BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY)

COLLEGE OF ENGINNERING, PUNE

Report on the Inauguration of the High-Performance Computing (HPC) Laboratory and Faculty Orientation Program at BV(DU)COE, Pune

Event Overview:

On 12th March 2025, the Bharati Vidyapeeth (Deemed to be University) College of Engineering, Pune BV(DU)COE, successfully hosted the inauguration of its newly established High-Performance Computing (HPC) Laboratory and a one-day faculty orientation program. The event was held under the National Supercomputing Mission (NSM) initiative, a project launched by the Government of India, in collaboration with the Centre for Development of Advanced Computing (C-DAC) Pune and Walchand College of Engineering (WCE), Sangli.

Inauguration Ceremony:

The event commenced with the formal inauguration of the HPC lab by Mr. Ashish Kuvelkar, Senior Director of HPC at C-DAC, Pune. The ceremony was graced by distinguished guests, including:

- Prof. Dr. R.S. Prasad, Principal, BV(DU)COE
- Mrs. Shweta Das, Joint Director, HPC, C-DAC Pune
- Dr. Medha Shah, Head, CSE Department, WCE, Sangli
- Mr. Mandar Guray, Consultant Mentor, Pune
- Mr. S. S. Patil, Associate Professor, WCE, Sangli
- Ms. A. S. Pawar, Assistant Professor, WCE, Sangli
- Dr. Sachin Chavan, Vice Principal (Administration), BV(DU)COE
- Dr. Sunita Jadhav, Vice Principal (Accreditation), BV(DU)COE
- Dr. Sandeep Vanjale, Head, Computer Engineering Department, BV(DU)COE
- Dr. Prakash Devale, Professor, IT Department, BV(DU)COE and Program Coordinator

The inauguration marked a significant milestone for BV(DU)COE in its commitment to advancing academic and research capabilities by providing access to cutting-edge HPC resources.

Faculty Orientation Program:

Following the inauguration, the faculty orientation program was conducted with the objective of enhancing faculty and researchers' awareness of High-Performance Computing (HPC) and its integration into education and research.

Dr. Rajesh Prasad, addressed the participants, highlighting the university's remarkable achievements, rankings, and accolades. He emphasized that the establishment of the HPC lab would be instrumental in enabling complex simulations, data analysis, and research requiring substantial computational power. Dr. Prasad underscored the importance of HPC in driving advancements in fields such as artificial intelligence, scientific research, and engineering.

Mr. Ashish Kuvelkar, in his speech, emphasized the transformative role of HPC as the backbone of advanced research. He mentioned that HPC facilitates the rapid processing of vast datasets and complex simulations, which are essential for driving innovation across a variety of disciplines, from artificial intelligence to scientific breakthroughs. Mr. Kuvelkar also elaborated on the evolution of supercomputers, their architectures, and operational mechanisms, while sharing information about the opportunities offered by the NSM to support students and researchers.

Key Sessions of the Orientation Program:

The orientation program featured a series of sessions led by experts from C-DAC, Pune and WCE, Sangli:

- 1. **Mrs. Shweta Das (C-DAC, Pune):** Provided an overview of HPC capabilities and its critical role in various sectors, including academia, industry, and government.
- 2. **Dr. Medha Shah (WCE, Sangli) and Ms. A. S. Pawar (WCE, Sangli):** Discussed the integration of HPC into academic curricula and its potential impact on enhancing the learning experience for students.
- 3. **Mr. Mandar Gurav (Consultant Mentor, Pune):** Focused on the applications of HPC in research, particularly in data processing and computational modelling.
- 4. **Mr. S. S. Patil:** Presented real-world examples of HPC's influence across various academic disciplines and shared insights on future trends and opportunities in the field.
- 5. **Dr. D.B. Kulkarni** (**Convener-WCE**, **Sangli**): Answered the queries of all the participants and explained about the research opportunities in HPC and AI domain. He also explained the role of WCE, Sangli as NSM nodal center.
- 6. **Collaborative Opportunities:** The sessions also highlighted the collaborative opportunities, resource access, and support mechanisms provided by NSM for students and researchers to engage in innovative HPC projects.

Dr.S.B.Vanjale, Head of Computer Engg Dept, BV(DU)COE, Pune was the convener of the event from host institute. The event was coordinated by Mrs. Devyanee Jagadale, and the formal vote of thanks was proposed by Dr. Prakash Devale concluded the program by expressing gratitude to all participants and contributors.

The inauguration of the HPC Laboratory and the successful conduct of the faculty orientation program underscored BV(DU)COE's commitment to fostering academic excellence and research innovation. The establishment of the HPC lab is a pivotal step in enabling students and faculty to engage in cutting-edge research, ultimately contributing to the advancement of knowledge and technology. The collaboration with C-DAC Pune, WCE Sangli, and the support of the National Supercomputing Mission ensures that this initiative will provide significant benefits to academia and research for years to come.

This initiative not only aligns with the Government of India's vision of promoting supercomputing capabilities through its **National Supercomputing Mission** but also plays a key role in transforming the educational landscape by integrating HPC into academic research and curriculum.



Mr. Ashish Kuvelkar addressing the participants



Faculty Orientation Program Participants



Mr. Ashish Kuvelkar inaugurating the HPC lab with Dr Rajesh Prasad and Dr Medha Shah



Guests interacting with researchers in the HPC lab