

INFORMATION BROCHURE



11th International Conference

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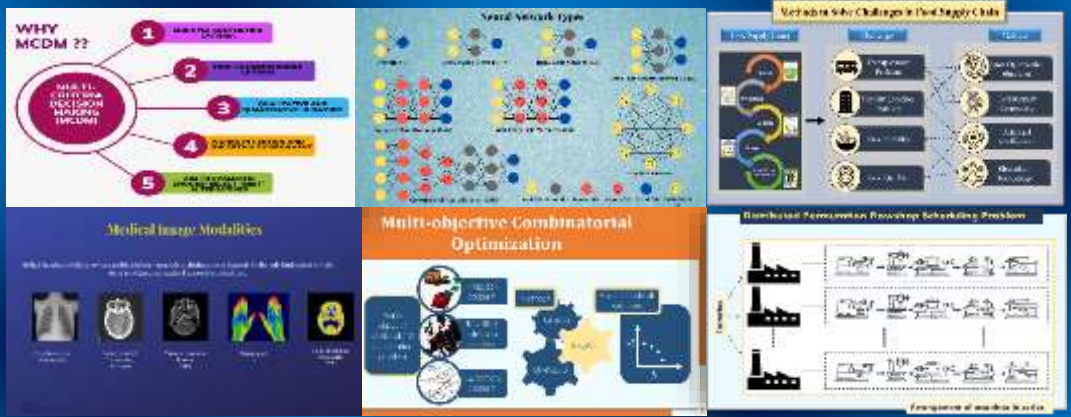
**Soft Computing for Problem Solving
Moving Towards Society 5.0**

August 11-13, 2023

IIT ROORKEE



SocProS 2023



INVITATION

The organizing committee is delighted to invite you to participate in the International Conference on Soft Computing for problem-solving (SocProS 2023) to be held in physical mode organized by the Department of Applied Mathematics and Scientific Computing (D-AMSC), IIT Roorkee, India on August 11-13, 2023.

SocProS-2023 will bring together leading Mathematicians, Scientists, Engineers, Research Scholars and Students under a common platform to interact and showcase various dimensions related to soft computing, machine learning and other AI techniques.

ABOUT IIT ROORKEE

Indian Institute of Technology - Roorkee is among the foremost of institutes of national importance in higher technological education and in engineering, basic and applied research. It has a history of more than 175 years. Since its establishment, the Institute has played a vital role in providing technical manpower and know-how to the country and in pursuit of research. The Institute ranks amongst the best technological institutions in the world and has contributed to all sectors of technological development. It has also been considered a trend-setter in the area of education and research in the field of science, technology, and engineering.



ABOUT SAHARANPUR CAMPUS

Situated at the foothills of the enchanting lower Himalayan ranges of Shiwalik, the city of Saharanpur (Western Uttar Pradesh) is the home to another campus of IIT Roorkee, popularly known as its Saharanpur Campus. The campus started its journey in the year 1964 as School of Paper Technology established by the Government of India in 1964, with an aid from the Royal Swedish Government. The school was managed by a society created by the U.P. Government until its merger with the then University of Roorkee in 1978. The University of Roorkee was given the status of a University by Act No IX of 1948 of the United Provinces (Uttar Pradesh). It is now known as the Saharanpur Campus of IIT Roorkee.

Saharanpur Campus is a well-planned Campus spread over 25 acres of land and is at a distance of around 49 km from the Roorkee campus. The Saharanpur Campus presently has three departments: The Department of Paper Technology, The Department of Polymer Engineering and The Department of Applied Mathematics and Scientific Computing, the most recently established Department. The Departments offer M.Tech and Ph.D. degrees in different programs.



ABOUT THE DEPARTMENT (D-AMSC)

The Department of Applied Mathematics and Scientific Computing (D-AMSC), is one of the most recent departments of IITR, came into existence in March 2022. The objective of the Department is to train the students in efficient computational techniques, which are often desirable and are many times necessary for solving complex real-world problems where analytical approaches are either difficult or impossible to use. The area of specialization of the faculty at D-AMSC includes numerical differential equations, numerical optimization, operations research, data science and machine learning and their applications to real life problems occurring in different domains. The department presently offers Ph.D. degree in Applied Mathematics and Scientific Computing and from 2023 onward, M.Tech degree will also be offered. At present around 30 Students are enrolled for the PhD degree at D-AMSC.

ABOUT THE CONFERENCE

SocProS was first held in 2011 at IIT Roorkee and attracted a large number of national and international researchers. Encouraged by its huge success, it was made a yearly event and the subsequent SocProS conferences were held in India and abroad with the last one being held at IIT Mandi in 2022. SocProS 2023, the 11th event of this flagship conference will be held at IIT Roorkee.

THEME OF THE CONFERENCE

The term Soft Computing represents a collection or set of computational techniques in machine learning, computer science and some engineering disciplines, which investigate, simulate, and analyze very complex issues and phenomena. SocProS23 aims to bring together researchers, engineers and practitioners to present the latest achievements and innovations in the interdisciplinary areas of soft computing, to discuss thought-provoking developments and challenges, and to consider potential future directions. One of the objectives of the conference is to encourage participation by young researchers; to this end, student papers will be given special consideration.



CALL FOR PAPERS

The 11th International Conference on Soft Computing for Problem Solving is an interdisciplinary conference that aims to bring together researchers working in different areas of Soft Computing, Machine Learning and Artificial Intelligence.

Contributions are welcomed on all areas related to soft computing techniques like evolutionary and nature inspired algorithms, swarm intelligence algorithms, fuzzy systems in terms of theoretical development and applications in different domains.

Contributions are particularly solicited on this year's theme, which include applications of soft-computing, AI and ML on the areas of: Healthcare, Agriculture, Defence, Supply Chain Management and Logistics, Smart Cities and other applications relevant to the theme of the conference.

All papers will be reviewed in a double-blind process and accepted papers will be presented at the conference.

PROCEEDINGS

To be published in Springer (pending approval).

IMPORTANT DATES

Deadline for paper submission	March 15, 2023
Decision of Acceptance	April 15, 2023
Camera ready papers & registration	June 15, 2023

REGISTRATION FEE

Registration fee includes conference proceedings published by Springer, conference bag, breakfast and lunch on all three days and gala dinner. Limited accommodation will be arranged on first-cum-first serve basis. One registration will cover only one paper of 10 pages. Additional papers by the same author(s) will be charged separately.

Registration		
Category	Indian Author	Foreign Author
Full time student author	Rs 4500	USD 60
Faculty author	Rs 7000	USD 90
Author from industry	Rs 10000/paper	USD 125/paper
Extra page charge	Rs 2000/page	USD 25/page
Only attending	Rs 2000	USD 25

REGISTRATION – To be done online (Registration link)

SUBMISSION OF PAPERS – Please submit your original research paper using CMT

ORGANIZING COMMITTEE

Organizing committee	Name of committee members	Affiliation
Patron	Prof. KK Pant, Director	IIT Roorkee, India
Conference Chair	Prof. Millie Pant Head, Department of Applied Mathematics and Scientific Computing	IIT Roorkee, India
Honorary Chair	Dr. Chander Mohan Retd. Professor	IIT Roorkee, India
Conveners	Prof. Kusum Deep	IIT Roorkee, India
	Prof Atulya Nagar	Liverpool Hope, United Kingdom
Organizing Secretaries	Prof. Rajan Arora	IIT Roorkee, India
	Prof. Manoj Thakur	IIT Mandi, India
Treasurers	Prof. Millie Pant	IIT Roorkee, India
	Prof. Kusum Deep	IIT Roorkee, India
Best Paper Chairs	Prof Atulya Nagar, UK	Liverpool Hope, United Kingdom
Best PhD Thesis Chairs	Prof Atulya Nagar	Liverpool Hope, United Kingdom
	Prof. AK Verma	Western Norway University of Applied Sciences, Norway
Publicity Chairs	Dr. Musrrat Ali	King Faisal University, Kingdom of Saudi Arabia
	Dr. Shilpa Shrivastava	Christ University, India
	Dr. Meenu Singh	VSB- Technical University of Ostrava, Czech Republic
	Dr. Kamanasish Bhattacharjee	Mayo Clinic, Arizona, USA
	Dr. Bilal	UTSW Medical Center, Dallas, USA
Conference Proceeding Chairs	Dr. Neetu Kushwaha	The Alan Turing Institute, London, UK
	Prof. Millie Pant	IIT Roorkee, India
Technical Sessions Chair	Prof. Kusum Deep	IIT Roorkee, India
	Dr. Irshad Ansari	IIITDM, Jabalpur, India
	Dr. Sunil Jauhar	IIM Kashipur, India
Special Session Chair	Dr. Manoj Thakur	IIT Mandi, India
	Dr. Musrrat Ali	King Faisal University, Kingdom of Saudi Arabia
	Dr. Sushil Kumar	NIT Kurukshetra, India
	Dr. Irshad Ansari	IIITDM, Jabalpur, India
Hospitality Chair	Dr. Natthan Singh	IET Lucknow, India
	Dr. Anurag Kushreshtra	IIT Roorkee, India
Reception & Registration Chair	Dr. Shilpa Shrivastava	Christ University, India
	Dr. Pinkey Chauhan	Jaypee Institute of Information Technology, India
	Dr. Hira Zaheer	Galgotias University, India
Printing & Publication Chair	Prof. Kusum Deep	IIT Roorkee, India
Cultural Program Chairs	Prof. Sampat Singh Bhati	IIT Roorkee, India



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