

Dr. DEVIKA MAHESH

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Google Scholar : <https://scholar.google.com/citations?user=4gxqSYIAAAAJ&hl=en>

ACADEMIC INFORMATION

- Ph.D., National Institute of Technology Tiruchirappalli, India, Physics (2022)
- M.Sc., National Institute of Technology Karnataka India, Physics (2016)
- B.Sc., Mar Ivanios College, University of Kerala, India, Physics (2014)

ACHIEVEMENTS

- Graduate Aptitude Test in Engineering (GATE) - 2016
- National Institute of Technology Tiruchirappalli (NIT Trichy) Ph.D entrance with AIR – 1
- Project proposal accepted for execution under Indian Nanoelectronics Users Program (INUP) scheme, 2018.

TEACHING EXPERIENCE

- Mother Theresa College, Nellikad, Thiruvananthapuram 01/02/2022 – 31/07/2023 (1 year and 6 months)

SKILLS AND EXPERTISE

- Hands-on experience on thin film coating methods as Spray pyrolysis, RF sputtering, Thermal evaporation and Spin coating
- Hands-on experience on UV-Vis-Spectrophotometer, Spectrofluorometer, Hall measurement set up and I-V characterisation.

RESEARCH INTERESTS

- Thin film optoelectronics, Oxide semiconductors, Photocatalysis
- Nanomaterials

WORKSHOPS ATTENDED

- **International Winter course** on ORGANIC SOLAR CELLS: PRINCIPLE AND PRACTICES, hosted by ‘Laboratory of molecular physics & Electronics, Department of Physics, National Institute of Technology Calicut. –2-10 November 2016
- **Indian Nanoelectronics Users Programme (INUP)** – Familiarisation workshop , conducted at Indian Institute of Science (IISc) Bangalore- 14-16 March 2018
- **Indian Nanoelectronics Users Programme (INUP)** – Hands on training , conducted at Indian Institute of Science (IISc) Bangalore- 15-25 May 2018
- **Workshop on Spectroscopic Ellipsometer, conducted by J.A.Woollam, Inc, USA** in association with JNCASR & Sinsil International, Bengaluru hosted by Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)- 5 & 6 November 2019

CONFERENCES PRESENTED

International:

- I2C4N, organised by Holy Grace College, Maala, Thrissur, Kerala on 7th and 8th April 2016.
- International Conference on Recent Trends in Material Science and Technology (ICMST 2018), organised by Indian Institute of Space Science and Technology Thiruvananthapuram, 10th -13th October 2018.
- International Conference on Recent Advances in Material Science (ICRAMS 2019), Organised by PG & Research Department National College, Tiruchirappalli.4th-6th February 2019.
- International Conference on Advanced Materials for Sustainable Energy and Sensors (ICAMSES 2019), Sponsored by MHRD RUSA 2.0 and organised by Department of Physics, Alagappa University Karaikudi, Tamil Nadu., 16th-17th September 2019.
- International Conference on Novel engineering materials for Biomedical, Energy and Environmental Sensing and other application (ICON-BEES), Organised and hosted by National Institute of Technology Tiruchirappalli.- 11-14 March 2021.

National:

- THINK NANO, conference organised by Centre for Nanoscience and engineering (CeNSE), IISc Bangalore on 31st and 1st April 2016

- Advanced Materials : Processing and Characterisation (AMPC 2017) Organised and hosted by Department of Physics, National Institute of Technology Trichy, 27-28 February 2017
- DAE SSPS 2017, national solid state symposium sponsored by Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (**DAE**) and organised by Bhabha Atomic Research Centre Mumbai, 26th-30th December 2017

LIST OF PUBLICATIONS

Devika Mahesh, John Paul and M. C. Santhosh Kumar (2022), Photocatalytic degradation of Methylene Blue by ZnO seed layers and 1D nanorods, *Materials Today Processing*, 58, 882-885.

Devika Mahesh, M. C. Santhosh Kumar, (2020) Synergetic effects of Aluminium and Indium dopants in the physical properties of ZnO via Spray Pyrolysis, *Superlattices and Microstructures*, 142,106511.

Devika Mahesh, B. Hemanth Kumar, M. C. Santhosh Kumar, (2019) Enhanced luminescence properties of 1D nanorods realised by Aqueous Chemical Growth on Indium doped Zinc Oxide thin films, *Thin Solid Films*, 686,137279

Devika Mahesh and M. C. Santhosh Kumar (2018) An Investigation on the In doping of ZnO thin films by Spray Pyrolysis, *AIP Conference Proceedings*, 1942, 080049-1-080049-4.

P. Ramana Reddy, Suchithra S. M., Devika Mahesh, N. K. Udayashankar (2016), Structural and Optical properties of Porous Anodic Alumina Annealed at different Temperatures, *NanoTrends: A Journal of Nanotechnology and Its Applications*,18.

Devika Mahesh, John Paul, M. C. Santhosh Kumar, Growth of In:ZnO 1D nanorods on seed layers deposited at various substrate temperatures for the photocatalytic activity- (Under communication).