TEQIP-III Sponsored Online Short-Term Course, December 26-30, 2020 Research Methodology in Science & Engineering Organised by

Disciplines of Physics & Metallurgy Engineering and Materials Science Indian Institute of Technology Indore





Course Content:

- 1. Introduction to Research Perspective
- 2. Types of research: Qualitative Research, Experimental Research, Survey Research
- 3. Research formulation: Literature review, Necessity to define Research problem, Research gap, working hypothesis, Sampling
- 4. Research design
- 5. Data collection and Analysis: Basics of statistics, data processing and analysis strategies and tools, hypothesis testing, interpretation of data points, Quantitative Data Analysis Techniques
- 6. Research Writing and Presentation
- 7. Research Evaluation and Critique

Course Instructors:

- Prof. Ken Peach, University of Oxford, UK & OIST, Japan
- Prof. Ajay Dalai, Uni. of Saskatchewan, Canada
- Prof. Rajiv Sangal, IIIT Hyderabad/IIT-BHU
- Prof. Shashi Nath Jha, KSDSU, Bihar
- Prof. S. K. Barai, IIT Kharagpur/BITS-Pilani
- Prof. C. V. Jawahar, IIIT Hyderabad
- Prof. C. S. Upadhay, IIT Kanpur
- Dr. Ajay Jha, ACS
- Prof. Biswanath Swain, IIM Indore
- Prof. Raghunath Sahoo, IIT Indore
- Prof. Vinod Kumar, IIT Indore

Course Introduction

This course is made for TEQIP-III sponsored institute participants to elevate the general methods in research and help them in their respective research domains to have an effective and fruitful output. Any other researchers are welcome to participate in this course which will cover the above curriculum in a methodical and pedagogical way.

Course Fees:

No registration fee for participants from TEQIP-III institutes. For non-TEQIP-III participants:

- Rs. 10,000* (for Industry personnel)
- Rs. 5,000* (for Faculty members/Scientists)
- Rs. 3,000* (for PhD students)

*including service tax Registration deadline: 22 December 2020

Mode of Payment:

For Online Payment : http://www.iiti.ac.in/page/e-payments

Bank Transfer:

Beneficiary Name: Registrar IIT Indore Bank Name : Canara bank, Branch: IIT Indore, Khandwa Road, Simrol, Indore Account number: 1476101027440 IFS Code : CNRB0006223 Non-TEQIP-III participants, please upload the payment receipt in online registration.

Registration:

For registration, please visit this link: http://www.iiti.ac.in/people/~raghunath/TEQIP/i ndex.html Course Co-ordinators: Prof. Raghunath Sahoo Discipline of Physics Indian Institute of Technology Indore Simrol, Khandwa Road, Indore-453552, M. P., India E-mail: raghunath[at]iiti.ac.in Phone: +91 6264818486

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