Faculty Profile

Mr. R. Prakash, M.E., M.B.A (PhD)
Assistant professor (OG)

HIGHLIGHTS:

- Number of Journal Publications: 8
- H-Index: 2
- Project Funding Received: Nil
- Patents Published: 2
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: 57940559100
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=57940559100
- Google Scholar ID: https://scholar.google.com/citations?user=RwQyHfQAAAAJ&hl=en
- Anna University Faculty ID: 267080
- AICTE Faculty ID: 1-2666757272
- Anna University Supervisor ID: NA
- LinkedIn: https://www.linkedin.com/in/prakash-ranganathan-529150ab/

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 12 yrs
- Industrial Experience: 7 yrs

INTERNATIONAL EXPOSURE: Nil

AREA OF SPECIALIZATION:

- Thermal Engineering
- Renewable energy
- Solar energy
- Heat and Mass transfer

Ph.Ds AWARDED WITH DETAILS:

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time
-	-	-	-	-
-	-	-	-	-

Ph.Ds GUIDING:

- **Full Time Scholars:** Nil
- **Part Time Scholars :** Nil

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY: Nil

PAPERS PUBLISHED

- R.Prakash., Arulmurugan Gnanasekaran., Marimuthu Rengasamy., Kamatchi Rajaraman. (2024) A review on recent developments in natural convective solar dryer for agricultural products: Methods, collector design, influencing factors, performance and challenges Manuscript ID:RSER-D-24-02944, *Renewable and sustainable energy reviews* ***(accepted)***

- Gnanasekaran, A., Paul, J., Rengasamy, M., Prakash, R., Lakshmanan, R., Nasinathan, R., ... & Rajaram, K. (2025). Perovskite structured LaCoO3 photothermal material decorated nanocellulose aerogel for efficient interfacial solar steam generation. *Results in Engineering*, 104373.

- R. Shenbagapandyian., E.Shankar., C.Devanathan., R.Prakash (2024) Effect of infill parameters on mechanical properties of poly lactic acid material in 3D printing: A review. In *Taylor and Francis book chapter,28*, pg. 170-75.

- Selvam R., Prakash R., Ilakkiya T., Joji Thomas., Devanathan C. Synthesis and photo-physical investigations of nani SiC particulate reinforced material for binder jet3D printing. In *Taylor and Francis book chapter,31*, pg. 185-791.

- Devanathan, C., Venkateshwaran, N., Shankar, E., Ajin, M., Vijay, G., & Prakash, R. (2024). Non-Traditional Machining of High Carbon High Chromium Steel and Optimization of Process Parameters. *International Journal of Vehicle Structures & Systems*, *16*(2), 161-163

- Prakash, R., & Kamatchi, R. (2024). Natural convective solar dryer powered by stepped fin plate integrated trough array solar air heater for agricultural produce preservations. *Solar Energy*, *271*, 112415

- Prakash, R., Kamatchi, R., Selvam, R., & Devanathan, C. (2023, May). Turbulent natural convection heat transfer enhancement of nanofluids. In *Journal of Physics: Conference Series* (Vol. 2484, No. 1, p. 012035). IOP Publishing.

- Prakash, R., & Kamatchi, R. (2023). Design, fabrication and investigations of natural convection step serrated fin plate integrated trough array low-cost collector for solar air heating: An application to agricultural crop drying. *Solar Energy*, *254*, 42-53.

- Selvam, R. and Babu Loganathan, Ganesh and Thomas, Joji and Prakash, R. and Karthikeyan, T. and Maridurai, T. (2022) *Analysis of a Cashew Shell and Fly Ash*

Rich Brake Liner Composite Material. Fluid Dynamics & Materials Processing, 19 (3). pp. 569-577

- Arunkumar S, Prakash R, Jeeva N, Muthu M, Nivas B. Boiler blowdown heat recovery. *IOSR Journal of Mechanical and Civil Engineering (IOSRJMCE)*. 2014;11:83-5.

PATENTS PUBLISHED/GRANTED:

- Patent titled "TROUGH STEP SERRATED FIN SOLAR DRYER" bearing Design Registration number: 378449-001 Dated:02/02/2023, Issued on 25/01/2024.
- Patent titled "Cashew shell fly ash rich brake liner" bearing application number 202141062320 A dated 31/12/2021, Published 04/02/2022.

COURSES CERTIFIED:

1. MATLAB Fundamentals from Mathwork Inc Dec2022
2. Programming for everybody (Getting started with python) from Coursera, Jul 2022
3. "Solar energy" from DelftX, edX.org Sep 2021
4. Data Visualization with Power BI from Great Learning sept 2023.
5. Fusion 360 from Autodesk Mar 2022
6. Generative AI from Linkedin Learning

ACHIEVEMENTS AND AWARDS:

- Anna university rank 11th in Post-graduation - M.E Thermal Engineering
- Madras University Rank 10th in Under Graduation - B.E Mechanical Engineering

SPECIAL SESSIONS DELIVERED: Nil

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

Conferences

- Presented a paper titled "Design of pressure vessel using friction stir welding in ICIMED conference 2023, at Saveetha Engineering college.
- Presented a paper titled "Turbulent Natural convection Heat transfer Enhancement of Nanofluids in ICMMT conference 2022, at Sushila Devi Bansal college of Technology, Indore.
- Presented paper "Performance Enhancement of Dual Mode Solar Energy Drier" at "AIMS' National Conference 2015" by C.Abdul Hakeem college of Engineering and Technology (Anna University Affiliated).
- Workshop on Assessment Curriculum syllabus Development-Autonomous organized by Department of Mechanical Engineering, Saveetha Engineering College at ECR.
- One Day National Workshop on Economics of Power Generation Technologies organized by Department of Thermal and Energy Engineering, 2019, VIT Vellore

FDP's

- FDP (one week) in Machine learning for Mechanical Engineers from CVR college of Engineering, Dec 2023.
- FDP (online5 days) in Recent Innovations and Development in Energy technologies (RIDET), Jan 2022. From Velammal Engineering college association with IIC, IEDC.

- FDP (virtual 7 days) on Manufacturing Processes SAEINDIA & SAIRAM Engineering College, Aug 2021.
- FDP(online 7 days) on Unconventional Machining Process SAE & ISTE sponsored REC July-Aug 2021.
- FDP(online 5 days) on Inculcating Universal Human value in Technical Education by AICTE July 2021
- FDP on Introduction to soft computing REC June 2020.
- FDP on Applications of Thermal Engineering, Kings Engineering college, June 2020.
- FDP on online Teaching Learning processes using ICT tools for Education 4.0 SVPCET Nagpur June2020.
- FDP101X (IIT Bombay) April 2018.
- FDP in Engineering Mechanics (SEC) Dec2017.
- FDP in Engineering graphics (SEC) Aug2017.
- FDP in Engineering Mechanics(REC-AU) Jan 2016.
- FDP workshop Engineering Graphics (SEC-AU) Aug 2015.

PROFESSIONAL MEMBERSHIPS:

- IAENG membership

OTHER DETAILS (If any):

- Worked as Process planning Engineer in Hindustan motors
- Production lead in Greaves Ltd., A Same/Crompton Greaves conglomerate