

RESUME

Dr. K. ARSHAD AHMED, M.E., Ph.D.,



II DETAILS II

#8 14th Street,

G4 Soundarya
Apartments,

Nanganallur,

Chennai – 600 061,
India.

+91 94456 89169

arshu1074@gmail.com

DATE OF BIRTH

15-11-1993

II SKILLS II

Research &
development

Strategic planning

Supervision & training

Decision making

II LANGUAGES II

English (R/S/W)

Hindi (R/S/W)

Tamil (R/S/W)

II HOBBIES II

Playing cricket

Listening to music

OBJECTIVE

To be a striving faculty to develop interest among the students to make them curious and enthusiastic which provides job satisfaction and self-development for achieving personal as well as organizational goals.

EDUCATIONAL CREDENTIALS

COURSE	INSTITUTION	% (or) CGPA	YEAR OF PASSING
Ph.D. , specialized in Concentrated Solar Thermal technology & Solar thermal CFD analysis under <i>Faculty of Mechanical Engg.</i>	College of Engineering Guindy campus, Anna University, Chennai – 25.	November 2020	
M.E., Energy Engineering	College of Engineering Guindy campus, Anna University, Chennai –	8.34 CGPA	2017
B.E., Mechanical Engineering	University College of Engineering, Arni, (A constituent college of Anna University, Chennai	7.68 CGPA	2015
Higher secondary	Prince Matriculation Higher Secondary school	89.90%	2011
Matriculation	Prince Matriculation Higher Secondary school.	85.80%	2009

SOFTWARE SKILLS

- AUTO CAD, Pro – E, ANSYS CFD – Fluent, tonatiuh ray tracer, Tracepro & Design builder.

AREA OF INTEREST

- Concentrated solar thermal technologies
- Numerical CFD modelling
- Heat Transfer
- Engineering thermodynamics
- Computational fluid dynamics
- Energy auditing

PROJECTS & RESEARCH

U.G. MAIN PROJECT

TITLE: Optimization of process parameters in titanium alloy by using genetic algorithm.

- ❖ The main objective of this project is to find the process parameters which influence the titanium alloy
- ❖ Machining was carried out with the help of insert and the influential factors are been measured for optimization

U.G. MINI PROJECT

TITLE: Design and fabrication of concave blade wind turbine.

- ❖ The main objective of this project is to design and fabricate a small prototype of wind turbine
- ❖ The designed wind turbine generated power (3V – 5V) for the lighting of an LED

P.G. MAIN PROJECT

TITLE: Thermal performance enhancement in a nano coated heat sink

- ❖ The main objective of this project is to augment the rate of heat transfer in the fins by applying nano coating
- ❖ The nano coating applied improves the thermal performance of the heat sink with increased rate of heat transfer

Ph.D., DISSERTATION

TITLE: Numerical and experimental investigation on a parabolic trough receiver tube with toroidal rings for improved thermal performance

- ❖ To analyze numerically and experimentally investigate the best cases of the toroidal ring absorber tube with various performance parameters under the optimal flow condition in a lab scale SPTC system using demineralized water as heat transfer fluid
- ❖ To evaluate the cost of heat gain produced for all the experimentally investigated absorber tube cases

RESEARCH PUBLICATIONS

1. R Arularasan, K Sivasakthivel, M Alagesan, R Anand, **K Arshad Ahmed**, S Vimalan, Optimization of Process Parameters in Titanium Alloy by Using Genetic Algorithm, International Journal of Research in Aeronautical and Mechanical Engineering, Vol. 3, (2015), issue 4.
2. **K. Arshad Ahmed**, E. Natarajan, Thermal performance enhancement in a parabolic trough receiver tube with internal toroidal rings: A numerical investigation, Applied Thermal Engineering, 162 (2019) 114224. [*Impact factor : 4.02*]
3. **K. Arshad Ahmed**, E. Natarajan, Numerical investigation on the effect of toroidal rings in a parabolic trough receiver with the operation of gases: An Energy and Exergy analysis, Energy, 203 (2020) 117880. [*Impact factor : 6.08*]
4. **K. Arshad Ahmed**, J. Prasanna Naveen Kumar, A. Shyam, E. Natarajan, S. Iniyan, Ranko Goic, Experimental investigation on a solar parabolic trough receiver tube enhanced by toroidal rings, Int. J Energy Research, (2022); 46 : 6637–6653.
[*Impact factor : 5.164*]

TEACHING & RESEARCH EXPERIENCE

Sn	Period	Organization	Designation	Status/Subjects handled
1.	NOV 2020 to Till Date	Institute for Energy Studies, Dept. of Mechanical Engg., CEG Campus, Anna University, Chennai – 25.	Teaching Fellow	• ME7602 Heat & Mass Transfer & ME5651 Heat & Mass Transfer • ME5301 Engineering Thermodynamics • EY5155 Thermodynamic Analysis of Energy Systems • EY5251 Computational Fluid Dynamics for Energy Systems • SY5112, EY5212 Analysis & Simulation Laboratory
2.	JULY 2017 to OCT 2020	Institute for Energy Studies, College of Engineering Guindy campus, Anna University, Chennai – 25.	Research Scholar (FULL TIME) & ACRF fellow	Ph.D., Thesis Submitted
3.	SEP 18 to DEC 18	Dept. of Mechanical Engg., College of Engineering Guindy campus, Anna University, Chennai – 25.	Guest Faculty	EY 7153 – Thermodynamic Analysis of Energy Systems & EY 7111 – Energy laboratory
4.	JAN 19 to MAY 19	Dept. of Mechanical Engg., College of Engineering Guindy campus, Anna University, Chennai – 25.	Guest Faculty	EY 7008 – Solar Energy Technologies & EY 7211 – Analysis and Simulation Lab for Energy Engineering
5.	JUNE 2019 to DEC 2019	Dept. of Mechanical Engg., College of Engineering Guindy campus, Anna University, Chennai – 25.	Guest Faculty	EY 7153 – Thermodynamic Analysis of Energy Systems & EY 7111 – Energy laboratory

6.	JAN 2020 to JUNE 2020	Dept. of Mechanical Engg., College of Engineering Guindy campus, Anna University, Chennai – 25.	Guest Faculty	EY 7008 – Solar Energy Technologies & EY 7211 – Analysis and Simulation Lab for Energy Engineering
7.	JUNE 2019 to DEC 2019	Dept. of Mechanical Engg., College of Engineering Guindy campus, Anna University, Chennai – 25.	Guest Faculty	EY 7074 – Energy forecasting modeling and project management

SEMINAR LECTURE DELIVERED

Sn	Program Title	Organization	Date	Sponsoring agency
1.	Awareness & Training Programme on Solar and other Renewable Energy technologies	MNM Jain Engg. College, Chennai.	20.02.2019	AU, Chennai (Under UGC XII plan)
2.	Awareness & Training Programme on Solar and other Renewable Energy technologies	Mohamed Sathak AJ College of Engg., Chennai.	12.03.2019	AU, Chennai (Under UGC XII plan)

INDUSTRIAL VISIT AND INPLANT TRAINING

ORGANISATION	TRAINING AREA	SKILLS LEARNT & PRACTICED
Chennai Port trust	Fundamentals of Locos and engine maintenance	IC engine start & stop, LOCO operation & ship engine maintenance
National Institute of Wind Energy	Wind data collection and small scale wind turbine	Energy conversion and data analysis
Ennore Thermal Power plant	Power generation with steam turbine	Various system functioning & Waste heat recovery
Innowell India Pvt. Ltd.	Energy auditing	Green building and energy conservation

NLC India Ltd.	Concentrated solar thermal technology	Solar collector structure erection & heat transfer phenomena in Lignite drying
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EXTRA CURRICULAR ACTIVITIES

- Annual event organizer for the all programs at school and college level.
- Held the position of Joint Secretary for Mechanical Engineering Association during under graduate course.
- Participated in various NSS events.
- Active blood donor.

CONSULTANCY PROJECTS

Sn	Project Title	Funding Agency	Role	Status
1.	Third party inspection report of mini incinerator plant installed under solid waste management in chitlapakkam town panchayat	Chitlapakkam Town Panchayat, Govt. of Tamilnadu.	Project team member	Report submitted & Completed
2.	Report on the DPR for installing 2 x 50 TPD MSW based Incineration Plant at Venkatamangalam	Tambaram Corporation, Govt. of Tamilnadu.	Project team member	Report submitted

R&D Links

1. Google Scholar:

Link:

https://scholar.google.com/citations?user=gKWY_OUAAAAJ&hl=en

2. ORCID:

ID: 0000-0001-8914-6900

Link: <https://orcid.org/0000-0001-8914-6900>

3. Research gate:

Link: https://www.researchgate.net/profile/Arshad_Ahmed8

4. SCOPUS:

ID: 57211662310

Link:

<https://www.scopus.com/authid/detail.uri?authorId=57211662310>

5. WEB OF SCIENCE:

ID: AAN-4555-2021

Link: <https://publons.com/researcher/3710036/k-arshad-ahmed/>

6. Vidwan ID: 264897

DECLARATION

I hereby declare that all the information mentioned above is true to the best of my knowledge. I will make it my earnest endeavour to discharge competently and carefully the duties you may be pleased to entrust with me.

(K. ARSHAD AHMED)