The objective of the course is to impart in depth knowledge in the Computer aided design of Microwave components including antennas through the conventional coding (MATLAB). The highlight of the workshop is to feel the joy and compare the originality of getting the solution through conventional codes with that of commercial software (ADS, HFSS, CST, IE3D, Fidelity etc). Each has its own exclusive merits and demerits. The demonstrations will speak and prove the above claim.
Course Coverage - Proposed Topics

- Overview of Computer Aided design (CAD) in Microwaves with emphasis on conventional coding – Dr. S. Raghavan, Professor, ECE Department, NIT, Trichy.
- Microwave components design and layout – Essentials- Dr. S. Raghavan, Dr. P. Muthuchidambaranathan, Dr. D. Sriman Kumar & Team, ECE Department, NIT, Trichy
- Design of patch antenna using conventional MATLAB coding and HFSS- S. Imaculate Rosaline, Senior Research Scholar, Microwave group, NIT, Trichy.
- 1D, 2D, 3D and 3.5D of FDTD using MATLAB and CST- D. Venkatesh, Ananya Parameswaran, Research Scholar, Microwave group, NIT, Trichy
- Design of reconfigurable filters using conventional MATLAB coding and ADS - Dr. V. Rajesh Kumar, Assistant Professor, Meppo Schlenk Engineering College, Sivakasi
- Design of rat race Surface Integrated Waveguides- Arvind Kumar, Research Scholar, Microwave group, NIT, Trichy, Sujitha Sree, K Ramakrishna College of Engineering, Trichy
- Computational Electromagnetics overview- Dr. M. Bhaskar, Assistant Professor, ECE Department, NIT, Trichy, Dr. S. Suganthi, Professor, CHRIST University, Bangalore, Dr. T. Shanmuganatham, Professor, Pondicherry University, Dr. P. Tiruvalarselvan, Professor, TRP Engineering College, Trichy.
- Introduction to biological effects of microwaves – Divya Chaturvedi, Seema R Tirkey, Research Scholars, Microwave group NIT, Trichy, Dr. S. Ashok Kumar, Professor VELTECH University, S. Imaculate Rosaline, Senior Research Scholar, Microwave group, NIT Trichy.
- CAD of metamaterials - Dr. R. Pandeeswari, Assistant Professor, ECE Department, NIT, Trichy, Samson Daniel Rapheal, Research Scholar, Microwave group NIT, Trichy, Prof. B. Anandimeena Prabhakar, Anna University, Dindugul.
- Implantable/ Textile Antenna – Dr. S. Ashok Kumar, Professor, VELTECH University.

Confirmed topics from industries

- Silent revolution (Make in India, MIGITAL (Microwave + Digital) INDIA) Minicircuits – challenges by Sri Guna MD/CEO, Urgitha Electronics.
- Handheld network analyzer (i) Amritzu (ii) Rhode and Schwarz
- Microwaves through software by PG microwave wizards.
- Secrets of micro measurements by Elmack Swaminathan, Keysight Technologies
- Patent filing tips by K. Balamanikandan, Senior Research Engineer, C-DOT, Bangalore.
- Selected external participants with software skill in microwaves (interested students should mail their abstract).
Eligibility:
The programme is open to the Bachelors, Masters, the Engineering faculty and Industry persons who are interested and wants to become expertise in soft computation in Microwave Engineering.

Resource Persons:
Faculty members from NIT Trichy, High Frequency Scientists from reputed scientific organizations and budding Microwave CAD students/Research Scholars experts.

Important Dates:
Last date for Receipt of application : 30-10-2015
Acceptance Notification : 02-11-2015
Date of Workshop : 06-11-2015 & 07-11-2015

Registration fee:
Participants from Academic Institutions : Rs.1500/- (EXCLUSIVE OF ACCOMMODATION)
Industries/R&D Organization : Rs. 5000/-
The registration fee must be paid by DD in favour of “The Registrar, NIT, Tiruchirappalli-620015” and payable at SBI, NIT, Tiruchirappalli.

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Coordinators
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Dr. P. Muthuchidambaranathan, ECE-NITT.
Dr. D. Sriram Kumar, ECE-NITT.

Co-Coordinator
Dr. R. Pandeeswari, ECE, NITT.

Research Scholar Co-ordinator
Arvind Kumar

PG Student Coordinators:
CH R V Manikumar  Florintina C  P Athira  R S Jim Godwin  Balkrishna Kurade
Sujith Suman  Engam Prasanth Kumar  Jithin M George

How to register?
Please e-mail the following details to rvmkch@gmail.com on or before 30th October 2015

Name           Designation           Institution
Qualification  Area of Interest

Years of Experience in MIC Components/Filter/ Microwaves/MIC Analysis:
DO YOU INTEND TO PRESENT ANY SOFTWARE RELATED TO MICROWAVES: Yes/No
(If Yes, e-mail the abstract*)
DD No. /Bank/Date:
Address for Communication with e-mail and mobile number:

*Note: Registration fee of applicant whose abstract is selected for presentation will be refunded.
The Core Team behind the show