

5 Day Workshop

Computational Techniques and Mathematical Modelling



for Academia and Industry

1st-5thNovember, 2017

Workshop Themes

MATLAB and Simulink **Molecular Dynamics LAMMPS Animation, Image Processing LabView Optimization Techniques Numerical Analysis Cellular Automata Microstructure Modelling**



Organized by

Computational Metallurgy Group Department of Metallurgical and Materials Engineering National Institute of Technology Rourkela

> WorkshopWebsite http://ctmm-17.webs.com/

















The city of Rourkela came into prominence in the year 1955, with the decision of the Government of India to set up the first Public Sector Steel Plant. It is one of the most beautiful cities of the state of Odisha. National Institute of TechnologyRourkela, is one of the premier institutions of government of India for imparting quality technical education in the country. The institute is surrounded by hills and spread over an area of 262 hectares of land. The well maintained green campus of the Institute provides 100 percent accommodation to students, faculties and staff. The campus has all the amenities for developing personal, social and academic skills of the young people. With 21 departments awarding degrees in Engineering, Science, Planning and Architecture, Management, and Humanities, NIT Rourkela is one of the most prestigious institutes in the country. National Institute of Technology Rourkela is a publicly funded institute of higher learning for engineering and technology located in the steel city of Rourkela, Odisha, India and is presently ranked the 2nd best NIT and 12th nationwide (including IITs) by the MHRD. The city is a huge metropolis connected with all parts of the country by railway and road. Domestic air services are available from Ranchi, Bhubaneswar and Raipur. Kolkata is about 400 kilometers from Rourkela. The population of the city is about 6 lakhs. The city experiences beautiful winter. The minimum temperature during December is about 12° Celsius accompanied with bright sunshine. The greeneries and flowers in the campus further make the stay very pleasant.

About the Department

Established in 1964, the department has been emerged as powerhouse for academics, scientific research and cutting edge technologies. With time, the department grew noticeably and established new areas of research and teaching in materials engineering, while retaining its strength in traditional areas in metallurgical engineering. Along with all ongoing academic programs, the department has introduced M.Tech. in Steel Technology from 2012. The department attracts highly qualified faculties and bright students from the entire nation. The well-developed infrastructure and diversified expertise of the faculties has provided the department a global acceptance. The graduates from the department are wellabsorbed in esteemed industries or institutions. The department is actively involved in research activities in the front line areas of metallurgical and materials engineering in collaboration with reputed R&D organizations and industries throughout the country.

About the Organizers

Dr.S.N.Alam mainly uses MATLAB and Simulink for numerical analysis and modelling. He teaches courses related to computational techniques in Materials Science and Engineering to both undergraduate and post graduate students.

Dr. Natraj Yedla works on classical molecular dynamics simulation deformation studies of crystalline and non-crystalline metallic materials. He teaches course related to modeling methods, interatomic potentials, algorithms, etc. to both undergraduate and post graduate students.

Dr. SnehanshuPal's research domain covers, atomistic modelling of materials, microstructure modelling and process modelling. Computational Materials Engineering deals with the computer aided modelling of various properties and behavior of materials which includes thermal, physical and chemical parameters. It allows researchers to create virtual system to understand the physical phenomenon in better ways. These systems are developed using mathematical tools and programming such as MATLAB, LAMMPS, C, C++, FORTRAN etc.. Process Modelling is an engineering technique for developing a statistical model which describes a process. This technique can be used in predicting and optimizing the metallurgical processes such as in steel making process.

Important Dates

1. Last Date for Registration : 20th October, 2017

2. Notification of Acceptance of Participation: 25th October, 2017

3. The Workshop: 1st-5thNovember, 2017

To avail Early Bird Registration sendRegistration Form along with Demand
Draft/Chequewhich shouldreach the Organizers by 20th October, 2017. As limited number of seats are available for the workshop on the spot registration is possible only if vacant spots are available.

Workshop Fees

Category	Fees (Rs) Early Bird Registration	Fees (Rs) On the Spot Registration	
Delegates from Industry	5,000/-	5,500/-	
Delegates from Academics and Govt. R&D	4,000/-	4,500/-	
Research Scholars/Graduate Students	2,500/-	3,000/-	
Undergraduate Students	2,000/-	2,200/-	

WorkshopOrganization

Patron : Prof. Animesh Biswas, Director, NIT Rourkela

Chairman: Prof. S.Sarkar, HOD,

Dept. of Metallurgical and Materials Engineering, NIT Rourkela

Organizers: Dr. S.N.Alam, Dr.S.Pal and Dr.N.Yedla

Accommodation

Limited accommodation will be provided at the institute guest house on payment basis. Prior information for requirement of institute accommodation is to be intimated. However, accommodation will be available in many hotels of Rourkela city at reasonable tariff. The Institute is situated about 15 minutes driving distance from the city.

Organizers

Dr. S. N. Alam

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Registration Form CTMM-17

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Name:	De	signation:		
Organization:				
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Telephone:	F			
	Accommodation Required_			
Details of Registration Fee:				
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All payments are to be made by a/c payee demand draft drawn in favour of "CONFERENCE NIT

ROURKELA" payable at SBI, NIT Rourkela Branch (Code-2109).