IIT(ISM) DHANBAD

ISM Dhanbad (now IIT (ISM), Dhanbad) established in 1926, is a premier institute of India under MHRD, Govt. of India. IIT(ISM) Dhanbad is situated in the city of Dhanbad, which is also known as the coal capital of India. This institute is located 3 km from the Dhanbad Railway Station, which lies on the Kolkata-Delhi railway main line. Dhanbad is also connected with Kolkata by National Highway-2 (Grand Trunk Road). Subhash Chandra Bose Domestic/ International Airport, Kolkata is about 250 KM away from Dhanbad.

Department of Applied Geology

DEPARTMENT OF APPLIED GEOLOGY

The Department of Applied Geology, established in 1926, the year of inception of the Indian School of Mines, is the pioneering centre of teaching, training and advanced research in Applied Geology in India. Department is a pioneer centre for learning Geostatistics in the country. The Department offers 5-year Integrated M.Sc. Tech. Applied Geology, 3-year M.Sc. Tech. Applied Geology, 2-year M.Tech in Mineral Exploration, Engineering Geology and Petroleum Exploration, and Ph.D. programs. Besides, the department organizes conferences, seminars and workshops and provides training programs, consultancy and testing services, both at international and national levels. The department has developed a very strong Industry-Institution relationship which is unique in the country.

GEOSTATISTICS & R

Geostatistics is a study of spatial or spatiotemporal geological datasets. Though originally it was developed to predict probability distributions of ore grades for mining operations, it is currently applied in diverse disciplines including petroleum geology, hydrogeology, hydrology, meteorology, oceanography, geochemistry, geometallurgy, geography, forestry, environmental control, landscape ecology, soil science, and precision farming. Nowadays geostatistical algorithms are used in many areas, including Geographic Information Systems (GIS) and the R statistical environment.

R is a programming language and free software environment for general statistical computing and graphics. Surveys and studies of scholarly literature databases show substantial increases in popularity in recent years. This language is freely available under the GNU General Public License. Pre-compiled binary versions of this software is also available for various operating systems.

OBJECTIVE

The purpose of this short course is to introduce analysis of mineral exploration data using R for geostatistical computing and graphics. This course will cover basic geostatistical methods for analysis, evaluation and estimation of mineral values for an unsampled location or for a larger support. As a data analysis tool, it will cover classical statistical, geostatistical and graphical methods of R. Emphasis will be given to the programme implementation, geostatistical data analysis methods and modeling of mineral exploration data using different geostatistical and advanced unsupervised techniques. Emphasis will also be given to R programming language so that participants can learn the language to use it in their respective fields.

SHORT TERM COURSE ON
Introduction to R-Programming Language for Geostatistical Data Analysis:

June 10-12, 2019
(Lecture schedule: 9 AM – 5.15 PM)
Organized by **Department of Applied Geology,** Indian Institute of Technology (ISM), Dhanbad-826004
www.iitism.ac.in

VENUE: Executive Development Centre / Department of Applied Geology.

COURSE CONTENTS

- ➤ Introduction to Geostatistics;
- ➤ Introduction to R–Programming Language;
- ➤ Basic Statistics;
- ➤ R for Statistical Data Analysis;
- ➤ Concept of Spatial Variability modeling: Semi-variography;
- ➤ R for Semi-variogram analysis;
- ➤ Geostatistical Estimation: Kriging
- ➤ Practice of Kriging in R.

REGISTRATION FORM

Short Term Certificate Course on:

Introduction to R-Programming Language for Geostatistical Data Analysis

Name --------------------------------------

Designation-------------------------------

Organization------------------------------

Phone--------------------------------------

Mobile-------------------------------------

Board & Lodging required: Yes/No

I would like to participate the Short Term Certificate Course being organized by the Department of Applied Geology during June 10-12, 2019 at IIT(ISM) Dhanbad. I understand that I am required to make my own arrangement for board and lodging. Further, I understand to bring my own Laptop and Calculator for practicing in the class during the course.

Please sign the registration form and send the scanned copy of this page along with the receipt of payment of course fee through e-mail to the Prof. B. C. Sarkar, the Contact Person).

(Signature)

COURSE REGISTRATION FEE (INCLUSIVE OF 18% GST)

(Excluding Board and Lodging charges. Outside participants will bear on their own, if Board and lodging are provided on their request, subject to availability (Accommodation charge on twin sharing basis is Rs. 600/- per head)):

Delegate from Industry: Rs 11,800/-
R&D Centre and Academic Institute:
Outside Student & JRF: Rs. 3,540/-
IIT(ISM) Student & JRF: Rs. 2,360/-

DEADLINE FOR REGISTRATION: 03rd June 2019

(minimum number of participants required for the course to run is 30 while maximum number is 60 on a first-cum-first-served basis)

Course fee is to be paid online to the IIT(ISM), Dhanbad with following account details:

Bank & Branch Name: Canara Bank, Saraidhela Branch, Dhanbad
Bank Account: SB 0986101024892
RTGS Code: CNRB0000986
GSTIN: 20AAAAI0686D1ZA

CONTACT PERSON

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