VAJRA Visiting Advanced Joint Research Faculty

SERB INDIA

CSUN CALIFORNIA STATE UNIVERSITY NORTHRIDGE

Indo-US VAJRA-Course on "Fundamentals of Electromagnetics" (EMF-2021)

(Virtual Event)

Duration: 15-19 March 2021
Time (IST): 06:30 PM-09:00 PM

Jointly organized by

National Institute of Technology Silchar (India),
Jawaharlal Nehru University Delhi (India)
and
California State University Northridge (USA)

Participation E-Certificate

Minimum 75% attendance and 60% marks in MCQ Test is mandatory for getting a participation E-certificate of the course.

For query, please contact:

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VAJRA Team/Distinguished Speakers

- **Prof. S.R. Rengarajan,** CSUN, USA
- **Prof. B.K. Kanaujia,** JNU Delhi, India
- **Dr. Taimoor Khan,** NIT Silchar, India

Contents to be discussed

- ✓ Vector Algebra
- ✓ Electrostatics
- ✓ Magnetostatics
- ✓ Maxwell's Equations and Time Varying Fields

About EMF-2021

Fundamentals of Electromagnetics (EMF-2021) is a week-long virtual course on Electromagnetic theories and principles. Electromagnetics is the most fundamental block for learning the concepts of waves, their propagation mechanism and different other properties. The theories of electromagnetism include discussion related to the static and dynamic nature of the electric and magnetic fields and their interactions. The discipline of electromagnetic field theory is largely based on Maxwell's equations, which are the result of the seminal work of James Clerk Maxwell unifying electricity and magnetism. Maxwell's equations provide the necessary basis for the modelling of practical electromagnetic problems. Electromagnetic theories constitute an important part of the undergraduate physics and electronics engineering curricula. This topic also provides the necessary platform for learning the advanced concepts of antenna, optics and microwave engineering. This course is therefore being organized to provide the students, research scholars, and industry professionals a platform to familiarize themselves with the theories behind the recent advancements in electromagnetic. Faculty members from different organizations can also attend this pilot course to get an exposure to relevant concepts and different effective teaching-learning approaches related to electromagnetic theories.

Chief Patron

Prof. Sivaji Bandyopadhyay, Director, NIT Silchar, India

Patrons

Prof. M. Ali Ahmed, Dean R & C, NIT Silchar, India
Prof. P.K. Patowari, Dean FW, NIT Silchar, India

Chairperson

Dr. K.L. Baishnab, HOD, ECE Dept., NIT Silchar, India

Convener

Dr. Taimoor Khan, ECE Dept., NIT Silchar

About VAJRA

VAJRA (Visiting Advanced Joint Research) Faculty Scheme has been conceptualized to bring an international dimension to the R&D ecosystem of India by leveraging overseas scientists' expertise to the Indian research framework. The Objectives of the Scheme is dedicated to tap the expertise of International visiting Faculty/scientists/technologists including Non-resident Indians (NRI) and Persons of Indian Origin (PIO)/Overseas Citizen of India (OCI) in highly competitive areas of research and development by offering them adjunct/visiting faculty positions in Indian Institutions/Universities for a specific period. Engaging NRI/PIO/OCIs in National R&D Programs and thereby deepen their engagement for value addition to various S&T programs, projects, and missions of the Government. SERB welcomes accomplished Overseas Scientists to take up challenging research problems in the Indian setting.

Eligibility of Participation

Interested UG/PG/PhD students, faculty members, and industry personnel from recognized technical institutions/organizations can register for this course.

Registration Details

There is no registration fee. Interested candidates can register (on or before 10 March 2021) using the link: https://forms.gle/LMfQ5S5Zdqc69XCEA