



# Mohammad Ansar Vakkattil

## PROFESSIONAL EXPERIENCES

● 2023 May - 2024 May

### Researcher

Institute for Ecopreneurship | School of Life Sciences | University of Applied Sciences and Arts Northwestern Switzerland | 3D Bioprinting for Bioremediation applications.

*Highlights:* Bioremediation | Bioprinting | Polymer synthesis | Photo polymers | RegenHU 3D Discovery.

● 2021 Oct - 2022 May

### Additive Manufacturing Specialist

Intelligent Materials System Laboratory | Tartu Institute of Technology | University of Tartu, Estonia | 3D Printing of Artificial Muscles

*Highlights:* Intelligent Materials | 3D Printing of Smart Textiles | Freeform Reversible Embedding | Cellulose | Conducting polymer | Smart textiles | 3D Printing | Prusa | Anisoprint | Solid works | Ionic liquid | Actuators | Grant writing and project preparation-EU Project.

● 2018 Nov - 2021 July

### Senior Project Engineer

Division of Polymeric Medical Devices | Biomedical Technology Wing, Sree Chithra Tirunal Institute for Medical Science and Technology | Parylene Coating for Implantable Medical Devices (Chemical Vapour Deposition Polymerisation of Parylene) | 3D Printing for cranioplasty.

*Highlights:* Medical Devices | Biopolymer | Biomaterial | Olivetti | FDM | FFF | SLA | 3D Bioprinting | Cytotoxicity | Hemocompatibility | Cranioplasty | Extruder | Brabender | Electrospinning | Ceramic nanoparticles

## EDUCATION

● 2018 - June

### Master of Technology (M Tech)


Rubber Technology  
Rubber Technology Centre,  
Indian Institute of Technology Kharagpur, India  
CGPA - 8.02/10


● 2016 - June


### Bachelor of Technology (BTech)

Polymer Science & Engineering  
Cochin University of Science and Technology (CUSAT),  
Kochi, India.  
CGPA - 7.23/10

 +919847407485

 ansarmohammad5@gmail.com/

 <https://www.linkedin.com/in/mohammad-ansar-05/>

 Birsfelderstrasse 3, Muttenz, Switzerland 4132

**Nationality:** Indian

**Work Authorisation:**

Swiss permit B holder (eligible to work in Switzerland)

## OTHER EXPERTISE

● 2017 June - 2018 March

### Master Thesis

Synthesis and Characterization of Castor oil Extended Epoxidised Natural Rubber | Indian Rubber Manufacturers Association (IRMRA), Mumbai & Indian Institute of Technology, Kharagpur, India.

*Highlights:* Epoxidised Natural Rubber | Natural Rubber | Rubber Modification | Rubber Compounding | FTIR | DSC | TGA | NMR | UTM | DMA | RPA | Mooney Viscometer | DIN | Origin.

● 2015 Dec - 2016 March

### Bachelor Thesis

Effects of Various Grades of SBR on Properties of Tire Tread Compounds | Hari Shankar Singhania Elastomer and Tire Research Institute, Rajasthan, India.

*Highlights:* Rubber | Formulation Rubber Compounding | SSBR | Liquid | Moulding | Rheology | RPA | DMA | UTM.

● 2014 Dec - 2015 Jan

### Training in Rubber Technology

Department of Training, Rubber Training Institute, Indian Rubber Board, India.

*Highlights:* Polymer Processing | Compounding | Testing.

● 2014 Apr

### Bachelor's Mini Project

Effects of Cure Time on Mechanical Properties of Latex Film | Department of Polymer Science and Rubber Technology, CUSAT, Kochi, India.

*Highlights:* Latex Compounding | UTM.

## RESEARCH OUTPUT

● 2022

Murali, Athira, Mohammad Ansar Vakkatil, and Ramesh Parameswaran. "Investigating the Effects of Processing Parameters on Mechanical Behaviour of 3D Fused Deposition Modelling Printed Polylactic Acid." *Journal of Material Engineering and Performance* (2022): 1-14.

*Highlights:* FDM | 3D Printing | Cura Slicer | UTM.

● 2021 May

**Poster Presentation | Parylene Coating for Biomedical Applications.**  
Advances in Polymer Technology | Department of Polymer Science and Rubber Technology, CUSAT

*Highlights:* Medical Devices | Biomaterials | CVD | Nanocoating

● 2018 Jan ,18 (Rubber Day)

**Poster Presentation | Synthesis and Characterization of Castor Oil Extended Epoxidised Natural Rubber**

Indian Rubber Manufacturers Research Association (IRMRA), Mumbai, India.

## RESEARCH SUPERVISION

● 2017 Dec - 2018 Mar

**Two Bachelor's Research Supervision | Four Supervisees**

1. Study of Effect of Epoxidised Natural Rubber as Compatibilizer and Coupling Agent in Silica Filled NR/NBR Blend, Supervisees Chandhini VC & Siddharth AK.
2. Synthesis and Characterization of Rice Husk Silica Filled Epoxidised Natural Rubber, Supervisees-Muhzin M & Aiswarya Ramachandran.  
Principle Supervisor Suchismita Sahoo, assistant Director IRMRA, India.

## TEACHING MERITS

● 2017 Dec - 2021 Jan

**Freelance Teacher of GATE Polymer Science**

● 2018 Sep - 2021 Jan

**Teaching Material Development**

Study Material for GATE Polymer Science Available at :

**Google Books:-**

[https://books.google.co.in/books/about/GATE\\_2019\\_XE\\_Polymer\\_Science.html?hl=de&id=XZ-5zAEACAAJ&redir\\_esc=y](https://books.google.co.in/books/about/GATE_2019_XE_Polymer_Science.html?hl=de&id=XZ-5zAEACAAJ&redir_esc=y)

**Amazon:-**

[https://www.amazon.in/Mohammad-Ansar/e/B07L5BKZS7/ref=auis\\_qp\\_mata\\_dskcience.html?hl=de&id=XZ-5zAEACAAJ&redir\\_esc=y](https://www.amazon.in/Mohammad-Ansar/e/B07L5BKZS7/ref=auis_qp_mata_dskcience.html?hl=de&id=XZ-5zAEACAAJ&redir_esc=y)

## AWARDS & HONORS

● 2016 Jul - 2018 May

**Gate Scholarship Masters Scholarship**

● 2017

**Brand D Management Competition Runner UP Spring fest IIT Kharagpur**

● 2018

**GATE All India Rank 32 Polymer Science and Material Science**

## OTHER MERITS

### Internships

- 2017 - Gold Seal ( Rubber Door Seal and Weather Strips Manufacturer), Gujarat, India.
- 2017 - Oriental Rubbers ( Conveyor Belt Manufacturer), Pune, India
- 2016 - CEAT Tyre, Mumbai
- 2015 - JK Tyre, Rajasthan
- 2015 - VKC Polymers ( Footwear Manufacturer ), Calicut, India.
- 2014 - Shakhthiman PVC Pipes
- 2014 - Lyka Plastics
- 2014 - Vajra Rubbers

## REFERENCES

1. Prof. Dr. Philippe Corvini | Research Supervisor | School of Life Sciences | University of Applied Sciences and Arts Northwestern Switzerland | [philippe.corvini@fhnw.ch](mailto:philippe.corvini@fhnw.ch)
2. Dr. Boris Kolvenbach | Research Supervisor | School of Life Sciences | University of Applied Sciences and Arts Northwestern Switzerland | [boris.kolvenbach@fhnw.ch](mailto:boris.kolvenbach@fhnw.ch)
3. Alvo Aabloo | Research Supervisor | Tartu Institute of Technology | University of Tartu Estonia | [alvo.aabloo@ut.ee](mailto:alvo.aabloo@ut.ee)