INDIVIDUAL FACULTY PROFILE- TEMPLATE TO BE UPLOADED IN COLLEGE WEBSITE



Name : Dr Deepthee M.R.

Designation : Assistant Professor Qualification : Ph.D.

Email-id: (official) : deeptheemr.maths@bmsce.ac.in

Experience : Teaching experience :

Date of Joining this Institution (BMSCE): 22/02/2019

Research Interests: Applied Mathematics

- Mathematical physics
- Mathematical modeling of dynamic systems
- Modeling of wireless chip to chip communication within enclosures.
- MIMO communication
- Mathematical biology

About Your self

I have completed my PhD in mathematical modeling of wireless chip communication from The University of Nottingham, UK in 2019 and masters from VNIT, Nagpur in 2015. I have published 3 papers in international journals and 2 international conference proceedings. I was a part of noisy electromagnetic field 2021 (NEMF21) project funded by HORIZON2020, a European Union organization. I was also a part of EPSRC funded project on M8MO communication. I have experience in programming using various languages such as C, MATLAB, C++, JAVA etc.

Education:

Doctoral Research: Wireless chip to chip communication within enclosures.

Masters : M.Sc. (APPLIED MATHEMATICS)

Bachelors: B.Sc.(Physics, Mathematics, Computer Science)

Personal web site/page if any then mention the Webpage link

Selected Publications:

- 1. Near field scanning and propagation of correlated low frequency radiations, IEEE transactions on electromagnetic compatibility, 2017.
- 2. Propagating methods for stochastic field emissions and source reconstruction, IEEE EMC, 2017.
- 3. Near field acoustical holography-a Wigner function approach, submitted to Journal of sound and vibration.
- 4. A Wigner function approach to near-field acoustic holography theory and experiments (Under review)
- 5. DEA approach to analyse MIMO communication within enclosures (under review)

Courses Handled/List

- Engineering Mathematics 1
- Engineering Mathematics 2
- Engineering Mathematics 3
- Engineering Mathematics 4

Additional Responsibilities

- 1. Valuation coordinator, BMSCE, Bangalore.
- 2. Teaching Assistant for UG, UON, UK.
- 3. Resident Tutor, Raleigh Park, Nottingham, UK.
- 4. Demonstrator and Marker, UON, Nottingham, UK.
- 5. Postgraduate research student supporters, UON, UK
- 6. Team leader, VIHANG2K14, VNIT, Nagpur, India.

Other Information:

Graduate Projects:

- 1. Mathematical modelling of noisy-electromagnetic fields (NEMF21) project.
- 2. EPSRC project on modelling of near field emissions from complex sources.
- 3. Master's project on general theory of relativity.
- 4. Bachelor's project on modelling of electromagnetic waves in cylinders based on Bessel's equation.
- 5. Modelling Pico-turbine windmill, super symmetry problems etc.Internship at IISc on analysing geometric topology

Conferences:

- 1. Young researchers in Mathematics, St. Andrew's, August 2016.
- 2. British applied mathematics colloquium, University of Surrey, April 2017.
- 3. Electromagnetic compatibility, IEEE conference, France, September 2017.
- 4. Training on Electromagnetic compatibility, Malta, April 2018.
- 5. URSI, AT-Rasc, Gran Canaria, May 2018.
- 6. NEMF21 meeting, Nice, France, July 2018.