADA/EMS project in India. Experienced Working in different areas of power system SACDA like data integration, up gradation with new technologies. Have expertise on applications of information technology in power system operation (larger grid operation). Successfully implemented Information Security Management System as per ISO 27001. Implemented India's first ever installations of synchrophasors as project manager. Member of working group on finalization of PMU/PDC requirements standards for VLPGO, an International consortium of Very Large Power grid Operators of USA, China, Korea, Brazil, India etc. Member of working group for preparation of PDC/PMU specifications of Bureau of Indian Standard (BIS). Core team member of panel of experts on Smart Grid Initiatives in India. Written and published many papers and articles at national and international level. TOPIC : **Cyber security framework in utilities**

Dr P V Ananda Mohan C-DAC Bangalore	Dr.P.V. Ananda Mohan received the B.Sc and M.Sc (Tech.) degrees from Andhra University, Waltair, India, in 1965 and 1968, respectively, and the Ph.D degree in electrical communication engineering from Indian Institute of Science, Bangalore, in 1975. He was with ITI during 1973-2003, ECIL, Bangalore till 2014 in R&D. He was in NTRO for during 2014. Since 2015, he is with CDAC, Bangalore as Technology advisor. His research interests are in the area of Analog VLSI design, VLSI architectures, DSP and Cryptography. He has published five books in these areas with Birkhauser and Prentice-Hall. Dr. Mohan is a life Fellow of IEEE (U.S.A), IETE (India), National Academy of Engineering (FNAE). He has received the Ram Lal Wadhwa Gold Medal Award from the Institution of Electronics and communication engineers (India) in 2003 and Indira Priyadarshini Award in 2004. **TOPIC:** Cryptosystem Validation FIPS-140 2 Perspective
Dr.Parag Rughani Associate Professor Digital Forensics Institute of Forensic Science Gujarat Forensic Sciences University Gandhinagar, Gujarat	Dr. Parag H. Rughani, received his Ph.D. in Computer Science at Saurashtra University, 2010. He is currently working as an Associate Professor [Digital Forensics] at Gujarat Forensic Sciences University, India. His major research thrust areas include Machine Learning, Memory Forensics, Cyber Security and Malware Analysis. He has 15 years of experience in teaching and research. He is currently working on Machine Learning based solutions for Malware Analysis, Cyber Security and Digital Forensics. He has 15 publications in international journal, 6 in International conferences and written a book. **TOPIC:** Securing Critical Infrastructure with Machine Learning
Dr Chester Rebeiro IIT Madras	Dr Chester Rebeiro is an Assistant Professor at IIT Madras. He completed his PhD from IIT Kharagpur and a post-doc from Columbia University. His research interests are in hardware security, applied cryptography, side channel analysis, and operating system security. He has one patent filed for his innovation on obtaining resistance to Cache Timing Attacks for Block Cipher Encryption. He has coauthored a book titled Timing Channels in Cryptography: A Micro-Architectural Perspective published by Springer. He is currently working on formal verification approaches to hardware security and fault attacks. **TOPIC**: Processor and its Vulnerability

Dr.Sumanta Sarkar **TCS Innovation Lab** **Hyderabad**	Dr.Sumanta Sarkar is a research scientist in TCS Innovation Labs, Hyderabad. He did his PhD at Indian Statistical Institute, Kolkata. He was a postdoctoral researcher at INRIA, France and University of Calgary, Canada. His research interests include Cryptography, Coding Theory, Blockchain Technology, and IoT security. **TOPIC:** Lightweight Protocols
Ms.Mini TT Principal Engineer, ABB Global Industries and Services Pvt Ltd.	Ms.Mini TT is a Principal Engineer in Measurements & Analytics at ABB Ability Innovation Center, Bangalore. She holds MTech in Embedded Systems from BITS Pilani and degree in Computer Science and Engineering from the University of Kerala. She has over 23years of experience in defence, semiconductors, consumer electronics, substation automation and industrial measurements. Her specialization is in embedded systems and system architecture. Her other areas of expertise include augmented reality, cyber security, performance engineering and real-time systems. She holds a green belt in Design for Six Sigma. Until 2009, She worked with Philips Innovation Campus where she developed products for consumer electronics market. She started her career with Bharat Electronics where she developed Artillery Command and Control Systems and Radars. Currently, she leads Cyber Security Centre of Excellence for Measurement and Analytics Business. TOPIC: Hardware Based Security for Industrial Instruments
Shri. B S Bindhumadhava, **Senior Director and Centre Head** **C-DAC, Knowledge Park,** **Bangalore**	Mr. Bapu S.Bindhumadhava is Sc – 'G' & Senior Director, at Centre for Development of Advanced Computing (C-DAC), MeitY, Govt of India Bangalore. He is Centre Head,C-DAC, Bangalore & Heading the Real Time Systems (RTS) & Internet of Things(IoT) activities. He has around 30 years of Industry & Information Technology experience. He obtained his Bachelor degree in Electrical &Electronics Engineering from Bangalore University, Post- Graduate Diploma in Systems Management from NIIT and MS (Electronics & Controls) from BITS, Pilani. His current research interests are in Real time systems, Network & Internet Security, Agent Computing, Smart Grids, Self-Managing System software &Cyber Physical Systems Security. He has filed 2 patents & authored more than 3 journal papers, 43 refereed International & National Conferences papers. **TOPIC:** **Smart Grid: R&D Cyber Security Challenges**

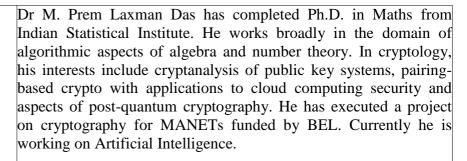|	
Shri. Haribabu **Joint Director** **C-DAC, Knowledge Park,** **Bangalore**	Mr.Haribabu is working as Joint Director for IoT (Internet of Things) team as part of RTS&IoT Group at CDAC, Bangalore. He has completed M.Tech from Andhra University in the year 2000 and he is working with CDAC, Bangalore Since January 2001.He is currently pursuing PhD at IIIT, Bangalore. His areas of expertise are in VLSI design, embedded system development, Internet of Things, Wireless sensor Networks, Energy harvesting for WSNs, FPGA design, Cryptography and Cryptanalysis. He has published more than 20 papers in International conferences and has two patents filed. He has conducted five national workshops in the area of wireless sensor networks. His research areas include energy aware routing protocols, advances in MAC protocols, automation systems for energy sector, Security in IoT. He is a senior member of IEEE. TOPIC: **Practical IoT Security**
Shri. Balaji **Joint Director** **C-DAC, Electronic City,** **Bangalore**	**Dr. Balaji Rajendran** is working as a Joint Director in Centre for Development of Advanced Computing (C-DAC), Bangalore. He has more than 18+ years of experience in Research and Development specifically in the domain of Information Security, Community Computing and Applied AI.. He is currently working to establish a Centre of Excellence in DNS Security, at C-DAC Bangalore. He has also been promoting the development of Internet Protocols through Indian Internet Research and Engineering Forum (IIREF). He has been leading the operations of a Critical Information Infrastructure Protection for a major organization. He has published several research papers in International Journals and Conferences. He had received fellowship from Asia Productivity Organization, Japan for a fully sponsored program on Information Security Management Systems. He also received fellowship from ISOC, for Internet Next Generation Leadership Program in 2012. **TOPIC:** **DNS Security**
Shri. Rajesh Kalluri **Joint Director** **C-DAC, Knowledge Park,** **Bangalore**	Mr.Rajesh Kalluri has mainly worked in the software Research & Development both in Government Institutions (CDAC) and in Industry and has over 12 years of experience. He has worked in the area of design and development of products in SCADA systems, Real Time Systems and Fault Tolerant Systems. He lead the team in setting up SCADA test bed for security analysis and developing security solutions for SCADA Systems. He has published over 14 research papers both in national and international conferences. His current interests are security in SCADA systems, smart grid security. Currently he is a Joint Director at CDAC Bangalore. He has done his masters from BITS Pilani and B.E. from Andhra University. **TOPIC :** **Visibility in Critical Infrastructure**

Dr.Prem Laxman Das Sr Scientist, SETS	Dr M. Prem Laxman Das has completed Ph.D. in Maths from Indian Statistical Institute. He works broadly in the domain of algorithmic aspects of algebra and number theory. In cryptology, his interests include cryptanalysis of public key systems, pairing-based crypto with applications to cloud computing security and aspects of post-quantum cryptography. He has executed a project on cryptography for MANETs funded by BEL. Currently he is working on Artificial Intelligence. TOPIC: Securing Critical Infrastructure in the Quantum Era: Post Quantum Cryptography
Dr.Jothi Ramalingam Scientist, SETS	Dr.Jothi Ramalingam is working as Scientist at SETS since 2006. He did MSc and MPhil in Maths at Pondicherry Central University and obtained PhD (Information Security) in 2012 from QUT, Australia. His current research interest is in the area of quantum-secure communication protocols. He also worked in other areas such as design and development of DoS countermeasure and algorithms for secure delegation of cryptographic computations. TOPIC: Securing Critical Infrastructure in the Quantum Era: Quantum Key Distribution
Ms.A.Suganya Scientist, SETS	Ms Suganya Annadurai obtained her MTech in VLSI Design from SASTRA University, Thanjavur. In her 15 years of experience at SETS she has developed core competency in side channel analysis and secure and efficient realisation of cryptography modules. Her research interests include side channel analysis attacks and countermeasures, analysis and design of efficient and secure crypto modules for communication systems, ubiquitous devices, and embedded devices. She played a major role in the establishment of Side channel analysis evaluation laboratory at SETS for the evaluation of crypto modules. She has good number of publications in reputed International conferences to her credit. TOPIC: Secure Crypto Devices for Cyber Infrastructure