

# FACULTY PROFILE

IYAH RAJA.S.

## Personal Details

**Salutation:** Dr.  
**Instructor Name:** Iyahraja. S  
**Designation:** Professor  
**Department:** MECHANICAL ENGINEERING - NEC  
**Date of Joining in NEC:** 25-08-1999  
**Date of Joining in Present Post:** 06-04-2022  
**Mobile Number:** 9894019806  
**College Id:** MECT008  
**College Email Id:** sirmech@nec.edu.in  
**Unique Staff Id:** 1-455141905



## Address for Communication

**Address Line 1:** No.5/619 L 10, Phase I, Housing Board Colony, **Pincode:** 628503  
**Address Line 2:** Krishna Nagar **District:** Thoothukudi  
**City:** Kovilpatti **State:** Tamilnadu

## Educational Qualifications

Sr	Name of the Degree	Specialization	Name of the Institute	Name of the University	Year of Passing
1	B.E	Mechanical Engineering	Thiagarajar College of Engineering Madurai	Madurai Kamaraj University	1996
2	M.Tech	Thermal Engineering	Indian Institute of Technology Madras	Indian Institute of Technnology Madras	2005
3	Ph.D	Heat Transfer	Anna University	Anna University	2017

## Faculty Professional Experience

Sr	Name of Institute / Organizations	Designation	Date of Joining	To	Total Experience
1	National Engineering College Kovilpatt	Professor	06-04-2022		
2	ering College Kovilpatti	Associate Professor	07-04-2011	05-04-2022	11 Yrs
3	ering College Kovilpatti	Senior Lecturer	01-06-2007	06-04-2011	3 Yrs 10 Months

Sr	Name of Institute / Organizations	Designation	Date of Joining	To	Total Experience
4	National Engineering College Kovilpatti	Lecturer	25-08-1999	31-05-2007	7 Yrs 9 Months
5	Stardrive Busducts Pvt. Ltd, Chennai	Engineer	06-08-1997	26-12-1998	1 Year 5 Months

### FDP/ Workshop/ Seminar/ Training/ Knowhow Program Attended

Sr	Name of the Event	Event Type	Name of the Institution or Organization	From	To
1	AICTE –ISTE Short term course on “Induction Training Programme for new teachers,”	Short Term Training Program	Dr.Sivanthi Aditanar College of Engg, Tiruchendur	29-10-1999	30-10-1999
2	AICTE-ISTE Workshop on “Teacher–Learner Strategy”	Training	NEC, Kovilpatti	26-02-2000	
3	AICTE –ISTE-STTP on “TQM in Technical Education”	Short Term Training Program	Dr.Sivanthi Aditanar College of Engg, Tiruchendur	08-03-2001	10-03-2001
4	QIP programme on “Teaching Methodologies	Faculty Development Program	I.I.T. Madras	01-12-2003	03-12-2003
5	Indo Swedish Workshop on “Biofuel Conversion”	International Workshop	I.I.T. Madras	09-12-2003	11-12-2003
6	AICTE sponsored STTP on “Fuel Cells: Power source of the future”	Short Term Training Program	I.I.T. Madras	01-12-2007	07-12-2007
7	AICTE Sponsored STTP on “Quantitative Research Techniques for Engineers and Researchers	Short Term Training Program	NIT, Trichy	21-12-2009	02-01-2010
8	SERC Winter School on “Automotive Combustion Control Systems: Sensors, Actuators and Real Time Embedded Controllers”	Short Term Training Program	I.I.T. Madras	28-01-2013	30-01-2013
9	AICTE sponsored Faculty Development Programme on “Advanced Concepts and Techniques in Engineering Design”	Faculty Development Program	Government College of Engineering, Tirunelveli	27-05-2013	08-06-2013
10	TEQIP sponsored Two-Day Faculty Development Programme on “Nanofluids”	Faculty Development Program	Thiagarajar College of Engineering, Madurai	05-12-2013	06-12-2013

Sr	Name of the Event	Event Type	Name of the Institution or Organization	From	To
11	Two-day seminar on "Advanced Engines and Emission Control Technologies"	National Seminar	Anna University Chennai	03-03-2017	04-03-2017
12	AICTE-QIP Sponsored One Week Short Term Course on "Frontiers in Materials Research for Energy Application"	Short Term Training Program	Thiagarajar College of Engineering, Madurai	11-12-2017	17-12-2017
13	Foundation Programme for ICT in Education	Faculty Development Program	IIT Bombay	08-03-2018	12-04-2018
14	Industrial Training	Industrial Know-How Program	Excel Hydro Pneumatics (India), Nanguneri	30-07-2018	03-08-2018
15	AICTE-QIP Sponsored One Week Short Term Course on "Computational Fluid Dynamics"	Short Term Training Program	Indian Institute of Science, Bangalore	13-08-2018	17-08-2018
16	IEI sponsored Two day All India Workshop on "Applications of Computational Fluid Dynamics Techniques in Heat Transfer and Energy Systems"	National Seminar	NIT, Trichy	28-06-2019	29-06-2019
17	TEQIP sponsored STTP on "Bio-Energy: Technologies & Transitions"	Short Term Training Program	National Institute of Technology, Kurukshetra & Government Engineering College, Bikaner	13-05-2020	17-05-2020
18	Short Term Training Programme through ICT Mode on "Concept Teaching in Fluid Mechanics"	Short Term Training Program	NITTTTR, Kolkata	22-06-2020	26-06-2020
19	STC on "How to define Research Problems and Solving Methods in Sustainable Design, Manufacturing and Energy Engineering"	Short Term Training Program	National Institute of Technology Silchar	24-08-2020	28-08-2020
20	Short term course on Multi-Scale Computational Fluid Dynamics: Fundamentals and Applications	Short Term Training Program	Dr B R Ambedkar National Institute of Technology Jalandhar	21-09-2020	25-09-2020
21	STTP on Engine Combustion and Emission Diagnostics	Short Term Training Program	National Institute of Technology Agartala	05-10-2020	09-10-2020

Sr	Name of the Event	Event Type	Name of the Institution or Organization	From	To
22	Online workshop on Universal Human Value on the theme "Inculcating Universal Human Values in Technical Education"	National Workshop	All India Council for Technical Education (AICTE), New Delhi	05-10-2020	09-10-2020
23	National Workshop on Recent Research Trends and Future Research Directions in Solar Energy Technologies Under AICTE-Margdarshan Scheme	National Workshop	National Institute of Technology Tiruchirappalli	18-05-2021	22-05-2021
24	One Week Online Orientation Training Programme for Mentors under National Initiative for Technical Teachers Training of AICTE	Faculty Development Program	National Institute of Technical Teachers Training and Research	05-07-2021	09-07-2021
25	Workshop on Quality Assurance in Technical and Higher Educational Institutions and Interpretation of requirements of NBA Accreditation	National Workshop	National Institute of Technology Tiruchirappalli	19-07-2021	23-07-2021
26	AICTE ATAL Online FDP on Recent Advancements in Sustainable Energy Storage and Conversion	Faculty Development Program	Manipal Institute of Technology, Manipal	25-10-2021	29-10-2021

## International and National Conferences Attended

Sr	Name of the Conference	Event Type	Name of the Institution or Organization	Title of the Paper	Authors	From	To
1	International Conference on Advances in Materials Research (ICAMR-2019)	International Conference Presentation	Bannari Amman Institute of Technology, Sathyamangalam	Silver Nanoparticles for Enhanced Thermal Energy Storage of Phase Change Materials	N.Pradeep, K.Paramasivam, T.Rajesh, V.Subash Purusothamanan, S.Iyahraja	06-12-2019	07-12-2019
2	Comparative Analysis of Briquettes Obtained from Biomass and Charcoal	International Conference Presentation	Bannari Amman Institute of Technology, Sathyamangalam	Comparative Analysis of Briquettes Obtained from Biomass and Charcoal	Ajith Kumar.J, Vinoth Kumar.K, Petchimuthu.M, Iyahraja.S, Vignesh Kumar.D	06-12-2019	07-12-2019

Sr	Name of the Conference	Event Type	Name of the Institution or Organization	Title of the Paper	Authors	From	To
3	International Conference on Nano Materials (ICN 2021)	International Conference Presentation	Mahatma Gandhi University, Kottayam, Kerala	Silver-Water Nanofluid for Heat Transfer Applications	S lyahraja	09-04-2021	11-04-2021
4	National Conference SACOEFEERENCE	National Conference Participation	Dr.Sivanthi Aditanar College of Engg., Tiruchendur	Electronic Fuel Injection System – An alternate fuel supply system of spark ignition engines	S lyahraja		
5	National Conference on I C Engines and Combustion Institute	National Conference Participation	Annamalai University Chidambaram	Electronic Gasoline fuel injector characteristics – An Experimental Study	S lyahraja, J M Mallikarjuna		
6	National Conference on Emerging Trends in Mechanical Engineering	National Conference Participation	PET Engineering College, Vallioor	Reduction of NOx Emission by induction of Water in Combustion Chamber in Diesel Engines	S lyahraja		

### FDP/ Workshop/ Seminar/ Conference Programs Organized

Sr	Name of the Event	Event Type	Nature of funding	Name of the Funding Agency	Amount received from funding Agency	Role	Venue	From	To
1	Renewable Energy – Energy for the future	Workshop	Fund Received from external funding agency	TEDA	₹ 15,000.00	Co-Ordinator	National Engineering College	17-08-2005	
2	Codes and Standards in Mechanical Engineering	Faculty Development Program	Self Supporting	Self Supported	₹ 0.00	Convenor	National Engineering College K R Nagar	25-05-2020	29-05-2020
3	Recent Advances In Mechanical Engineering (RAIME 2020)	National Conference		Self Supported	₹ 0.00	Convenor	National engineering College K R Nagar	19-06-2020	

### Guest Lecture Delivered

Sr	Name of the Event / Program	Name of the Institution / Organization	Title of the Lecture delivered	From	To
1	Technical Symposium	Coimbatore Institute of Technology, Coimbatore	Turbocharger	26-08-2015	
2	Anna University sponsored Faculty Development Programme	Sri Vidya College of Engineering & Technology, Virudhunagar	Engineering Thermodynamics	07-06-2016	08-06-2016
3	ICMR sponsored Two Day National Level Workshop on "Nanotechnology and Nanomaterials: Future Medicine in Treatment of Life-Threatening Diseases	Government College of Engineering, Tirunelveli	Convergence of Nanotechnology and Medical Technology	25-01-2018	
4	DST SERB sponsored Two-day National Level Seminar on "Challenges in Materials for Energy Conversion, Storage, and Enhancement Applications"	National Engineering College, Kovilpatti	Nanofluid – An Emerging Engineering Fluid	10-08-2018	
5	Expert lecture	Government College of Engineering, Tirunelveli	Nanofluid	23-09-2020	
6	Skill development programme	Bharathiar University, Coimbatore	Performance enhancement of solar thermal collector	20-01-2021	
7	International Online Conference on NanoMaterials (ICN 2021)	Mahatma Gandhi University, Kerala, India, Wroclaw University of Technology, Poland, Gdansk University of Technology, Poland & Wuhan Universi	Nanomaterials for Energy Applications	09-04-2021	10-04-2021
8	Anna University sponsored Faculty Development Programme on Thermal Engineering – I	Francis Xavier Engineering College, Tirunelveli	I C Engines" and "Gas Turbines	03-01-2022	08-01-2022
9	Coaching for GATE and Engineering Services Aspirants	Government College of Engineering, Tirunelveli	Engineering Thermodynamics", "Thermal Engineering", "Heat and Mass Transfer" & "Fluid Mechanics and Machinery		

## Faculty Research Publications

Sr	Title of the Paper	Name of the Journal	Year of Publication	Authors	DOI (Digital Object Identifier System)
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Sr	Title of the Paper	Name of the Journal	Year of Publication	Authors	DOI (Digital Object Identifier System)
1	Study of thermal conductivity enhancement of aqueous suspensions containing silver nanoparticles	AIP Advances	2015	Iyahraja, S and Selwin Rajadurai, J	10.1063/1.4919808
2	Stability of Aqueous Nanofluids Containing PVP-Coated Silver Nanoparticles	Arabian Journal for Science and Engineering	2015	Iyahraja, S and Selwin Rajadurai, J	10.1007/s13369-015-1707-9
3	Studies on Heat Transfer and Pressure Drop in Turbulent Flow of Silver - Water Nanofluids through a Circular Tube at Constant Wall Heat Flux	Heat and Mass Transfer	2018	S Iyahraja, J. Selwin Rajadurai, S. Rajesh, R. Seeni Thangaraj Pandian, M. Selva Kumaran, G. Selvakumar	10.1007/s00231-018-2291-9
4	Investigation on Convective Heat Transfer and Friction Factor of Silver–Water Nanofluid under Laminar Flow – An Experimental Study	Heat and Mass Transfer	2019	S.Iyahraja, J.Selwin Rajadurai, B.Siva Subramanian, S.Siva Subramanian, P.Sivasankar, S.Subash	10.1007/s00231-019-02640-y
5	Silver Nanoparticles for Enhanced Thermal Energy Storage of Phase Change Materials	Materials Today: Proceedings	2021	Pradeep N., Paramasivam K., Rajesh T., Subash Purusothamanan V., Iyahraja S	<a href="https://doi.org/10.1016/j.matpr.2020.02.671">https://doi.org/10.1016/j.matpr.2020.02.671</a>
6	Comparative Analysis of Briquettes Obtained from Biomass and Charcoal	Materials Today: Proceedings	2021	J. Ajith Kumar, K. Vinoth Kumar, M. Petchimuthu, S. Iyahraja, D. Vignesh Kumar	<a href="https://doi.org/10.1016/j.matpr.2020.02.918">https://doi.org/10.1016/j.matpr.2020.02.918</a>
7	Experimental Analysis of Small Size Solar Dryer with PCM for Food Preservation	Journal of Energy Storage	2021	S. Rakshamuthu , S. Jegan , J. Joel Benyameen , V. Selvakumar , K. Anandeeswaran , S. Iyahraja	<a href="https://doi.org/10.1016/j.est.2020.102095">https://doi.org/10.1016/j.est.2020.102095</a>
8	Investigations on Mechanical and Morphological Characteristics of Mudar Fiber Reinforced Polymer Composites	Journal of Natural Fibers	2022	L Vadivel Kannan, K A Sundararaman, S Iyahraja, D Vignesh Kumar, G Venkatachalam, Piyush Arora	DOI:10.1080/15440478.2022.2068105

## Research Supervisor & Scholars Details

Sr	Name of the University	Name of the Faculty	Reference No. (Supervisor id Number)	Research Area	Date of supervisor recognition
1	Anna University	Mechanical Engineering	3120051	Thermal Engineering	08-06-2018

Sr	Name of the Research Scholar	Date of Registration	Internal or External / Full time or Part Time	Research topic
1	Mr. Jaya venkatesh R	24-02-2020	Internal	Synthesis and Application of a New Phase Change Materials for Solar Thermal Energy Storage
2	Mr. Muthu Saravanan N	20-01-2021	Internal	Heat Transfer Enhancement in Heat Exchanger
3	Mr. Sudalaiyandi K	20-01-2021	Internal	Perfromance Optimization of Receiver in CSP System

## Membership in Professional Societies

Sr	Name of the Society / Organization	Type of Membership	Membership ID
1	Indian Society for Technical Education	Life Member	LM31489
2	Institution of Engineers (India)	Life Member	M-135992-9

## Instructor Log

Sr	Academic Year	Academic Term	Department	Program	Course
1	2021-22	2021-22 (EVEN)	MECHANICAL ENGINEERING - NEC	B.E (MECHANICAL ENGINEERING)	19ME41C Fluid Mechanics and Machinery
2	2021-22	2021-22 (EVEN)		B.E (MECHANICAL ENGINEERING)	19ME16E HYBRID ELECTRIC VEHICLES
3	2021-22	2021-22 (EVEN)		B.E (MECHANICAL ENGINEERING)	19ME65C-COMPREHENSION
4	2021-22	2021-22 (ODD)		B.E (MECHANICAL ENGINEERING)	19ME33C - Thermodynamics
5	2021-22	2021-22 (ODD)		B.E (MECHANICAL ENGINEERING)	19ME02L-ENERGY AUDIT
6	2021-22	2021-22 (ODD)		B.E (MECHANICAL ENGINEERING)	19SH17C - Engineering Practice Laboratory
7	2020-21	2020-21 (EVEN)		B.E (MECHANICAL ENGINEERING)	19ME43C-THERMAL ENGINEERING



Sr	Academic Year	Academic Term	Department	Program	Course
8	2020-21	2020-21 (EVEN)		B.E (MECHANICAL ENGINEERING)	15ME13E-ENERGY CONSERVATION AND WASTE HEAT RECOVERY
9	2020-21	2020-21 (EVEN)		B.E (MECHANICAL ENGINEERING)	15ME65C-COMPREHENSION
10	2020-21	2020-21 (ODD)		B.E (MECHANICAL ENGINEERING)	19ME33C - Thermodynamics
11	2020-21	2020-21 (ODD)		B.E (MECHANICAL ENGINEERING)	15ID03E-ENERGY ENGINEERING