

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY



INFORMATION DATA SHEET



Name	Dr Favas T K
Designation	Assistant Professor
Department	Ship Technology
Area of Specialization	Fluid Mechanics
Research Area	Computational Fluid Dynamics, Convective Heat Transfer, Entropy Generation
Contact	+91 9497302979; favastk@cusat.ac.in, favastk@gmail.com

1. Academic Records

Degree/Exam	Branch	Topic/Elective	University	Institution	Year & Percentage/Class
Ph D	Mechanical Engineering	Numerical Study of Entropy Generation in a Plate with Volumetric Energy Source	NIT Calicut	National Institute of Technology Calicut	2018 – CGPA 9.50
M Tech	Mechanical Engineering	Industrial Refrigeration and Cryogenic Engineering	University of Kerala	T K M College of Engineering, Kollam	2004 – 87.68% - First Class with Distinction
B Tech	Mechanical Engineering		University of Calicut	Govt. Engineering College, Thrissur	2002 – 77.24% - First Class with Honors

GATE	Mechanical Engineering				2003 – 91.00 Percentile		
2	Research Publications						
National/International Journals							
SI. No	Authors (As published in the paper)	Title	Journal	ISBN/ISSN number	Year	Volume	Page No
1.	T.K. Favas, G.Jilani	Effect of variable thermal conductivity on entropy generation in a plate with internal energy generation	<i>MATEC Web of Conferences</i>	ISSN 00002012	2018	144	04001-10
2.	T.K. Favas, G.Jilani	The effect of non-uniform energy generation on entropy generation in a plate being cooled in a fluid medium	<i>Heat and Mass Transfer Research Journal</i>		2017	1(1)	35-47
3.	T.K. Favas, G.Jilani	Minimization of entropy generation in a plate with non-uniform energy generation	<i>Indian Journal of Engineering</i>	ISSN 2319-7757	2016	13(33)	53-60
4.	T.K. Favas, N.K. Mohammed Sajid, John M. George, K.K. Abdul Rasheed, K.A. Shafi, B. Premlet	Development of an Orifice Pulse Tube Refrigerator	<i>Indian Journal of Cryogenics</i>	ISSN: 0379-0479	2005	30(2)	70-73
International Conference							
SI. No	Authors	Title of the Paper	Conference	Venue	Year/Date		
1.	T.K. Favas, H. Mohammed Faizal	The effect of coolant Prandtl number on hotspots in plate type fuel element of a nuclear research reactor	<i>International Conference on Aerospace and Mechanical Engineering</i>	T K M College of Engineering, Kollam	December 16-18, 2021		
2.	Renu Raj, T.K. Favas	A review of the computational fluid dynamics investigations on fire safety in ships	<i>International Conference on Advances in Naval and Ocean Engineering</i>	Cochin University of Science and Technology	November 19-20, 2021 (ISBN : 978-81-952577-5-1)		
3.	Mohammed Faizal H, T.K. Favas	Computational heat transfer in marine transportation systems – A review	<i>International Conference on Advances in Naval and Ocean Engineering</i>	Cochin University of Science and Technology	November 19-20, 2021 (ISBN: 978-81-952577-5-1)		
4.	T.K. Favas, G. Jilani	Effect of variable thermal conductivity on heat transfer characteristics of a nuclear fuel element	<i>Fifth International Conference on Computational Methods for Thermal Problems</i>	Indian Institute of Science (IISc), Bangalore, India	July 9-11, 2018		

5.	T.K. Favas, G. Jilani	Effect of coolant Prandtl number on thermal performance of and entropy generation rates in an energy generating plate	<i>International Conference on Numerical Heat Transfer and Fluid Flow</i>	National Institute of Technology (NIT) Warangal, Telangana, India	January 19-21, 2018
6.	T.K. Favas, G. Jilani	Conjugate heat transfer analysis of an energy generating plate with variable thermal conductivity	<i>1st International Conference on Mechanical Engineering</i>	Jadavpur University, Kolkata, India	January 4-6, 2018
7.	T.K. Favas, G. Jilani	Entropy generation analysis of an energy generating plate dissipating heat into its surrounding fluid medium	<i>Seventh International Conference on Theoretical, Applied, Computational and Experimental Mechanics</i>	Indian Institute of Technology (IIT) Kharagpur, West Bengal, India	December 28-30, 2017
8.	T.K. Favas, G. Jilani	Effect of variable thermal conductivity on entropy generation in a plate with internal energy generation	<i>International Conference on Research in Mechanical Engineering Sciences</i>	Manipal Institute of Technology, Manipal, Karnataka, India,	December 21-23, 2017
9.	T.K. Favas, G. Jilani	Thermal performance characteristics of a plate type nuclear fuel element with temperature dependent thermal conductivity	<i>2nd Energy System Modeling and Optimization Conference</i>	NIT Durgapur, West Bengal, India	December 11-13, 2017
10.	T.K. Favas, G. Jilani	Entropy generation minimization in a plate type fuel element of a nuclear fission reactor	<i>International Conference and an Exhibition on Smart Technologies for Green and Sustainable Future</i>	Maulana Azad National Institute of Technology (MANIT) Bhopal, Madhya Pradesh, India	December 8-9, 2017
11.	T.K. Favas, G. Jilani	Effect of variable thermal conductivity on thermal characteristics of an energy generating plate	<i>International Conference on Frontiers in Engineering, Applied Sciences and Technology</i>	NIT Trichy, Tamilnadu, India	March 31- April 1, 2017 (ISBN: 978-81-90838-88-7)
12.	T.K. Favas, G. Jilani	Minimization of entropy generation in a plate with non-uniform energy generation	<i>International Conference on Trends in Industrial and Mechanical Engineering</i>	MANIT, Bhopal, Madhya Pradesh, India	February 4-6, 2016
13.	T.K. Favas, G. Jilani	Entropy generation minimization in a rectangular plate with volumetric energy generation	<i>International Conference on Industrial, Mechanical and Production Engineering:</i>	MANIT, Bhopal, Madhya Pradesh, India	November 27-29, 2014 (ISBN: 978-93-84935-03-0)

				<i>Advancements and Current Trends</i>		
National Conference						
Sl. No	Authors	Title of the Paper	Conference	Venue	Year/Date	
1.	T.K.Favas, G. Jilani	Conjugate conduction-forced convection heat transfer analysis of a plate type nuclear fuel element dissipating fission heat to liquid sodium	<i>44th National Conference on Fluid Mechanics and Fluid Power</i>	Amrita University, Kollam, Kerala, India	December 2017	14-16,
2.	T.K.Favas, G. Jilani	Numerical study of entropy generation in plate with internal energy generation	<i>National Conference on Advances in Thermal Engineering</i>	Jadavpur University, Kolkata, India	September 2016	23-24,
3.	T.K. Favas, N.K. Mohammed Sajid, John. M. George, K.K. Abdul Rasheed, K.A. Shafi, B. Premlet	Development of an Orifice Pulse Tube Refrigerator	<i>National Seminar and Conference on Cryogenics and its Frontier Applications</i>	Bengal Engineering College, Shibpur, West Bengal, India	March 25-27, 2004	
Book Chapter						
Sl. No	Authors	Title of the Chapter	Title of the Edited Book	ISBN/ISSN number	Editor/Publisher/Year	
1.	T.K. Favas,G. Jilani	Minimization of entropy generation in a plate with non-uniform energy generation	<i>Trends in Industrial and Mechanical Engineering</i>	ISBN: 978-93-84935-68-9	Verma A, Soni V K, Soni P K (Eds.), Excellent Publishing House, New Delhi, 2016	

3	Experience					
	Teaching – Regular:					
Particulars	SI No.	Institution	Post held	Period	No. of years/months	
	1.	Cochin University of Science and Technology	Assistant Professor	06.11.2020 to Present	1 year 6 months	
	1.	National Institute of Technology Calicut	Ad-hoc Faculty	11.12.2017 to 24.04.2018	4 months	
	2.	National Institute of Technology Calicut	Ad-hoc Faculty	10.07.2017 to	4 months	

				06.12.2017	
	3.	National Institute of Technology Calicut	Ad-hoc Faculty	15.07.2016 to 07.12.2016	4 months
	4.	National Institute of Technology Calicut	Ad-hoc Faculty	23.12.2015 to 26.05.2016	5 months
	5.	National Institute of Technology Calicut	Ad-hoc Faculty	27.07.2015 to 22.12.2015	4 months
	6.	National Institute of Technology Calicut	Ad-hoc Faculty	06.01.2015 to 10.06.2015	5 months
	7.	National Institute of Technology Calicut	Ad-hoc Faculty	06.08.2014 to 30.12.2014	4 months
	8.	National Institute of Technology Calicut	Ad-hoc Faculty	16.12.2013 to 19.05.2014	5 months
	9.	National Institute of Technology Calicut	Ad-hoc Faculty	16.07.2013 to 09.12.2013	4 months
	10.	MES College of Engineering, Kuttippuram	Lecturer in Mechanical Engineering	01.10.2004 to 16.01.2009	4 years 3 months
Teaching – Visiting/Part Time					
	1.	National Institute of Technology Calicut	Part Time Teaching Assistantship (as part of MHRD scholarship)	January 2009 – December 2013	4 years
	2.	MES College Mampad	Visiting Faculty to MSc Food Technology	2005-2006	5 months
Industrial/Other					
	1.	Kerala Water Authority	Assistant Engineer	26.04.2018 to 05.11.2020	2 years 6 months
	2.	Travancore Cochin Chemicals Limited	Unpaid Apprentice	August 2002 – September 2002	2 months
Subjects Taught:					
Undergraduate Level - Computational Methods in Engineering, Computer Programming, Thermodynamics, Thermodynamics and Heat Transfer, Applied Thermodynamics, Environmental Studies for Mechanical Engineers, Basic Mechanical Engineering, Fluid Mechanics, Advanced Mechanics of Flow, Design of Heat Transfer Equipments, Refrigeration and Air-conditioning, Advanced Mechanics of Solids, Machine Design, Principles of Management, Metal					

Forming, Material Science, Computational Fluid Dynamics in Marine Technology, Marine Pollution Prevention and Management, Fluid Mechanics – II					
PG/Ph D Level - Analytical Methods in Heat Transfer II (Convective Heat Transfer), Advanced Instrumentation, Non-conventional Energy Systems, Advanced Fluid Mechanics, Advanced Refrigeration Systems					
Academic Responsibilities					
<ul style="list-style-type: none"> • Coordinator, PhD Admissions, Department of Ship Technology, CUSAT (Since July 2021 onwards) • Coordinator, Department Research Committee, Department of Ship Technology (Since July 2021 onwards) • Participated actively in NAAC Accreditation Works at CUSAT during 2020-2022 • Participated actively in NBA Accreditation Works at NIT Calicut during 2016-2017 • Lab-in-Charge, Heat Transfer Laboratory, MES College of Engineering, Kuttippuram, 2007-2008 					
4. Participation in Training Programs/Workshops					
SI No.	Duration	Title	Agency	Institution	Period
1	One Day	Bringing Research Focus	IEEE	IEEE Kochi	April 07, 2022
2	Five Days	Advanced Modeling and Innovations in Water Resources Engineering and Management	NIT Hamirpur	NIT Hamirpur	February 28 – March 04, 2022
3	One Day	Golden Jubilee Celebratory Workshop on Writing Quality Research Articles and Identifying Relevant Journals to Read and Publish in	Elsevier and CUSAT Library	Cochin University of Science and Technology	December 14, 2021
4	One Day	Inspiring Innovation at CUSAT with IEEE Research	IEEE and CUSAT Library	Cochin University of Science and Technology	October 28, 2021
5	Three Days	IEEE Mini POCO Workshop 2021	IEEE Kochi Subsection and APJ KTU	IEEE Kochi	September 02-04, 2021
6	One Day	National Educational Policy 2020 : Way Ahead	Rajkiya Engineering Collge, Mainpuri, UP	Rajkiya Engineering Collge, Mainpuri, UP	August 27, 2021
7	One Week	Computational Fluid Dynamics – A Potential Engineering Tool	Centurion University of Technology and Management, Odisha	Centurion University of Technology and Management, Odisha	July 26-30, 2021
8	Three Days	Technological Advancements in Naval, Defense and Space Applications: An industry 5.0 Approach	NS Raju Institute of Technology, Visakhapatnam	NS Raju Institute of Technology, Visakhapatnam	July 08-10, 2021
9	One Day	A Digital Passage : Progressive Tools for Maritime Research and Development : An	Kunjali Marakkar School of Marine Engineering, CUSAT	Kunjali Marakkar School of Marine	July 06, 2021

		Industry 5.0 Approach		Engineering, CUSAT	
10	One Week	Prudent Teaching Dynamics	IQAC	SAFI Institute of Advanced Study, Kerala	June 21-28, 2021
11	One Month	Online Induction Program for Newly Recruited Teachers	Centre for Employee Empowerment and Skill Acquisition (CEESA)	CUSAT	March 17 – April 16, 2021
12	One Week	Advanced Computational Techniques in Water Resources Engineering and Management (ACT-WREM 2021)	Department of Civil Engineering	NIT Hamirpur	March 01-05, 2021
13	One day	NEP 2020 : Implementation and Implications in HEI	School of Engineering under TEQIP III	CUSAT	February 25, 2021
14	Two days	New Examination Reforms (AICTE)	School of Engineering under TEQIP III	CUSAT	February 18-19, 2021
15	One Week	Modern Pedagogical Techniques for Effective Teaching & Learning	AICTE-ATAL	NRI Institute of Technology, Andhra Pradesh	February 08-12, 2021
16	One Week	Blended Learning and Flipped Classroom	AICTE-ATAL	Vellore Institute of Technology	January 18-22, 2021
17	One Week	CFD	AICTE-ATAL	LBS College of Engineering, Kasaragod	January 04-08, 2021
18	One day	Online Tools for Research	Department of Ship Technology	CUSAT	December 20, 2020
19	One day	The Art of Writing and Publishing Research Papers in International Journals	Department of Ship Technology	CUSAT	November 24, 2020
20	One day	Hydraulic Layout and Design of Water Supply Components	Kerala Water Authority (KWA)	Centre for Water Education, Thiruvananthapuram	January 14, 2020
21	One day	Material Management and Purchase Rules	KWA	Centre for Water Education, Thiruvananthapuram	October 25, 2019
22	Three Weeks	Induction Level Training to Assistant Engineers	KWA	Centre for Water Education,	July 29-August 09 & September 23-

				Thiruvananthapuram	27, 2019
23	Three days	IT Enabled Application in Water Supply and Sewerage Projects	The Institution of Engineers (India)	Engineering Staff College of India (ESCI), Hyderabad	July 09-11, 2019
24	One day	Handling of Chlorine and Use of Breathing Apparatus	TCC	The Travancore - Cochin Chemicals Ltd. Kochi	June 13, 2019
25	Three days	Water Transmission and Distribution Engineering	KWA	Centre for Water Education, Thiruvananthapuram	February 12-14, 2019
26	One day	Design and Selection of Pump sets	KWA	Centre for Water Education, Thiruvananthapuram	January 16, 2019
27	One Week	Computer Aided Design of Pipelines and Pipe Networks for Water Supply and Sewerage Systems	CPHEEO	VNIT Nagpur	December 06-12, 2018
28	Two days	Operation and Maintenance of Pumps and Motors	KWA	Centre for Water Education, Thiruvananthapuram	November 21-22, 2018
29	One day	Research Writing: Technical and Language Aspects	AICTE-MHRD-TEQIP-II	NIT Calicut	February 28, 2016
30	Two days	National Meet for Research Scholars	TEQIP –II	NIT Calicut	July 3-4, 2015
31	Four days	Instructional Design and Pedagogical Aspects of Engineering Education	MHRD-TEQIP	NIT Calicut	January 2-5, 2014
32	One Week	Development in Air-Conditioning and Ventilation	AICTE, New Delhi	IIT Madras	August 16-22, 2008
33	One Week	Marketing Strategy for Small and Medium Enterprises in the Changing Global Scenario	AICTE-ISTE	MES College of Engineering, Kuttippuram	June 23-28, 2008
34	One Week	Advances in Thermal Management of Electronic Systems	AICTE-ISTE	TKM College of Engineering, Kollam	June 16-21, 2008
35	One	Instructional Design and Delivery	NITTR Chennai - QIP	MES College of	March 14-19,

	Week			Engineering, Kuttippuram	2005
36	Two Weeks	Marine and Industrial Refrigeration	CIFNET	Central Institute of Fisheries, Nautical and Engineering Training, Kochi	October 13-23, 2003
37	One Week	Vocational Training in Oxygen Plant of Titanium Dioxide Pigment Unit	KMML	The Kerala Minerals and Metals Ltd, Kollam	September 01-05, 2003
38	Two months	Industrial Training at Mechanical Maintenance Department	TCC	Travancore Cochin Chemicals (TCC) Limited, Cochin	July-August, 2002
39	Two days	Essay Workshop	Kerala Sahithya Academy	Prof.P. Sankaran Nambiar Foundation, Thrissur	November 18 & 25, 2000
40	Two days	Training Program on Energy Conservation and Audit	EMC-Kerala & ISTE Thiruvananthapuram	Energy Management Centre-Kerala, Thiruvananthapuram	August 25-26, 2000

Conferences/Seminars Organized

SI No.	Title	Responsibility	Held at/Organized by	Period
1.	Golden Jubilee International Conference on Sustainable Technologies and Innovations for Industry 4.0	Co-chair, Editor-Book of Abstracts	Cochin University of Science and Technology	April 21-22, 2022
2.	Erudite Lecture by Dr. Gopu R Potty on Research Opportunities in Naval and Ocean Engineering	Coordinator	Cochin University of Science and Technology	December 06, 2021
3.	International Conference on Advances in Naval and Ocean Engineering	Joint convener, Editor – Conference Proceedings	Cochin University of Science and Technology	November 19-20, 2021
4.	International Webinar on Landslides in Kerala: Driving Factors and Mitigation Measures	Coordinator	Science for Humanity	November 06, 2021
5.	International Webinar on Science in the Post Covid Era – Challenges and Opportunities	Coordinator	Science for Humanity	April 03, 2021
6.	International Conference on Advances in Tribology	Member, Cultural Program Committee	NIT Calicut	February 21-24, 2014

5. Membership in Academic Bodies/Professional Organizations					
SI No.	Organization		Details		
1.	Indian Society for Technical Education		Life Member – LM 51087		
6. Research Projects					
SI No.	Title		Agency and Details		
1.	Numerical Prediction of Hotspots and Entropy Generation in Energy Generating Components Cooled by Nanofluids/Liquid Metals by considering Temperature Dependency of Thermo-physical Properties		Seed Money for New Research Initiatives (SMNRI) under State Plan Grant of Cochin University of Science and Technology – Rs 1 Lakh (Period – 2years) – Ongoing		
7. Extension Activities					
	SI No.	Responsibility	Title	Institution	Period
	1.	Co-chair, Reviewer	International Conference on Advances in Naval and Ocean Engineering	Cochin University of Science and Technology	November 19-20, 2021
	2.	Invited Talk on Flourish in the Campus	Students Induction Program	Cochin University of Science and Technology	October 28- November 05, 2021
	3.	Inaugural Message	Reading Week	GHSS Muthuvallur, Malappuram	June 19-25, 2021
	4.	Author of Technical Article	<i>Ezhthappednda Pareekshana-Nireekshana-Gaveshanangal</i>	AKWAO NEWS (Vol 6, No: 1)	January, 2021
	5.	Reviewer – Technical Papers	International Conference on Frontiers in Engineering, Science and Technology (ICFEST 2020)	Yenepoya Institute of Technology, Moodbidri, Mangaluru	December 19-20, 2020
	6.	Certificate of Excellence in Reviewing in recognition of outstanding contribution to the quality of AIP/CCIS Springer Proceedings 2020	International Conference on Computational Sciences: Modelling, Computing and Soft Computing (CSMCS 2020)	National Institute of Technology Calicut	September 10-12, 2020

	7.	Reviewer – Technical Papers	National Conference on Recent Advances in Mechanical Engineering and Technology (NCRAMET – 19)	Yenepoya Institute of Technology, Moodbidri, Mangaluru	April 29-30, 2019
8. Awards/Achievements					
<ul style="list-style-type: none"> • Beloved Alumnus for Excellent Achievement award as part of 35th anniversary celebrations of VIDYA, Kondotty – December 2021 • Research Supervisor under Faculty of Technology of CUSAT – February 2021 • Best Participant (1st Rank) in Induction Level Training to Assistant Engineers - 2019 conducted by Centre for Water Education, Thiruvananthapuram • Second Rank for M Tech Mechanical Engineering at University of Kerala – December 2004 • Second Prize in All Kerala Essay Competition conducted by Kerala Water Authority on <i>Water Conservation</i> as part of <i>Manaveeyam 2000</i> • Second Prize in All Kerala Essay Competition conducted by Dr K K Rahulan Sapthathi Agosha Committee during November 2000 • Third Prize - Malayalam Essay Writing Competition in University Arts Festival (Inter-zone) of University of Calicut, March 1998 					
9. Social Service/Extra Curricular Activities					
<ul style="list-style-type: none"> • Secretary, Parent Teachers Association, Department of Ship Technology, CUSAT since April 2021 • Editorial Board Member of <i>Reflections</i> – Alumni Magazine of GEC Thrissur, October 2020 • Editorial Member of <i>Maayaatha Kaalpaadukal Thedi</i>-a souvenir published as part of 20th anniversary of PPMHS SSLC-96 Batch, 2016 • Participated in Ten days <i>NSS</i> special camping program conducted at TKM College of Engineering Kollam, February 2004 • Executive Member of <i>ISTE Students Chapter</i>, GEC Thrissur, 2000-2001 • Editorial Board Member of <i>Reflections</i> – an All Kerala intercollegiate Magazine during 2001-2002 • Associate Editor of <i>Chrysalis</i>-College Magazine of GEC Thrissur of 2000-2001 • Joint Convener, Media Committee, <i>Thrissur Motor Show</i> and <i>Rhapsody</i> of 2001 • Participated in Campus Discussion Programs broadcasted by <i>Akashavaani</i> Thrissur Nilayam during 2001 					

DECLARATION

I, Dr Favas T K, hereby declare that all information and data furnished above are true to the best of my knowledge and belief.

Place: CUSAT
Date: 27/04/2022

Signature