
STEFAN JACKSON

RESEARCH EXPERIENCE

**1. Amity Institute of Nanotechnology, AUUP, Noida
(May 2016 – July 2016)**

Guide: Dr Utkarsh Jain (Assistant Professor, Amity Institute of Nanotechnology)

Project: *Synthesis of Silver Nanoparticles for Biological Sensing*

**2. Amity Institute of Nanotechnology, AUUP, Noida
(May 2017 – July 2017)**

Guide: Dr Jagriti Narang Malhotra (Assistant Professor, Amity Institute of Nanotechnology)

Project: *Synthesis of Palladium Nanoparticles and its Characterization*

RESEARCH INTERESTS

- Polymer Science
- Nanocomposite
- Nano Medicine
- Biosensor
- Drug Delivery
- Lab-on-chip
- Nanoparticle Synthesis
- Tissue Engineering
- Stem Cells
- Self-healing
- Nano Cellulose
- Edible Coating
- Semi-conductors
- Quantum Dots
- Nano Packaging
- Conductive Materials

**3. IIUCNN, Mahatma Gandhi University, Kottayam
(February 2018 – April 2018)**

Guide: Dr Sabu Thomas (PhD, FRSC, CChem – Founder Director IIUCNN)

Project: *Effects of Carbon Black as a filler on the mechanical properties and morphological analysis of Poly Lactic Acid Composites*

**4. IIUCNN, Mahatma Gandhi University, Kottayam
(February 2018 – June 2018)**

Guide: Dr Sabu Thomas (PhD, FRSC, CChem – Founder Director IIUCNN)

Project: *Effects of Multi-Walled Carbon NanoTubes on Carbon Black filled composites for structural applications*

SKILLS

Technical Skills

- X- Ray Diffraction (XRD)
- U-V Visible Spectroscopy
- Dynamic Light Scattering (DLS)
- Atomic Force Microscopy (AFM)
- Scanning Electron Microscopy
- Tunneling Electron Microscopy
- UTM
- Compression Moulding
- Two Roll Mill
- Haake Mixer
- Plasma Etching
- Thermal Evaporation

Computer Skills

- MS Office
- Icecrem
- Matlab
- VHDL
- Z View
- Origin
- Parrot
- Horizon

5. IIUCNN, Mahatma Gandhi University, Kottayam (March 2018 – May 2018)

Guide: Dr Sabu Thomas (PhD, FRSC, CChem – Founder
Director IIUCNN)

Project: *Diffusion Studies of aromatic solvents through rubber membranes*

6. IIUCNN, Mahatma Gandhi University, Kottayam (May 2018 – June 2018)

Guide: Dr Sabu Thomas (PhD, FRSC, CChem – Founder
Director IIUCNN)

Project: *Separation of organic – organic mixtures by pervaporation through NR/BR rubber blends*

7. IIUCNN, Mahatma Gandhi University, Kottayam (February 2019 – May 2019)

Guide: Dr Sabu Thomas (PhD, FRSC, CChem – Founder
Director IIUCNN)
Co- Guide: Dr Joshy K. S (Post.Doc)

Project: *Synthesis, characterization and in vitro/ in vivo studies on hybrid nano system for non-toxic and anti-bacterial edible coating*

PUBLICATIONS

1. Kaliyathan AV, Rane AV, Jackson S, Thomas S. **Analysis of diffusion characteristics for aromatic solvents through carbon black filled natural rubber/butadiene rubber blends.** *Polymer Composites.* 2020;1–22.
<https://doi.org/10.1002/pc.25832>
2. Joshy K.S, Stefan Jackson, Iswarya Satian, Hong Chi**
“Polyionenes as anti-microbial agents.” *Holistic and Integrated approach to life style disease.* Apple academic press.
<https://www.appleacademicpress.com/a-holistic-and-integrated-approach-to-lifestyle-diseases-/9781774630143>

LANGUAGE PROFICIENCY

- **English**
(IELTS Score -8)
- **Hindi**
- **Malayalam**
(Native Language)
- **German**

REFEREES

Prof. Dr. Sabu Thomas
(PhD FRSC CChem)

(Vice Chancellor,
M.G University, Kottayam,
Kerala.

Email ID:
sabuthomas@mgu.ac.in)

Dr. Ashish
Mathur

(Assistant Professor,
Amity Institute of
Nanotechnology,
Noida

Email ID:
amathur@amity.edu)

Dr. Jagriti Narang
Malhotra

(Assistant Professor, Jamia
Hamdard University,
New Delhi

Email ID:
jagritinarang@jamihamda rd.ac.in)

EDUCATION

**Amity Institute of Nanotechnology, Amity University -
Noida,India**
B. Tech + M. Tech Nanotechnology
7.17 GPA (First Division)

The King's School – Kollam, Kerala, India
AS and A Levels (Cambridge University)
IGCSE (Cambridge University)

SEMINAR DELIVERED

Self – Assembled Monolayers (SAMs) –
IIUCNN, M.G University, Kottayam, Kerala

CONFERENCES & WORKSHOPS ATTENDED

1. **Euro-India International Conference on Experimental and Clinical Medicine (ICECM) 2017**, IIUCNN, M.GUniversity, Kottayam, Kerala.
2. **International Conference on Recycling and Reuse of Materials (ICRM) 2018**, M.G University, Kottayam, Kerala.
3. **National Seminar on Current Trends in Material Science (CTMS -2019)** by *Advanced Molecular Materials Research Centre (AMMRC)*, M.G University, Kottayam, Kerala.
4. **International Workshop on Advanced Polymeric Systems**, 2019, M.GUniversity, Kottayam, Kerala

MAJOR COURSES UNDERGONE

- Applied Chemistry, Applied Physics and Applied Maths
- Chemistry for Nanomaterials; Interfacial Nanochemistry
- Methods of Synthesis of Nanomaterials; Functionalization of Nanomaterials
- Polymer Science; Nanocomposites; Biological Nanocomposites
- Basic Material Science; Biophysics
- Characterization Techniques; Quantum Concept of Nanostructures
- Bioscience for Nanotechnology; Bionanoscience; Basic Bioanalytical Techniques; Bionanotechnology and Advanced Bionanoscience
- Introduction to Liquid Crystals; Thin Film Technology and MEMS
- Basic Electronics; Advanced Electronics and Instrumentation; Nano Electronics
- Molecular Nanotechnology in Organic Electronics
- Fundamentals of Semiconductor Devices and Applications
- Processing Techniques of MEMS and NEMS
- Sensors and Nanosensors; Nano Sensors in Agriculture and Food Industry
- Low Dimensional Semiconductor : Fundamentals
- Nanoscale Technology; Micro Fluidic Devices
- Properties of Nanomaterials and Applications; Industrial Applications of Nano-Sized Materials
- Nanomaterials in Agriculture; Nanomaterials in Food;
- Nanoparticles and Micro Organisms; Nanotoxicology and Environment
- Nanomaterials in Medicine; Nanomaterials in Drug Delivery and Analytics
- Nanostructured Surfaces for Photocatalytic Applications; Nanophosphors and Applications
- Scientific Data Analysis Techniques in Nanotechnology
- Programming in C; Basic Simulation Lab; Technical Project Management

DECLARATION

I, hereby declare that the above mentioned information are true to the best of my knowledge.

STEFAN JACKSON