# **Faculty Profile**



Mr. A.S. SHAGUL, M.TECH.,(Ph.D)
Assistant Professor - MECH

#### **HIGHLIGHTS:**

• Number of Journal Publications: 4 Awaiting

• H-Index: 0

• Project Funding Received: 0

Patents Published: 5Patents Granted: 0

## **PROFESSIONAL LINKS:**

• Anna University Faculty ID: 278039

• AICTE Faculty ID: 1-9467145122

• LinkedIn: <a href="https://www.linkedin.com/in/shagul27/">https://www.linkedin.com/in/shagul27/</a>

#### PROFESSIONAL BACKGROUND:

• Teaching Experience till date: 3 Years

• Industrial Experience: Nil

#### AREA OF SPECIALIZATION:

• Additive Manufacturing

• CAD Software – Fusion 360

Materials characterization

• Engineering Mechanics

Product Development

#### NPTEL COURSE CERTIFICATION

- ADVANCED MANUFACTURING PROCESS (12 WEEKS)
- Metal Additive Manufacturing (12 WEEKS)
- 3D Printing and Design for Educators (12 WEEKS)

#### **BOOK PUBLISHED**

• **BOOK NAME:** POLYMER ADDITIVE MANUFACTURING: INNOVATIONS, APPLICATIONS, AND FUTURE DIRECTIONS

ISBN: 978-1-300-40605-1

# **BOOK CHAPTER (SCOPUS INDEXED)**

Nano Materials – Springer Book Chapter

## PAPER SUBMITTED TO JOURNAL (scopus under review)

- 1. Enhancing Impact Strength of FDM-Printed PLA through Taguchi Method Optimization.
- 2. Optimizing Fused Deposition Modeling (FDM) Parameters to Improve the Impact Resistance of Nano Calcium Carbonate-Coated Polylactic Acid (PLA) Components.
- 3. Performance analysis of modern EV Batteries: Efficiency, Longevity, and Future Innovations.
- 4. Advancements in Fused Deposition Modeling: Materials, Processes, and Emerging Trends in Polymer Additive Manufacturing.

## **IEEE - CONFERENCE PAPER**

1. Cyber Bullying Detection using Deep Learning and Natural language processing Paper published at 5th International Conference on IoT based control networks and intelligent systems.

## **ATAL - Faculty Development Programme**

- 1. Electric Vehicles: Technological Innovations and Market Trends at SAVEETHA ENGINEERING COLLEGE from 02/12/2024 to 07/12/2024.
- 2. AI DRIVEN PREDICTIVE ANALYTICS AND DECISION MAKING IN MANUFACTURING SUPPLY CHAIN at RAJALAKSHMI ENGINEERING COLLEGE from 27/01/2025 to 01/02/2025.

#### **Patents**

• Patent Name: BIOMIMETIC SWARM INTELLIGENCE FOR AUTONOMOUS

# CYBERSECURITY MESH NETWORKS. STATUS:PUBLISHED DATE:05/07/2024 APPLICATION NO:202441050314

• Patent Name: MALARIA INFECTED RED BLOOD CELLS USING IMAGE PROCESSING AND MACHINE LEARNING.

*STATUS: PUBLISHED DATE:05/07/2024* **APPLICATION NO**:202441048275

• Patent Name: SELF- ADAPTIVE WIND TURBINE BLADE DESIGN WITH MORPHING TRAILING EDGE FOR ENHANCED ENERGY CAPTURE.

**STATUS:** PUBLISHED DATE:19/07/2024 **APPLICATION NO**: 202441052750 A

• Patent Name: MACHINE LEARNING ALGORITHMS FOR ADAPTIVE CONSENSUS MECHANISMS IN BLOCKCHAIN NETWORKS.

**STATUS:** PUBLISHED DATE:19/07/2024 **APPLICATION NO**: 202441052750 A.

• Design - Patent Name: INFRARED PROJECTOR FOR VEIN DETECTION.

STATUS: PUBLISHED DATE:11/02/2025

**APPLICATION NO**: 436455-001