

**Dr. MANOJ NAGERI**  
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**Assistant Professor**  
**Dept. Of Chemistry**  
**Sanatana Dharma College**  
**Alappuzha 3, Kerala, India-688003**

**Nageri Illam**  
**Pulpatta P.O. Manjeri,**  
**Malappuram, Kerala**  
**India-676 123.**

**EDUCATION**

**Ph. D. Chemistry** - May 2019  
University of Calicut

**M. Sc. Chemistry (Analytical Chemistry) - May 2009**  
M.G. University, Kottayam

**AWARDS and FELLOWSHIPS**

- CSIR - UGC - NET / JRF Fellowship - 2011
- College First in M.Sc. Analytical Chemistry - 2009
- Currently in charge of Consultant of Go- Organic, (A company producing Virgin coconut oil based products) Calicut.

**WORK EXPERIENCE**

Technical Assistant	: IISER, Thiruvananthapuram	2010 - 2011
Guest Faculty in Chemistry	: Govt. Women's Polytechnic College, Kozhikode	2018 – 2019
	: Govt. College, Malappuram	2019-2021

**RESEARCH EXPERIENCE**

Research Project Staff	: Nanomaterials Group, C-MET, Thrissur	2011- 2012
Ph. D. Research Fellow	: Nanomaterials Group, C-MET, Thrissur	2012 - 2018

**Ph. D. THESIS**

“Influence of Morphology and Surface Modifications on the Photocatalytic Activity of Titania-based Nanotube arrays”

**RESEARCH INTERESTS**

- Morphological and Defect related property variations in semi conductors and perovskites.
- Synthesis of nanomaterials having different morphology for (photo) Catalytic applications.

- Fabrication of novel heterojunctions for photocatalytic and sensor applications.
- Band-gap engineering of wide band-gap semiconductor oxides and ferroelectric materials.
- Fabrication of multi ferroic materials and modifications of wide band gap semiconductors for dilute magnetic semiconductors (DMS) and sensor applications.

### **HANDFUL EXPERIENCE IN**

- Preparation of semi conducting nano material and ferro electric materials through hydrothermal, anodisation and sol-gel methods.
- Characterisation study by using X-ray Diffractometer, UV Visible spectroscopy, X-ray photoelectron spectroscopy (XPS), Scanning electron microscopy, Raman Spectroscopy, Electron Paramagnetic Resonance Spectroscopy, Vibrating sample magnetometer, Photocatalytic characterisation through immersion type photo reactor.

### **HANDFUL EXPERIENCE IN OPERATION OF**

- Raman Microscope (Model-DXR, Thermo Scientific)
- TGA-DSC Analyser (Model-SDT Q600, TA Instruments)
- UV Visible Spectrometer (Model-JASCO-V-550, UV Vis Spectrometer)
- IR spectrometer (Model-Shimadzu, IR prestige 21)
- GCMS (Model-Shimadzu, QP 2010 plus)
- Zeta Potential- Particle Size Analyser (Model-NICOMP 380 ZLS)

### **JOURNAL PUBLICATIONS**

1. Titania nanotube arrays surface-modified with ZnO for enhanced photocatalytic applications, **Manoj Nageri**, Vijila Kalarivalappil, Baiju K Vijayan, V Kumar, Mater. Res. Bull. 77 (2016) 35-40
2. SnO<sub>2</sub>-loaded BaTiO<sub>3</sub> nanotube arrays: fabrication and visible light photocatalytic application, **Manoj Nageri**, A B Shalet, V Kumar, J. Mater. Sci: Mater. Electron. 28 (2017) 9770-9776
3. Manganese-doped BaTiO<sub>3</sub> nanotube arrays for enhanced visible light photocatalytic applications, **Manoj Nageri**, Viswanathan Kumar, Mater. Chem. Phys. 213 (2018) 400-405
4. Stability studies of PbS sensitised TiO<sub>2</sub> nanotube arrays for visible light photocatalytic applications by X-ray photoelectron spectroscopy (XPS), N B Rahna, Vijila Kalarivalappil, **Manoj Nageri**, Suresh C Pillai, Steven J Hinder, V Kumar,

- Baiju K Vijayan, Mater. Sci. Semicond. Process. 42 (2016) 303-310
5. Pd Loaded TiO<sub>2</sub> Nanotubes for the Effective Catalytic Reduction of p-Nitro phenol, Vijila Kalarivalappil, C M Divya, W Wunderlich, Suresh C Pillai, Steven J Hinder, **Manoj Nageri**, V Kumar, Baiju K Vijayan, Catal. Lett. 146 (2016) 474-482

### **PATENT**

1. Nano-Zinc oxide process of preparation and application thereof, **Nageri Manoj**, Kizhakkelikoodayil Vijayan Baiju, Viswanathan Kumar, file no-2348/DEL/2015, filing date-July 30, 2015, Granted on 25/11/2019
2. Large Scale production of Virgin coconut oil by Heat extraction procedure using white bell metal vessel, Dhanesh. T, Geetha N. T, **Manoj Nageri**, Patent filed on 05/05/2023, Application number 202341031964

### **CONFERENCE PRESENTATION**

1. Participated and presented a poster-in Indo-US, international work shop on Nano structured Electronic Materials: Challenges & Relevance to electronics & energy research-2013, March (IUSWNM-2013) conducted by C-MET Thrissur, Children's hospital Harvard USA, Northeastern University USA, Joint School of nanoscience & nanoengineering USA
2. Participated in the UGC sponsored graduate seminar on Advances in materials chemistry-December-2014 (AMC-2014) organized by the department of chemistry, university of Calicut
3. Participated and done oral presentation in National Seminar (Frontiers in chemical sciences FCS)- 2018, February conducted by Department of Chemistry, University of Calicut

### **REFEREES**

**1. Dr. Viswanathan Kumar**

**Senior Scientist**

Centre for Materials for Electronics Technology [C-MET]

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**2. Dr. Kizhakkelikoodayil Vijayan Baiju**

**Assistant Professor**

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**3. Dr. Suredran Parambadath**

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