



OP JINDAL UNIVERSITY, RAIGARH

SCHOOL OF SCIENCE

2nd Virtual International Conference on Innovation and Research in Science & Technology for Sustainable Development (25-26 May 2023)

A REPORT

School of Science, OP Jindal University organized 2nd Virtual International Conference on Innovation and Research in Science & Technology for Sustainable Development during 25-26 May 2023. The conference themed around four tracks *viz* Applied Science, Engineering & Technology, Disaster management and other related theme. The objectives of the conference were:

- To provide a forum to the science and technology faculty, researchers and teacher educators to share their research work, innovative practices and emerging trends in science.
- To make recommendations for future courses of action for the promotion of quality research and innovation in the field of science and technology in general and applied sciences in particular.
- To document the best innovations and researches in the field of science and technology to disseminate the same

Distinguished speakers from academia and industries delivered keynote speeches on Applied Sciences, Recent Technologies, Disaster Management and other fields related to Management and Humanities, etc. The following eminent speakers from reputed government and non-government organizations from India and abroad shared their insights and valuable experience during the two days of the conference:



Inaugural Session:

- **Prof. Vinod Kumar Sharma**, Senior Professor-DM, Indian Institute of Public Administration and Vice-Chairman, Sikkim State Disaster Management Authority, Govt. of Sikkim (Chief Guest)
- **Dr. Dharmendra Singh**, Head, Dept. of Computer Science & Engineering and Professor (Electronics & Comm. Engg.), IIT, Roorkee (Guest of Honour)
- **Mr. Garry de la Pomerai**, DRR consultant to UNISDR, UNESCO, UNCRD, Kathmandu (Guest of Honour)

Keynote Session I:

- **Dr Ashok Kumar**, Associate Professor, Department of Applied Sciences, National Institute of Technical Teachers Training and Research, Chandigarh



- **Dr Prashant Mundeja**, Professor, MATS University, School of Sciences, Raipur
- **Dr Goutam Kumar Patra**, Professor and Head Department of Chemistry, Former Dean School of Physical Sciences, Guru Ghasidas Central University, Bilaspur
- **Dr Kiran Billore**, Professor & Head, Dept. of Bio-technology, Govt. Model Autonomous College, Indore (Session Chairperson)

Keynote Session II:

- **Dr Debashis De**, Professor, Department of Computer Science and Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal
- **Dr O. P. Sikhwal**, Professor, Dept. of Mathematics, Poornima Institute of Engineering & Technology, Jaipur
- **Dr Sanjeev Rana**, Deputy Manager, QA/R&D, Jindal Steel & Power, Raigarh, Chhattisgarh
- **Dr Anuj Jain**, Professor (HAG), Dept. of Applied Mechanics, MNNITA, Prayagraj (Session Chairperson)

Keynote Session III:

- **Garry de la Pomerai**, DRR consultant to UNISDR, UNESCO, UNCRD, Kathmandu
- **Dr S. K. Sinha**, Associate Professor & Head, Dept. of Physics, BIT Mesra, Patna Campus
- **Dr Sushant Singh**, Associate Professor, Amity Institute of Bio-technology, Raipur
- **Er Awdhesh Kumar**, Assistant Professor, Invertis University, Bareilly, UP
- **Prof. P. K. Bajpai**, Dean- Physical Sciences, Dept. of Pure & Applied Physics, GGU, Bilaspur (Session Chairperson)

Keynote Session IV:

- **Dr Ranjan Upadhyaya**, F-Senior Professor, Management Learning & Innovation, iNurture Education Solutions Pvt. Ltd., Bangalore, Karnataka
- **Prof Richa Arora**, Director, School of Humanities & Social Sciences, Manipal University, Jaipur
- **Dr Mehzbeen Sadriwala**, Assistant Professor, Department of English, Imam Abdulrehman bin Faisal University, Saudi Arabia
- **Dr Swayam Prabha Satpathy**, Associate Prof in the Dept of Humanities, Siksha O Anusandhan University, Bhubaneshwar
- **Dr Rana Singh**, Director- CIMP, Patna (Session Chairperson)

Technical Session Chairpersons:

- **Prof. Reenu Mishra**, Asst. Prof., Govt. KG College Raigarh, Chhattisgarh (Session 1)
- **Dr Analkant Jha**, Senior Research Scientist (Nanotechnology), University Department of Chemistry, TM Bhagalpur University, Bhagalpur (Session 2)
- **Dr Anurag Gautam**, Associate Professor, Dept. of Freshman Engineering, Geetanjali College of Engineering, Bangalore (Session 3)



- **Dr S. L. Ahirwar**, Professor, Dept. of Mechanical Engg., Oriental Institute of Science & Technology, Bhopal (MP) (Session 4)
- **Dr Ramesh Kumar Sangwan**, Scientist-B, ICMR-NIIRNCD, Jodhpur (Rajasthan) (Session 5)
- **Dr Dhanesh Singh**, Professor, Dept. of Chemistry, KGASC, Raigarh, CG (Session 6)
- **Dr Archi Sharma**, Asst. Prof., Dept. of Chemistry, Bharat Institutions, Hyderabad (Session 7)
- **Dr Tusar Parida**, Department of Mathematics, Silicon Institute of Technology, Bhubaneswar (Session 8)
- **Dr Kirti Tiwari**, Professor & Head., Dept. of Postgraduate and Research Studies in English, Govt. JYC College, Raipur (Session 9)
- **Dr Avadhesh Sharma**, Associate Professor, Invertis University, Bareilly (Session 10)

Valedictory:

- **Prof. G. D. Sharma**, Vice Chancellor, University of Science & Technology, Meghalaya (USTM), Meghalaya (Chief Guest)
- **Dr Arjun Dave**, Director, Vedant Knowledge Systems Pvt. Ltd., Rajkot, Gujrat (Guest of Honour)

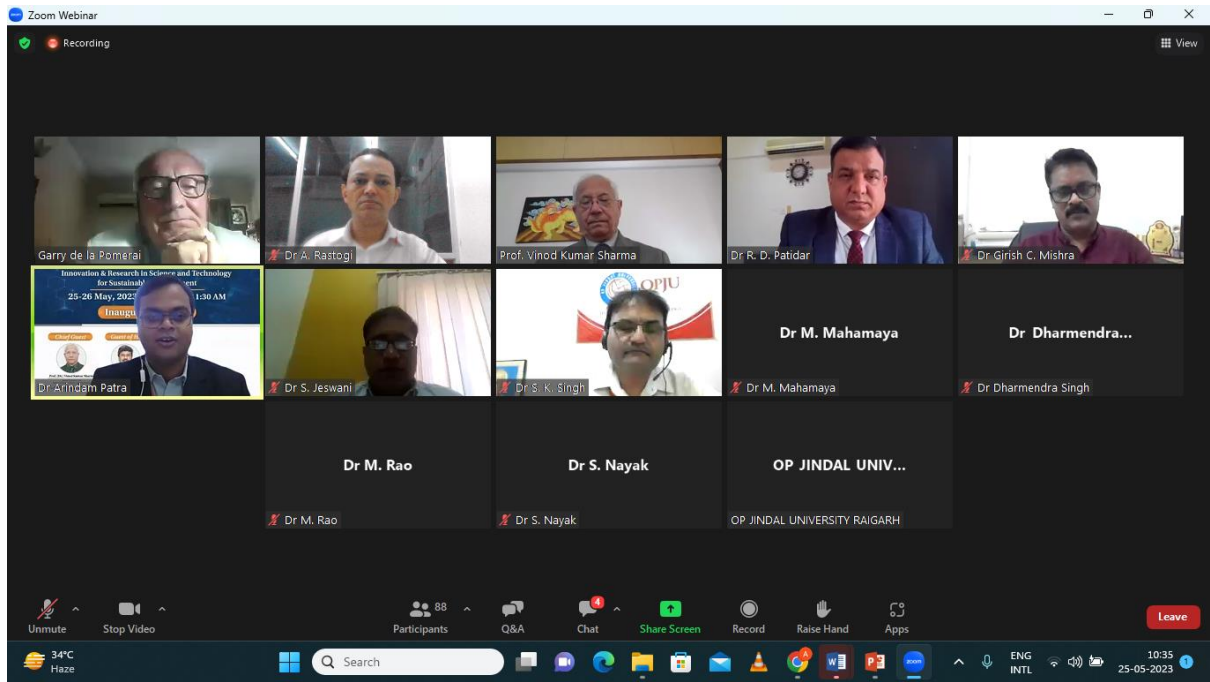
Best Paper Award:

A total of 109 abstracts were received from PAN India out of which 102 abstracts were selected and 87 of which were presented during the 4 technical sessions. 4 best papers were awarded on the four key tracks of the conference; the details are listed as below:






| Session | Paper ID | Title of Paper | Presenter | Institute |
|---------|--------------------|---|--|---|
| 1 | ICIRSTSD-23/AS-078 | Pipeline Transportation of high Concentration Fly Ash Water Slurry using Sodium Dodecylsulphate | Umakanta Behera, | Government College of Engineering, Keonjhar, Odisha |
| 4 | ICIRSTSD-23/ET-003 | A Review of Machine Learning Approaches for Detection and Classification of Leukemia Disease | Rohini Raina | Shri Mata Vaishno Devi University |
| 7 | ICIRSTSD-23/AS-065 | Microwave Assisted Synthesis of Quantum Dots using Phyto-derived organic materials | Nidhi Nirmalkar | Department of Chemistry, GGU Bilaspur, Chhattisgarh |
| 8 | ICIRSTSD-23/AS-008 | Numerical analysis of a casson nanofluid past a stretching cylinder with chemical reaction and irregular heat sources of brownian motion and thermophoresis on convective heat and mass transfer flow | Dr. G Kathyayani, P.Venkata Subrahmanyam, G.Venkata Ramudu | Department of Applied Mathematics, Yogi Vemana University, Kadapa, Andhra Pradesh |



Screenshots of Conference:




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Recording



Dr. Dharmendra Singh

Participants (103)

Panelists (14) Attendees (89)

Q Search

- AK Ajay Kumar
- AP Amber Pandey
- AV ANJALI VERMA
- AS Annu Sharma
- AD Anshuman Dwivedi
- AS Anusha Sahu
- AG Astha Gupta
- BK Barun Kumar Sahu
- BD Bhawana Deshmukh
- BK BRIJESH KUMAR SONGOTRA
- CP Chetna Patel
- DS Debasmita Samal
- DS Deepika Singh Rajput
- DM Devashree Mandal

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Participants 103 Q&A Chat Share Screen Record Raise Hand Apps





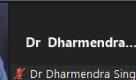

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Garry de la Pomerai

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Zoom Webinar

Dr. A. Rastogi | Garry de la Pomerai | Dr. Girish C. Mishra | Dr. Arindam Patra | Dr. Dharmendra Singh | Dr. R. D. Patidar

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Prof. Vinod Kumar Sharma

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Zoom Webinar

Dr. A. Rastogi | Prof. Vinod Kumar Sharma | Dr. Arindam Patra | Dr. R. D. Patidar | Dr. S. K. Singh | Dr. Awdhesh K.

Dr. Girish C. Mishra

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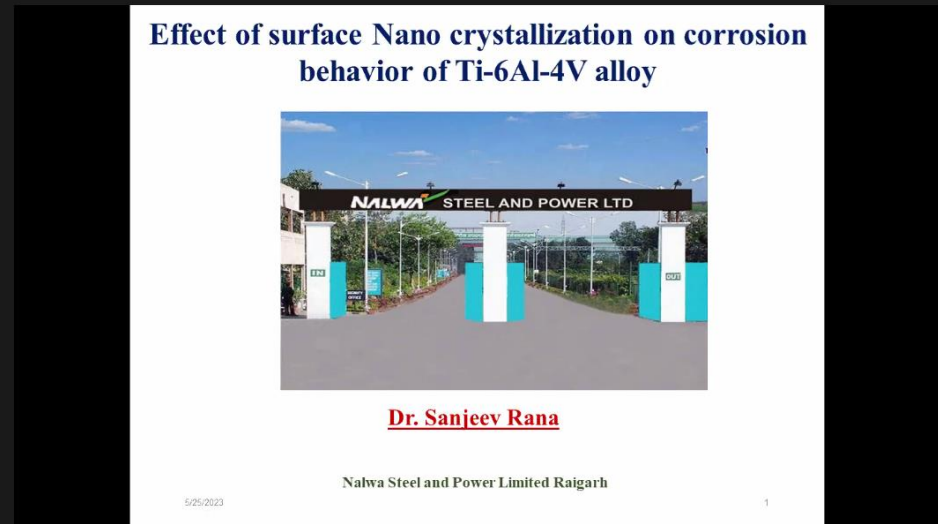
Drone computing for sustainable development

DEBASHIS DE
DEPT. COMPUTER SCIENCE AND ENGG,
MAKAUT, WEST BENGAL
DR.DEBASHIS.DE@IEEE.ORG


5/25/2023 DEBASHIS DE DRONE COMPUTING 1

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Zoom Webinar



Effect of surface Nano crystallization on corrosion behavior of Ti-6Al-4V alloy



Dr. Sanjeev Rana

Nalwa Steel and Power Limited Raigarh

5/25/2023 1

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AND MANAGEMENT

OP Solid Solutions Council
**INSTITUTION'S
INNOVATION
COUNCIL**
(Ministry of IITD, Government of India)

JINDAL
STEEL & POWER

75
Azadi Ka
Amrit Mahotsav

G20
INDIA
2023

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Recording...

Operating System:

Many practical problems can be solved with the help of graph data structures in the field of an operating system such as job scheduling, resource allocation problems.

For example, graph coloring concept can be applied in job scheduling problems of CPU, jobs are assumed as nodes of the graph and edge between two jobs that cannot be executed simultaneously and there will be one to one relationship between the feasible scheduling of graphs.

Dr. O. P. Sikhwal

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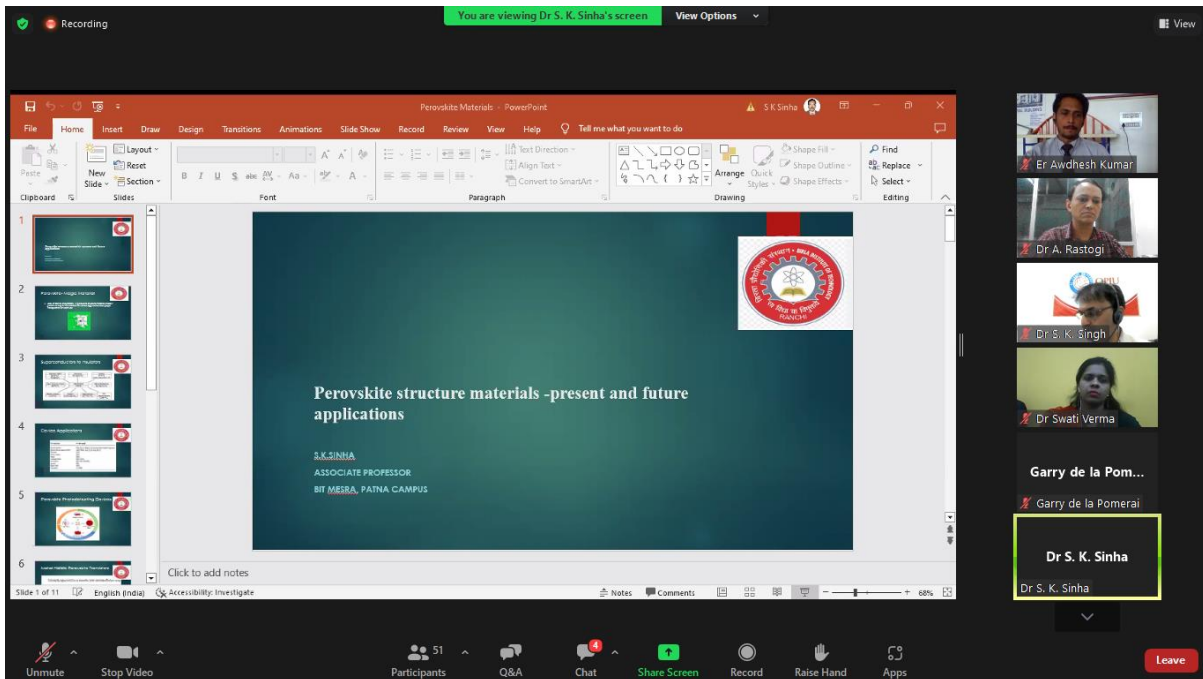
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Dr. R. S. Singh | Dr. Sanjeev Rana | Dr. Girish C. Misra | OP JINDAL UNI... | Dr S. K. Singh | Dr. Anuj Jain

Recording...

Dr. Anuj Jain

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SCIENCE & TECHNOLOGY INNOVATIONS FOR DRR

*Special Coverage to SECOND WAVE COVID19
 *Extremely Severe Cyclonic Storm TAUKTAE



AWDHESH KUMAR
 ASSISTANT PROFESSOR, DEPARTMENT OF CIVIL ENGINEERING,
 INVERTIS UNIVERSITY, BAREILLY (UTTAR PRADESH)

Dr S. K. Singh

Dr A. Rastogi

Dr Girish C. Mishra

Garry de la Pomerai








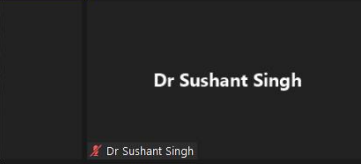


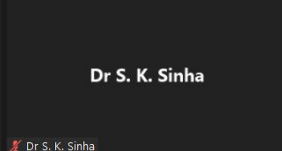
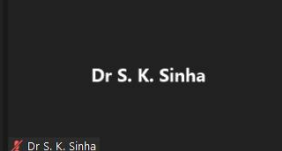
Dr Awdhesh Kumar

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|---|---|--|---|
|  Dr Awdhesh Kumar |  Dr A. Rastogi |  Prof. P. K. Bajpai |  Dr S. K. Singh |
|  Aastha Gupta |  Dr Girish C. Mishra |  Garry de la Pomerai |  Dr Sushant Singh |
|  Vishakha Singh |  OP JINDAL UNIVERSITY RAIGARH |  Dr S. K. Sinha |  Dr S. K. Sinha |

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Dr. Jaya Prakash Rath | Dr. A. Rastogi | Dr. S. K. Singh | Dr. Arindam Patra | Dr. Mehzeen Sadriwala

Dr. Rana Singh | Dr. Swayam Prabha Satpathy | Dr. S. Nayak | Dr. Girish C. Mishra | Prof. Richa Arora

Aastha Gupta | OP JINDAL UNIV... | Vishakha Singh | Dr. Ranjan Upad...
Aastha Gupta | OP JINDAL UNIVERSITY RAIGARH | Vishakha Singh | Dr. Ranjan Upadhyaya

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Dr. A. Rastogi | Dr. Mehzeen S... | Prof. Richa Arora | Dr. S. K. Singh | Dr. S. Nayak

Dr. Rana Singh

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Dr. Ankur Rastogi | Dr. Arindam Patra | Dr. Sanjay Singh | Dr. Girish C. Mishra | Dr. Arjun Dave | Saumya Singh






Prof. G. D. Sharma

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|---|--|---|---|
|  Prof. G. D. Sharma |  Dr. Ankur Rastogi |  Dr. Arindam Patra |  Dr. Sanjay Singh |
|  Dr. Girish C. Mishra | Saumya Singh | Dr. Arjun Dave | Dr. Taniya sengu... |
| Dr. R. S. Singh | Dr. R. S. Singh | OP JINDAL UNIV... | OP JINDAL UNIVERSITY RAIGARH |

Participants: 40 | Q&A | Chat | Share Screen | Record | Raise Hand | Apps

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**VIRTUAL
INTERNATIONAL CONFERENCE**
On
**Innovation & Research in Science and Technology
for Sustainable Development**
25-26 May, 2023 | 10:30 AM to 11:30 AM
Inaugural Function

Chief Guest



Prof. (Dr.) Vinod Kumar Sharma
*Senior Professor-DAT,
Indian Institute of Public Administration
and Vice-Chairman, Siksha Shiksha
Gyan Management Authority, Govt. of Sikkim*

Guest of Honour



Dr. Dharmendra Singh
*Head Dept. of Computer
Science and Engineering,
Professor in Department of Electronics and
Communication Engineering,
Indian Institutes of Technology, Bombay*



Garry de la Pomerai
*DMR consultant to UNISAL,
UNESCO, UNESCO Nepal*

Organizing Committee



Ms. Shalu Jindal
*Patron-ICHSISD23 &
Chairperson,
OP Jindal University, Raigarh, CG*



Dr. R. D. Patidar
*Chairman ICISSTSD23 &
Vice-Chancellor,
OP Jindal University, Raigarh, CG*



Mr. Anurag Vijaywargiya
*Registrar,
OP Jindal University, Raigarh, CG*



Dr. Girish C. Mishra
*Associate Dean & Head,
School of Science, OPJU*



Dr. S. K. Singh
Convener



Dr. Ankur Rastogi
Convener

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2nd VIRTUAL

INTERNATIONAL CONFERENCE

On

Innovation & Research in Science and Technology
for Sustainable Development

26 May, 2023 | 04:00 PM to 05:00 PM

Valedictory Function

Chief Guest



Prof. G. D. Sharma
Vice Chancellor, University of Science & Technology Meghalaya (USTM), Meghalaya

Guest of Honour



Prof. (Dr) G. A. Ghanshyam
Officer on Special Duty and Professor of English, Directorate of Higher Education, Raipur (CG)



Dr. Arjun Dave
Director, Vedant Knowledge Systems Pvt. Ltd., Rajkot, Gujarat

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Patron-ICRISTSD'23 & Chancellor, OP Jindal University, Raigarh, CG



Dr. R. D. Patidar
Chairman-ICRISTSD'23 & Vice-Chancellor, OP Jindal University, Raigarh, CG



Mr. Anurag Vijaywargiya
Registrar, OP Jindal University, Raigarh, CG



Dr. Girish C. Mishra
Associate Dean & Head, School of Science, OPJU



Dr. S. K. Singh
Convener



Dr. Ankur Rastogi
Convener

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