Naseeh Backer Kannanthodi

Confident student researcher with commitment to excellence and background in conductive polymers based on carbon nanomaterials. Effective collaborator with great critical thinking and experimental skills. Proven history of detail-oriented and accurate work.

Education

2021-09 – 2024-07

MS Nanotechnology Engineering

Sapienza University of Rome - Rome, Italy

Grade: 109/110

2016-07 - 2020-05

BTech Engineering Physics

National Institute of Technology (NIT) Calicut - Calicut, India

GPA: 7.58/10

Work History

Graduate Student Researcher

Sapienza University of Rome, Rome

- Research in the field of **thermal conductivity modeling of GNP/Polymer nanocomposites**.
- Thermal conductivity model based on Maxwell Garnett formula was developed and its experimental verification.
- Complexities regarding the irregular shapes of graphene flakes were solved.
- Performed further research to introduce the simulated material composition into the field of thermoelectric materials.

Undergraduate Student Researcher

National Institute of Technology Calicut, Calicut

- Thesis study on "**Confocal Raman Study of Low Temperature Grown CVD Diamond**".
- Performed characterization techniques on Low temperature grown nano-diamond films which

Skills

Skilled in [Python, Matlab, R Programming, Arduino, TCAD, Microsoft Excel, Microsoft Powerpoint, Origin Pro, Tinkercad]

Written and interpersonal communication

Academic and online research

Team work

Critical Thinking

Lab result interpretation

Nanomaterials expertise

are synthesized using the technique LA MW CVD.
- The quality of diamond film was analyzed using peak analysis of Raman spectroscopy.
- Performed research into study topics to increase knowledge and to provide valuable contributions.
- Synthesized data and wrote detailed reports to present research findings.

Undergraduate Research Student

National Institute of Technology Calicut, Calicut

- The bandgap of ZnS was calculated by performing **absorption spectroscopy** on the material.
- Using UV-Visible spectrophotometer with standard light source made of a deuterium arc of wavelength (190–330 nm).

Class Seminar Speaker

Sapienza University of Rome, Rome

- Presentation about noval technologies in the field of **vacuum science**.
- Discussed the importance of vacuum technology in the field of microscopy.

Class Seminar Speaker

National Institute Of Technology Calicut, Calicut

- Presentation about photolithography technology and its techniques.
- Attended meetings and presentations to learn more about photolithography.
- Researched material extensively before writing informative speeches.

Certifications

Participant and organizing staff, Nanoinnovation 09/2022, 09/2023

Successfully participated and was part organizing staff of nanoinnovation 2022,2023: A flagship event for innovation and technological development held at Faculty of Civil and Industrial Engineering - Sapienza University of Rome.

Nanofabrication laboratory

Photolithography

Languages

English — Advanced

Italian — Elementary

Arabic — Intermediate

Malayalam (Mother tongue) — Advanced

Hindi — Upper intermediate

Achievements

All India Rank: 1779 (**GATE** 2021 Physics)

GATE 2021
Secured an all-India rank of 1799 for the physics paper of Graduate Aptitude Test in Engineering (GATE).

Nanotechnology: a maker's course, 05/2021
Successfully completed an online non-credit course authorized by Duke University, North Carolina State University and The University of North Carolina at Chapel Hill and offered through Coursera.

TOEFL iBT, 11/2020
Secured a score of 94 out of 120.

Python data structures, 07/2020 - 09/2020
Certified from University of Michigan by completing Python data structures course from Coursera.

Learning How to Learn: Powerful mental tools to help you master tough subjects, 08/2020
Successfully completed an online non-credit course authorized by Deep Teaching Solutions and offered through Coursera for developing studying and teaching skills.

Short Term Course on Statistical Techniques using R software, 12/2019
Completed Short Term Course on Statistical Techniques using R software from NIT Hamirpur.

Interests

Teaching

Reading

Football

Social Service

References

Alessandro Giuseppe D'Aloia, PhD
Sapienza Università di Roma Dipartimento di Ingegneria Astronautica, Elettrica ed Energetica (DIAEE)
Centro Ricerca sulle Nanotecnologie applicate all'Ingegneria (CNIS)

Dr. Maneesh Chandran,
Assistant Professor, Department of Physics, National Institute of Technology Calicut