# One day Workshop on

# Mathematical, Statistical and Computational Techniques for Scientists and Engineers

Multipurpose Hall, Training School Hostel, Anushaktinagar, Mumbai 400094 0930-1730 Hours; 03 August 2019

### INTRODUCTION

With advent of high speed computational facilities, scientists and engineers are now able to derive more insights from multidimensional data using advanced mathematical, statistical and computational tools. Along with theoretical and experimental studies, computational methods today form one of the main pillars for advanced design and engineering works. With sophisticated data recording and affordable data storage systems, data driven approaches are increasingly being used in various branches of science and technology, including civil engineering, image processing, internet data mining, hydrology, industrial safety, process control, safety analysis and many more. A number of commercial software is available today for solving diverse and specific problems. However, the best use of these tools is often limited due to the lack of informationabout the underlying physical principles and the strengths and limitations of the available solving / modeling methods. The developer needs feedback regarding the requirements of practicing engineers and scientists to refine existing tools and propose new ones. This workshop will foster productive interaction between the domain experts from various disciplines and the practitioners& researchers.

### **TOPICS**

- i. Fundamentals of mathematical modeling
- ii. Computational & statistical techniques
- iii. Applications& case studiesin various fields of science and engineering
- iv. Demonstration

### **PROGRAM**

The workshop will comprise of a series of short lectures by domain experts from JU Alumnus, BARC, and IIT Bombay on the various topics covered in the scope. It is further planned to organize a dedicated sessionfor demonstration of commercial computational software. The various lectures and the panel discussion would help the attendees to grasp/ refresh the different tools and expose them to a large variety of applications in sciences and engineering.

### **ABOUT JUAAM**

(http://www.juaam.com/)

Jadavpur Universityis one of thepioneering and leading Universities in India, noted for its high standard Research & Education in the fields of Engineering & Technology, Science and Humanities. It was the result of the efforts of accomplished individuals from the Institute that the Jadavpur University Alumni Association Mumbai (JUAAM) was born in the mid – 1956. The aim of the organization – to ensure that the knowledge, character and relations developed within the ramparts of one of the most respected universities in the country do not fade away amid the monotony of everyday life.



Registration Fees: INR 200.

Seats are limited – registration confirmation on 'FIRST COME FIRST SERVED' basis.

## **Contact Persons:**

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