ICoMeC(International Conference on MetaComputing) 2010

The First 'International Conference on Metacomputing' [IcoMec10) organized by Lakshya held at National Institute of Oceanography, Goa during December 16 - 17, 2010 primarily aimed at integrating the domains of computing applications in research, industry, business and management, for the benefit of academia and industry, with special emphasis on Affordable High Performance Computing in India. This conference plays a vital role in keeping the HPC user community abreast with the latest technology/trends thus bridging the gap between high-performance computing (HPC) use and its potential, bringing the beneficial capabilities of HPC to application users/researchers for better research, education, innovation. This provided a great platform to the HPC users community to exchange/share their application problems/methods with the industry.

The emerging field of MetaComputing is focussed on the methodological/technological aspects of the development of large Computer infrastructure such as High Performance Computing, Grid Computing, Cloud and Distributed Computing, Internet and Intranet and its applications for special purposes of governance, industry and research.

The inaugural function was graced by Shri V K Jha, IAS, Secretary, Science and Technology, Government of Goa, Prof L M Patnaik, Vice Chancellor, Defence Institute of Advanced Technology, Pune – the conference chair and Pradosh K Roy, Chief Geophysicist, ONGC – the Program Chair, Mr Manguirish Pai Raikar, Vice President, Goa Chamber of Commerce and Industries, Goa and Dr Albert Gouveia, Head, ITG, NIO, Goa – the Local Coordination Chair. Prof L M Patnaik highlighted the role of High Performance Computing in diverse applications such as scientific computing, entertainment industry and financial & banking applications. He mentioned the role of mobile computing via wireless communication, cloud computing as an affordable computing paradigm to address diverse application domains and significance of soft computing paradigm to perform human like operations. A special of the conference was a panel discussion on Affordable HPC chaired by Prof L M Patnaik – the Conference Chair who aptly concluded that affordability should not only address the issue of economy of price but also should imply easy usage through excellent man-machine interface, programming & debugging support so that usage of HPC will be more widespread.

Topics deliberated at the conference included Complex Systems, Distributed Computing, Parallel Computing, High Performance Computing, Grid/Cloud Computing, Computer Networks and Security etc and its applications including researches being carried out on some topics at NASA and other research institutions/labs under Govt of India.

A wide spectrum of emerging HPC architectures e.g. Green Supercomputing, Exascale Computing, Heterogeneous Computing etc. and applications in Modeling and Simulations related to Computational Fluid Dynamics, Molecular Biology, Computational Physics, Computational Chemistry etc. were presented by Expert Speakers viz. Pradeep K Sinha [CDAC, Pune], Dilip Angom [PRL,Ahmedabad], Devendra Sharma[Plasma Research, Gandhinagar], Sudip Roy [NCL, Pune], Swagata Bhwomik [IIT, Kanpur], P N Vinaychandran [IISc, Bangalore], H A Nagarajaram [CDFD, Hyderabad], N Seetaramakrishna [CRL, Pune].

Industry participants like Rajeeb Hazra, Sanjay Goil [Intel Corp. Santa Clara, CA], Vibhav Teckchnand[AMD,Mumbai]; Rehan Zaidi, [NetApp, New Delhi]; Benny Koren [Mellanox Technology,Israel]; Manish Bali[NVIDIA, Bangalore]; Sandeep Lodha [Netweb Technologies, Bangalore]; Kapil Awasthi [CheckPoint Technologies]; Pankaj Navani [Dell HPC Solutions, Bangalore]; Rajneesh shinde [Altair]; Pankaj Sharma[LeadInvent, New Delhi] Jigar Halani [Wipro, Bangalore]; Locuz; Giri Prabhakar [IBM, Bangalore]; Venkatesh Iyer, and Sudhakar Yerneni [CRAY India Ltd.] to name a few, demonstrated the trends in products/services and technologies to prospective HPC segment/users attending from research/ academic/industrial organizations across India.

The Best Paper Award at IcoMeC'10 was presented to Durga Toshniwal, Indian Institute of Technology, Roorkee.

It is proposed to hold the IcoMeC'11 on December 15-16, 2011 in Goa with emphasis on larger participation of HPC user community by widening the scope of the conference . Prof L M Patnaik and Pradosh K Roy , Oil and Natural Gas Corporation Ltd. will continue to be the Conference chair and Program chair. Dr Albert Gouveia, National Institute of Oceanography will be the Program Co-Chair for IcoMeC'11.

In the changing global economic scenario, India is slated to play a leading role in 21st Century and the objective of the conference, which is unique of its kind in India, is to consolidate academic, industrial and corporate efforts towards the goal.