Indian Institute of Technology Indore

presents

Workshop on Sustainable Agriculture Using Bharat Agri-Grid Ecosystem

June 28 to June 29, 2022

under the scheme
National Supercomputing Mission (NSM)
Govt. of India from
Supercomputer Education and Research Centre (SERC)

cO-hosted by:

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<th>IIT Indore</th>
<th>ICAR-IISR Indore</th>
<th>Mahindra University Hyderabad</th>
<th>IIT Jodhpur</th>
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<td>C-DAC Pune</td>
<td>IISc Bangalore</td>
<td>CSIR-CEERI Pilani</td>
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It gives us immense pleasure to inform you that the Online “Workshop on Sustainable Agriculture Using Bharat Agri-Grid Ecosystem” under the National Supercomputing Mission (NSM) from Supercomputer Education and Research Centre (SERC) will be hosted by IIT Indore, IISR Indore, and Mahindra University Hyderabad in collaboration with IIT Jodhpur, C-DAC Pune, IISC Bangalore, CEERI-Pilani, NCL Pune from 28 June 2022 to 29 June 2022 in hybrid mode.

This workshop aims to bring together the industry/start-up ecosystem of the country to harness the power and planning of Agriculture grid infrastructure applications over the NSM supercomputers. Agriculture plays an important role in GDP and accounts for providing employment to 43 percent of the total Indian population according to the World Bank census, 2017. NSM is a project of national importance that can help boost the agriculture sector enabling the industry/start-up ecosystem. Therefore, it is essential to impart HPC training to the application domain researchers. Objectives of the Workshop

- To come up with the Bharat AgriGrid which is going to be the agriculture grid of the country.
- To identify the problems of the breeders and to design the solutions corresponding to the problems.
- To come up with sustainable agriculture solutions.
- To enable integration of developed Agriculture Grid on NSM grid with Ashoka Grid along with the novel agriculture solutions.
- To create integrated HPC commercial tools with available NSM Supercomputing facilities so that processing and analysis of data can be done in less time.
- To create a cloud based centralized repository of genome data termed as Bharat AgriGrid consists of both raw and processed genome sequence data.
- Characterization of new genes of plant species which are disease resistance, drought tolerant.
- Service framework for the entire agriculture community.

No Registration Fee
Fill the Registration details: https://docs.google.com/forms/d/e/1FAIpQLSdgNSeLceR5_8BDn7SiLthb8md4wqDpIzujGeCKAC14YHrSbQ/viewform?usp=sf_link

Bar code:

The last date of Registration: June 27, 2022 till 11:59 PM
The meeting link will be intimated on registered e-mail: June 27, 2022
Contact: Rajesh Dwivedi, SRF, Computer Science and Engineering, IIT Indore
Mail your queries at: nsm.agrigrid@gmail.com
Organizers:

Dr. Aruna Tiwari  
IIT Indore

Dr. Milind Ratnaparkhe  
ICAR-IISR Indore

Dr. Neha Bharill  
Mahindra University  
Hyderabad

Dr. Om Prakash Patel  
Mahindra University  
Hyderabad

Mr. Amit Saxena  
C-DAC Pune

Dr. Sanjay Singh  
CSIR-CEERI Pilani

Dr. M. Karthikeyan  
CSIR-National Chemical Laboratory, Pune

Prof. Mitali Mukherjee  
IIT Jodhpur

Dr. Ayan Sadhukhan  
IIT Jodhpur
### Panel Discussion
Title: Bharat AgriGrid: Agriculture Applications Over NSM Grid

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<th>Picture</th>
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| ![IAS Abhishek Singh](image-url) | IAS Abhishek Singh  
CEO Digital India |
| ![Smt. Sunita Verma](image-url) | Smt. Sunita Verma  
Scientist G,  
Group Coordinator (R&D in Electronics & IT)  
Ministry of Electronics & Information Technology |
| ![Prof. Santanu Chaudhury](image-url) | Prof. Santanu Chaudhury, Director, IIT Jodhpur |
| ![Prof. Rajat Moona](image-url) | Prof. Rajat Moona  
Director, IIT Bhilai |
| ![Col. A K Nath (Retd.)](image-url) | Col. A K Nath (Retd.)  
Executive Director (Corporate Strategy and C-DAC Pune) |
| ![Dr. Hemant Darbari](image-url) | Dr. Hemant Darbari  
Mission Director NSM |
| ![Dr. Anil Rai](image-url) | Dr. Anil Rai  
Assistant Director General (ICT), ICAR, New Delhi |
| ![Dr. Nita Khandekar](image-url) | Dr. Nita Khandekar  
Director, ICAR- Indian Institute of Soybean Research Indore |
| Prof. Suhas Joshi  
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<th>Director, IIT Indore</th>
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| Prof. Yajulu Medury  
| Vice Chancellor, Mahindra University Hyderabad |
| Dr. C R Mehta  
| Director, ICAR - Central Institute of Agricultural Engineering, Bhopal |
| Dr. Narendra S. Chaudhari  
| Professor, IIT Indore |
| Dr. Mark Post  
| Lecturer (Assistant Professor) in Robotics and Autonomous Systems, University of York, UK |
| Dr. Suresh Motwani  
| General Manager, Solidaridad Network |
### Keynote Speakers

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| **Dr. Anil Rai**  
Assistant Director General (ICT), ICAR, New Delhi | Title of the talk: |
| **Dr. Narendra Singh Rathore**,  
Vice-Chancellor, Maharana Pratap University of Agriculture and Technology, Udaipur | Title of the talk: |
| **Prof. Hiroyuki Koyama**  
Gifu University | Title of the talk: **Data-driven plant science and green biotechnology for bioeconomy** |
| **Dr. Rajesh Perianayagam**  
CEO Karyosoft company, USA | Title of the talk: **Agrigenomics: Past, Present and Future** |
| **Mr. Sanjay Wandhekar**  
HOD HPC, C-DAC Pune | Title of the talk: **National Supercomputing Mission: Towards Building Indigenous Supercomputing Ecosystem** |
| **Mr. Sandeep Malviya**  
Joint Director, HPC-MBA Group C-DAC, Pune  
On behalf of Dr. Rajendra Joshi | Title of the talk: **Designing the solution for exascale genome data analysis** |
| **Mr. Ashish P Kuvelkar**  
Senior Director, C-DAC Pune | Title of the talk: **Leveraging HPC for Agriculture** |