

## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Shri. B.S. Jagadeesh**

**Title of Talk:** Building and Operating State of the art Petascale computing systems



**Shri. B.S. Jagadeesh** Currently he is working as ‘Outstanding Scientist’ & Associate Director, E&I Group in Bhabha Atomic Research Centre, Trombay. He is also Chairmen of National Supercomputing Mission (NSM)- Infrastructure Group. He has made very significant contributions in the design and development of Anupam Series Parallel Supercomputers, Parallel File system etc. He is the team leader from Indian side for collaborative projects with CERN and has carried out many projects in World Wide Large Hadron Collider Grid (WLCG). He has published more than 40 papers in peer-reviewed International and National Conferences. He has been awarded the “Scientific and Technical Excellence award” in the year 2007 by the Department of Atomic Energy.

**Shri. P.S. Dhekne,**

**Title of Talk:** BigData Science for Scientific & Engineering Applications of HPC Domain



**Shri. P.S. Dhekne**, is serving as a Scientific Consultant to the Principle Scientific Adviser to Government of India. He is also a member of NKN project. He is an ex-associate Director of BARC, Mumbai. During his long tenure of over 35 years, he has made invaluable contributions in the field of High Performance/Distributed/Grid Computing and information security systems spanning more than three decades. His major contributions include High resolution Tiled Graphics System, building layered and highly secure information architecture, establishment of worldwide LHC computing grid, EU-INDIA grid and DAE grid. He was awarded, the Indian Nuclear Society Award INS-2001 in 2002, presented by Honourable Prime Minister of India. He is a fellow of National Academy of Engineers (FNAE) and Institution of Electronics and Telecommunication Engineers.

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**Dr. Rajendra Joshi**

**Title of Talk:** Accelerating Biology: Extreme scale visualization and analysis



**Dr. Rajendra Joshi** holds a Masters degree in Biochemistry from the University of Pune and a Doctorate in Biochemistry. Currently Dr Joshi is working as Associate Director, Bioinformatics Group at Centre for Development of Advanced Computing, Pune. He is also Convener of National Supercomputing Mission, Application Group. At C-DAC he has been instrumental in setting up the Bioinformatics Resources and Applications Facility (BRAAF) which serves as a nodal point for all researchers in life sciences who require high speed computing. His major area of expertise, is in the use of high performance parallel computers for biological research. He has numerous publications, articles and invited talks to his credit. His career objective is to build an environment where much of biology could be understood using high performance parallel computers.

**Prof. Prabhu Ramachandran**

**Title of Talk:** Making HPC for numerical methods productive and fun



**Prof. Prabhu Ramachandran** has been a faculty member at the department of Aerospaceengineering, IIT Bombay, since 2005. He currently serves as a director, Enthought India. His research interests are primarily in particle methods for fluid flow simulation and applied scientific computing. He is the creator, author, and lead developer of the award winning Mayavi Python package. He is an active member of the SciPy community. He was awarded the Kenneth Gonsalves award by the Python Software Society of India and PSF in 2014.

## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

### **Shri. Bharat Kumar Sharma**

**Title of Talk:** The Practical Reality of Heterogeneous Super Computing: Transforming from Single Purpose HPC to Large Purpose HPC



**Shri. Bharat Kumar Sharma** obtained master degree in Information Technology from Indian Institute of Information Technology, Bangalore. He has around 10 years of development and research experience in domain of Software Architecture, Distributed and Parallel Computing. He is currently working with Nvidia as a Senior Solution Architect, South Asia. He has published papers and journal articles in field of Parallel Computing and Software Architecture.

### **Shri. Rama Kishan Malladi**

**Title of Talk:** Importance of software optimization and code modernization to unleash potential of silicon.



**Shri. Rama Malladi** is an Application Engineer with the Software and Services Group at Intel in Bangalore. He works with various software developers and vendors, enabling their applications on the latest Intel platforms. Rama has been working at Intel supporting Intel Software Tools, tuning high-performance computing applications and resolving customer issues. Rama has a Master of Science degree in Electrical Engineering from University of Massachusetts, Dartmouth.

## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Prof. Gurunath Gurrala**

**Title of Talk:** Role of HPC for Power Systems Operation



**Prof. Gurunath Gurrala**, is M.Tech and Ph.D from Indian Institute of Science. He was a post doctoral fellow at Texas A&M university and Oak ridge national lab, USA. He is currently an assistant professor at department of electrical engineering, Indian Institute of Science. He received Prof DJ Badkas medal for best PhD thesis from EE, IISc, Bangalore. He received INAE Young Engineer Award 2015. His research interests include power system stability, grid integration of renewables, Microgrid control, high performance computing applications to power systems, nonlinear and adaptive control of power systems.

**Dr. M. V. Hosur**

**Title of Talk:** Application of bigdata technology in bioscience area.



**Dr. M. V. Hosur** is presently working at CDAC-Kharghar, Navimumbai. He is also an Adjunct Professor at the National Institute of Advanced Studies (NIAS), IISc, Bangalore. Dr. M. V. Hosur obtained Ph. D from Indian Institute of Science, Bangalore. He was awarded Martin Forster Gold medal for his Ph. D. thesis work. He has carried out post-doctoral research in the USA, at University of Wisconsin and also at Purdue University. His research has been in the fields of Structural Biology and Computational Biology of viruses and viral proteins such as HIV-1 protease. Dr. Hosur was the first to develop a computer program called FRDICT for in-silico manipulation of molecules during crystallographic drug development. While at BARC, he has done pioneering work to show that beamlines on synchrotrons across the globe can be operated remotely from India through use of National Knowledge Network (NKN). He is a member of the DBT Expert Committee for utilisation of synchrotrons, and also of the PSA Task force for Big Data applications in life sciences. He is a Fellow of Indian National Science Academy.

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**Prof. C.E. Veni Madhavan**

**Title of Talk:** Blockchain Technology: Applications beyond Cryptocurrencies



**Prof. C.E. Veni Madhavan** obtained his PhD from Indian Institute of Science. He worked in the industry, Air India, National Informatics Center and currently a professor at IISc. His current work on cryptanalysis and steganalysis are on the problems of large-scale integer factoring and statistical analysis. He has published over 60 papers in refereed journals and conferences, and delivered over 100 invited talks in national conferences and universities. He obtained in 2001, an award by the Mathematical Association of India, for distinguished services in mathematics education and research.

**Dr. Prem Laxman Das**

**Title of Talk:** Post-quantum cryptography



**Dr. 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.

## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Prof. Miron Livny, Univ. of Wisconsin-Madison**

**Title of Talk:** Distributed High Throughput Computing with HTCondor and the Open Science Grid



**Prof. Miron Livny** received his Ph.D. degree in Computer Science from the Weizmann Institute of Science in 1978 and 1984, respectively. Since 1983 he has been on the Computer Sciences Department faculty at the University of Wisconsin-Madison, where he is currently the John P. Morgridge Professor of Computer Science, the director of the Center for High Throughput Computing (CHTC), is leading the HTCondor project and serves as the principal investigator and technical director of the Open Science Grid (OSG). He is a member of the scientific leadership team of the Morgridge Institute of Research where he is leading the Software Assurance Market Place (SWAMP) project and is serving as the Chief Technology Officer of the Wisconsin Institutes of Discovery. Dr. Livny's research focuses on distributed processing and data management systems and involves close collaboration with researchers from a wide spectrum of disciplines. He pioneered the area of High Throughput Computing (HTC) and developed frameworks and software tools that have been widely adopted by academic and commercial organizations around the world.



## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Prof. R. Govindarajan**

**Title of Talk:** Supercomputing: Research Challenges and Opportunities



**Prof. R. Govindarajan** has been with SERC and the Department of Computer Science and Automation at IISc, Bangalore since 1995. He received a BSc in Mathematics from Madras University in 1981, and a BE in Electronics and Communication, and PhD in Computer Science from the Indian Institute of Science, Bangalore in 1984 and 1989, respectively. He has held postdoctoral research fellowship and faculty positions at various Canadian universities and visiting faculty positions at US universities. His current research interests are in the areas of high performance computing, compilation techniques, and computer architecture. In these areas, he has more than 100 research publications in international journals and refereed conference proceedings. He is a senior member of the IEEE and a member of ACM and the IEEE Computer Society.

**Dr. Parameswaran Ajith**

**Title of Talk:** LIGO: The new frontier of astrophysics



**Dr. Parameswaran Ajith** obtained his PhD from the Max Planck Institute for Gravitational Physics. He's currently a faculty member at the International Centre for Theoretical Sciences (ICTS), Tata Institute of Fundamental Research, Bangalore. His research spans various aspects of gravitational wave physics and astronomy. Ajith is a Ramanujan Fellow and is the head of Max Planck Partner Group on Astrophysical Relativity and Gravitational Wave Astronomy at ICTS. He is the recipient of 2016 Special Breakthrough Prize in Fundamental Physics and Gruber Cosmology Prize.

## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Shri. Ashwini Kumar**

**Title of Talk:** Trends in Research Computing on Public Cloud



**Shri. Ashwini Kumar** leads the Education Solutions Vertical at Microsoft India. He also leads the research computing initiative for the country. Over the last 13 years at Microsoft, Ashwini has helped multiple governments and large enterprises across the globe to conceptualize as well as realize benefits out of Information technology initiatives. His focus area is Cloud projects of significant scale, volume and complexity. He has delivered talks on security and PKI at global corporate forums. He was a part of the team which recently got the President's award for Swayam

**Ms. Supriya N Pal**



**Ms. Supriya N. Pal** holds a Master's degree in Computer Science from University of Mumbai. She had worked in NCST and presently is Associate Director and Head of Big Data Analytics Group & ACTS Training Division at CDAC Bangalore. She has been Technical Lead in applied R & D projects at National and International level in E-Governance and E-Learning domain. Her research interests are in Big Data Technologies, Database Systems, and Software Engineering.



## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Dr. Debasis Dash**

**Title of Talk:** Advance search strategies in proteogenomics: Looking beyond the horizon



**Dr. Debasis Dash** completed his M.Sc. and Ph.D. in Biophysical Chemistry from the University of Delhi and joined CSIR-IGIB as a Scientist. He has made significant contributions towards development of in silico tools for large scale comparative genomics studies and some of these tools developed by him are being extensively used by academic institutes. In collaboration with international team he developed data interoperability object model namely PaGE-OM that integrates phenotype-genotype data. Applying open source and his own developed proteomics tools he has identified several novel protein coding genes in prokaryotes and proteoforms in eukaryotes using proteo-genomics approach. He has more than 50 international publications, 2 patents and several copyrights to his credit. He has been awarded the CSIR Young Scientist Award (2004) and DBT Bioscience award for career development (2014).

**Prof. Kannan Moudgalya**

**Title of Talk:** Virtual Laboratories for accelerating e-Learning



**Prof. Kannan** is a professor in chemical engineering department at IIT Bombay. He did his Ph.D in Chemical Engineering, Rice University in 1985. He has many international publications to his credit. Prof. Kannan is now devoting his time on spreading education on a massive scale, without quality dilution. He has been focusing on spoken tutorials, open source software systems, virtual labs and the low cost tablet, Aakash.

## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Dr. Ananda Mohan**

**Title of Talk:** Secure Multiparty Computation



**Dr. Ananda Mohan** has obtained his Ph.D. from Indian Institute of Science, Bangalore. He was with ITI limited since 1973 till 2003 in R&D. Later he was with Electronics corporation (ECIL) of India Limited as Executive director till 2008. After a one year stay at NTRO, at Bangalore, he was back with ECIL till 2014. Since April 2014, he is with C-DAC as Technology Advisor. He is a specialist in Analog filters and Cryptography.

**Prof. Kumaradhas**

**Title of Talk:** Molecular Dynamics simulation of Ache and p300 inhibitors



**Prof. Kumaradhas**, Periyar obtained his Ph.D. from Bangalore University, Bangalore. Currently he is a professor at Periyar University, Salem. He is a specialist in Crystal structure prediction of high energetic molecules, X-ray Crystal structure determination of novel small molecules, and Computational design of molecular Nano-wires, switches and diodes. He is also specialist in computational design of new drug molecules to inhibit HIV and HCV using molecular docking, screening, QM/MM, MD simulations, structure and charge density analysis of drug molecules of TB, Alzheimer and Cancer diseases. He has also published many research papers in these areas. He obtained International Union of Crystallography (IUCR), Young Scientist award for the year, 1995 & 1998.

## **Distinguished Speakers of National Symposium on NSM Grid over NKN**

**Shri. Santhosh J**  
**Title of Talk:** Cloud Security



**Shri. Santhosh J** is working as Senior Technical Officer at CDAC Bangalore. He has his BE from RV College of Engg, Bangalore and MS from Manipal University. He has worked in GARUDA Grid Computing Initiative from the inception. He has also worked in various other projects like Setting up of Indian Grid Certification Authority (IGCA), Cloud Security etc. Currently he is working on Cloud Security project. He has published and presented papers in various national and international conference.