CURRICULUM VITAE

Personal profile

Name: **Saptarshi De**
Date of Birth: 2nd May, 1986
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Reference(s)

1. Prof. N. Venkataramani
   Thick and thin films lab (room no. 210B, 2nd floor)
   Department of Metallurgical Engineering and Materials Science, Indian Institute of Technology Bombay, Powai. Mumbai-400076, India.

2. Prof. Rajiv. O. Dusane
   Thin films lab (3rd floor)
   Department of Metallurgical Engineering and Materials Science, Indian Institute of Technology Bombay, Powai. Mumbai-400076, India.

3. Prof. Shiva Prasad
   Department of Physics, Indian Institute of Technology Bombay, Powai, Mumbai-400076, India.
   (Current affiliation: Director General, Institute of Infrastructure Technology Research And Management (IITRAM), Gujarat, India.)

4. Dr. Fozia Z. Haque
   Associate Professor & Head, Department of Physics; Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh, India. Email: foziazia@manit.ac.in ; Phone : 0755-4051596

5. Prof. Rajnish Kurchania
   Department of Physics, Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh, India.
   rkurchania@manit.ac.in, Phone (O) : 0755-4051595, 1591

Job Experience

3rd September 2018 to 30th September 2019 :	Dr. Z.H. (P.G.) College, Etah, affiliated to Dr. B. R. Ambedkar University, Agra, India.	Post: Assistant Professor
1st Jan 2020 to 31st May 2020:	Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh	Post: Assistant Professor (Temporary)

Education

Ph.D Title: Complex Oxides for Gas Sensing Application. 2018
(Department of Metallurgical Engineering and Materials Science,
Indian Institute of Technology, Bombay, India.)

M.Sc Physics, Special paper: Atomic and molecular spectroscopy, 2010
(Banaras Hindu University, Varanasi, India.)

Dissertation title: Preparation, characterization & optical properties of
Rare Earths (Er^{3+}/Yb^{3+}) codoped Y_2O_3 nano phosphor.

B.Sc Physics (Hons.), University of Calcutta, India. 2008

Awards/fellowships

- Graduate Aptitude Test in Engineering (GATE) (2010) All India Rank-302 (95th percentile)
- Crompton Greaves Research Fellowship awarded by IIT Bombay, July -2010
- IFCPAR Research fellowship for three months, France (2016).

Technical/ hands-on experience

- Pulsed laser ablation technique, DC sputtering, Radio frequency sputtering and Thermal evaporation (Teaching assistance of B.Tech and M.Tech Lab. & used in research purpose)
- Mask Aligner (SUSS Micro Tec), XRD (PANalytical), FTIR, TEM (CM200), Impedance spectroscopy (Novocontrol), Raman and UV-Vis spectroscopy (Duty as an operator for 2 yrs.)
- Language: FORTRAN 77 & 90; Labview.
- Built a homemade gas sensing setup for thin and thick films.

Internships/trainings

1. 3 Months as research student in CNRS Toulouse (CIRIMAT), France, May–July, 2016.
2. 3 Weeks in summer school, Goa organized by DST-SERC School on "Advanced Functional Magnetic Materials" February 3–21, 2014.

Conference presentations

1. Saptarshi De, Narayanan Venkataramani, Rajiv Dusane, Shiva Prasad, "Fast response of pulsed laser deposited $ZnFe_2O_4$ thin film as a chemo-resistive gas sensor", presented in IEEE sensors 2015 conference, 1-4 November, 2015, Busan, South Korea.
2. Saptarshi De, N.Venkataramani, Shiva Prasad, R.O.Dusane, "Reactive pulsed laser (KrF) deposition of textured thin film of Ta_2O_5 on amorphous quartz substrate by varying O_2 gas pressure", presented in International conference on materials science and technology 2012, 10-14 June, 2012, Kerala, India.

Peer viewed publications (from thesis)

1. Saptarshi De, N. Venkataramani, Shiva Prasad, R. O. Dusane, Lionel Presmanes, Y. Thimont, P. Tailhades, Valérie Baco-Carles, Corine Bonningue, T. P. Sumangala, Antoine Barnabé, "Ethanol and Hydrogen gas-sensing properties of CuO–$CuFe_2O_4$ nanostructured thin films", IEEE Sensors Journal, (I.F. 3.076), Volume: 18, Issue: 17, Sept.1, 2018, doi: 10.1109/JSEN.2018.2849330

Peer viewed publications (from thesis) (Under Review)

1. T. P. Sumangala, Saptarshi De, Mahender Chegonda, N. Venkataramani, Shiva Prasad, Lionel Presmanes, Y. Thimont, P. Tailhades, Valérie Baco-Carles, Corine Bonningue, Antoine Barnabé, "Comparison of Carbon di oxide sensing nature of various ferrites".

2. Saptarshi De, N. Venkataramani, R. O. Dusane, Shiva Prasad, "Chemo-resistive gas sensing properties of pulsed laser deposited $ZnFe_2O_4$ thin film and $ZnFe_2O_4$ nanopowder".

3. Saptarshi De, N. Venkataramani, R. O. Dusane, Shiva Prasad, "Estimation of depletion-width (due to gas adsorption) in polycrystalline metal oxides using in-situ impedance spectroscopy".

4. Saptarshi De, N. Venkataramani, Shiva Prasad, R. O. Dusane, Lionel Presmanes, Y. Thimont, P. Tailhades, Antoine Barnabé, "CuO-Copper ferrite composite thin film for CO_2 sensing".