Curriculum Vitae

Brief Profile

Dr. Sreejith Mohan is serving as an Assistant Professor in the Department of Mechanical Engineering, NIT Trichy. He did his B-Tech in Mechanical Engineering from Kannur University, Kerala and M-Tech in Machine Design from College of Engineering, Trivandrum, Kerala. Soon after his Masters, he joined the SCMS School of Engineering and Technology as an Assistant Professor, before joining his Ph. D. in the department of mechanical engineering, NIT Tiruchirappalli. He completed his doctoral research in "Investigations on Fume Reduction from SMAW process using Nano-Alumina and Nano-Titania Coated Electrodes", from the Department of Mechanical Engineering, NIT Tiruchirappalli. He has 12 years of research and teaching experience in total.

Dr. Sreejith Mohan joined NIT Trichy during the year 2020 and since then have been involved in several active roles and responsibilities at the Institute. He is a member of the Institute level committee responsible for implementing Online and Continuing Education Programs, since 2021. He was also engaged in the developmental activities of a HEFA funded laboratory in the year 2021. He is the initiating faculty for the establishment of "Orthopaedic Biomechanics and Motion Analysis Laboratory" and also the coordinating member of "Industrial Hygiene and Ergonomics Laboratory", in the department of mechanical engineering, NIT Trichy.

He is a member of the panel, CHD 07: P3 of the Bureau of Indian Standards (BIS) and is engaged in the drafting and reviewing of Indian Standards pertaining to various chemical compounds.

Dr. Sreejith Mohan has sheer expertise across various domains such as occupational health and hygiene, environmental pollution, ergonomics, vibrations, nano coatings, nano materials, and particulate emissions and control. He is a prominent researcher with more than 20 papers published in reputed and peer reviewed international journals. Besides, he has authored several book chapters with reputed international publishers. He has guided more than 15 PG and UG dissertations. Three of his patents got published so far. He was also the recipient of two funded research projects from the Kerala State Council for Science, Technology and Environment and APJ Abdul Kalam Technological University, Kerala of net worth Rs. 3.2 lakhs. He has also carried out a consultancy work titled "Conducting Safety Studies at ISRO propulsion Complex" worth Rs. 20 lakhs.

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

1. Name: Dr. Sreejith Mohan
2. Designation: Assistant Professor
3. Office Address: Department of Mechanical Engineering
4. Telephone (Direct) (Optional):

   Telephone: 0431-2504095

   Mobile (Optional): 6238050110 Extn (Optional): 4095

5. Email (Primary): sreejith@nitt.edu

   Email (Secondary): drsreejithmohan@gmail.com
6. Field(s) of Specialization: Particulate emissions and control, Welding fume analysis, Mathematical modeling and finite element methods, Biomechanics and ergonomics, Nano-coatings, Tribo-corrosion

7.Employment Profile

Job Title	Employer	From	To
Assistant Professor	National Institute of Technology, Tiruchirappalli, Tamil Nadu, India	11/05/2020	Till date
Assistant Professor	The National Institute of Engineering, Mysuru, Karnataka, India	15/05/2019	30/04/2020
Associate Professor	Sree Buddha College of Engineering, Pattoor, Kerala, India	05/01/2017	13/05/2019
Associate Professor	Vimal Jyothi Engineering College, Kannur, Kerala, India	20/05/2015	02/01/2017
Assistant Professor	SCMS School of Engineering and Technology, Karukutty, Keralam India	11/08/2011	31/01/2012

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D	National Institute of Technology, Tiruchirappalli, Tamil Nadu, India.	2015	-	Particulate fume emissions and control from welding

M.Tech	College of Engineering, Trivandrum/ University of Kerala	2011	First Class	Machine Design
B.Tech	LBS College of Engineering, Kasaragod/ Kannur University	2009	First Class	Mechanical Engineering
XIIth	MGM Residential Public School	2005	Distinction	Physics, Chemistry, Mathematics, Biology
Xth	MGM Residential Public School	2003	Distinction	NA

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department /Centre/Institution	From	To
Ph.D Admission committee member	Department	22/02/2021	Till date
PAC chairman for 2nd Year M. Tech ISE	Department	02/08/2021	Till date
PMRF scrutiny committee	Department	22/07/2021	Till date
Departmental project evaluation committee member for M.Tech ISE	Department	02/08/2021	Till date
Member of HEFA funded laboratory for the study of particulate emission from Industrial Processes and Combustion	Department	21/04/2021	Till date
Convocation committee (Programme sub-committee)	Institute	31/08/2021	25/08/2021
Member of online degree sub committee	Institute	09/08/2021	Till date
Convocation committee (Programme sub-committee)	Institute	04/07/2022	Till date

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Bureau of Indian Standards committee member of panel CHD 07: P3	Bureau of Indian Standards (BIS)	02/08/2021	Till date

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2021	Best faculty performer award	NITT

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
-NIL-				

13. Details of Academic Work

(i) Curriculum Development

(ii) Courses taught at Postgraduate and Undergraduate levels

Course	Semester	Department	Code	Course title
B. Tech	3	Mechanical	MEPE40	Operational Research
B. Tech	4	Mechanical	MEPC15	Mechanics of machines-I
M. Tech	1	ISE	ME671	Environmental pollution control
M. Tech	2	ISE	ME654	Safety in chemical industry
M.Tech	1	ISE	ME661	Industrial Hygiene and Ergonomics Laboratory

(iii) Projects guided at Postgraduate level

S.No.	Title of the Thesis	Guide/ Co-Guide	Roll Number of Student
1	Study on Muscle Activity and Fatigue During Manual Material Handling Activity and Flexor Tasks	Guide	211220002
2	Study on the Influence of Size Reduced Synthetic Rutile on Particulate Fume Emissions in SMAW Process	Guide	211220003
3	Ergonomic Risk Assessment and Fatigue Analysis During Manual Lifting Tasks in Farming Activities	Guide	211220010
4	Detection of Personal Protective Equipment's Amongst Workers in Construction Industry from Images Using Deep Learning	Guide	211220002

5	Analysis and Implementation of a High Gain SEPIC Converter for Renewable Energy Application	Guide	211220003
6	Design and Simulation of Thermal Management System of Electric Vehicle Battery	Guide	211220010

(iv) Other contribution(s) – Consultancy and Patent

Consultancy

Name of the consultancy work	Organization	Year	Status
Conducting Safety studies at ISRO propulsion complex	ISRO Propulsion Complex (IPRC), Mahendragiri	2021	Completed

Patents

Title of the patent	Inventor	Application Number	Status	Grant number	Publication / Grant date
Cylindrical Substrate Coating Apparatus and Method Thereof	1.**Dr.S.P.Sivapirakasam** 2.Dr.Sreejith Mohan 3.M.Rahul 4.Vishnu B.R	202041025422	FER Reply Filed. Application in amended examination	-	08-10-2021
Nano flux composition for low fume SMAW electrodes	**1.Dr.S.P.Sivapirakasam** 2.Dr.Sreejith Mohan 3.Vishnu B.R 4.Raajesh Kannan	201741039032	FER Reply Filed. Application in amended examination	-	01-03-2019
A novel flux composition for stainless steel SMAW electrodes with mild steel ore wire	1.**Dr.S.P.Sivapirakasam** 2.Dr.Sreejith Mohan 3.M.Rahul 4.Vishnu B.R 5.Raajesh Kannan 6.Jeyabalganesh G	202141005994	FER Issued, Reply to be filed	-	11-02-2022

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Coconut tree climbing and cutting machine	Kerala State Council for Science, Technology and Environment	22/01/2019	31/07/2019	Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role (Supervisor/ Co-Supervisor)	Year of Award

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
August 10-14, 2020	Training programme on E-Content Development	National	Participant	NITTTR	Online
April 16-18, 2018	4th Global Nano Technology Congress and Expo (GNCE)	International	Speaker	Nanotechnology Organizing Committee, Scientific Federation	Dubai
28th September to 1st October 2016	International Conference on Green Technologies and Energy Efficiency	International	Speaker	Sakarya University, Turkey	Turkey

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event	Date (s)	Role	Venue

	(International/ National/ Local)			
Design of Experiments for Engineers and Researchers	Local	22nd Jan 2016	Coordinator	Vimal Jyothi Engineering College, Kannur
National Conference on Current Advances in Mechanical Engineering (NCCAM)	National	4th and 5th March 2016	Coordinator	Vimal Jyothi Engineering College, Kannur
Research Techniques and Tools for Engineers and Researchers	National	20-24 June 2016	Coordinator	Vimal Jyothi Engineering College, Kannur
Nanotechnology and its Applications	Local	2nd July 2016	Coordinator	Vimal Jyothi Engineering College, Kannur
Design of Experiments and Optimization Techniques	National	14-18 May 2018	Coordinator	Sree Buddha College of Engineering, Pattoor, Alappuzha
Advanced Energy Engineering and Technology	National	2-6 July 2018	Coordinator	Sree Buddha College of Engineering, Pattoor, Alappuzha
Experimental and Numerical Dynamic Analysis of Structures	National	30th September 2019	Coordinator	The National Institute of Engineering, Mysuru
Industrial Applications of 3D printing and Reverse Engineering	National	14th November 2019	Coordinator	The National Institute of Engineering, Mysuru

18. Invited Talks delivered

Topic	**Date**	**Inviting Organization**
Pool boiling heat transfer enhancement using nano-CuO coating	05/07/2022	Kalasalingam Academy of Research and Education, Tamil Nadu

Reduction of particulate emissions from welding: A novel approach	13/07/2020	Sree Buddha College of Engineering, Kerala
Source reduction strategies for arc welding fumes - Way forward to green welding process	18/06/2021	Marian Engineering College Trivandrum, Kerala

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Turkey	1Week	International Conference
Dubai	1 Week	Invited Talk

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Subhash G.V., Sivapirakasam S.P.,**Sreejith Mohan**, Nandakumar Subramanian, Harisivasri Phanindra K.	Effect of diethyl ether additive on reformulated bio-mix blends from a mixture of different feed stock's	Waste and Biomass Valorization	-	-	2022	3.703
Subhash G.V., Sivapirakasam S.P.,**Sreejith**	Production, characterization and assessment	Biomass and Bioenergy	154	106246	2021	5.7

Mohan, Harisivasri Phanindra K.	of reformulated bio-mixture fuel from a mixture of various raw feedstock's and the effect of n-butanol as an additive on bio-mixture blends					
Rajeswari, V. B., Paramashivan, S. S., **Sreejith Mohan**., Albert, S. K., & Rahul, M	Effect of substituting fine rutile of the flux with nano TiO2 on the improvement of mass transfer efficiency and the reduction of welding fumes in the stainless-steel SMAW electrode	High Temperature Materials and Processes	39	117-123	2020	1.1
Kannan, R. R., Sivapirakasam, S. P., Vishnu, B. R., Rahul, M., & **Sreejith Mohan**	Reduction of hexavalent chromium (Cr^{6+}) in welding fumes during stellite hard facing with GTAW process	Materials Today: Proceedings	27	2052-2055	2020	
Sreejith Mohan, Nair, S. S., Ajay, A. V., Saravanan, M. S., Vishnu, B. R., Sivapirakasam, S. P., & Surianarayanan, M.	Corrosion behaviour of ZrO2-TiO2 nano composite coating on stainless steel under simulated marine environment	Materials Today: Proceedings	27	2492-2497	2020	
Joseph, A., **Sreejith Mohan**, Kumar, C. S., Mathew, A.,	An experimental investigation on pool boiling	Experimental Thermal and Fluid Science	103	37-50	2019	3.37

Thomas, S., Vishnu, B. R., & Sivapirakasam, S. P.	heat transfer enhancement using sol-gel derived nano-CuO porous coating					
Sivapirakasam, S. P., **Sreejith Mohan** , Santhosh Kumar, M. C., Thomas Paul, A., & Surianarayanan, M.	Control of exposure to hexavalent chromium concentration in shielded metal arc welding fumes by nano-coating of electrodes.	International Journal of Occupational and Environmental Health	23	128-142	2017	1.19
Sivapirakasam, S. P., **Sreejith Mohan**, Kumar, S., & Surianarayanan, M.	Modeling of Fume Formation from Shielded Metal Arc Welding Process.	Metallurgical and Materials Transactions B	48	1268-1278	2017	2.5
Sreejith Mohan, Sivapirakasam, S. P., Santhosh Kumar, M. C., & Surianarayanan, M.	Application of Taguchi method in the optimization of process parameters for a sol–gel-derived nano-alumina film.	Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications	230	574-585	2016	0.74
Sivapirakasam, S. P., **Sreejith Mohan**, Kumar, M. S., & Surianarayanan, M.	Welding fume reduction by nano-alumina coating on electrodes–towards green welding process.	Journal of Cleaner Production	108	131-144	2015	9.29
Sreejith Mohan, Sivapirakasam, S. P., Kumar, M. S., & Surianarayanan, M.	Welding fumes reduction by coating of nano-TiO_2 on electrodes	Journal of Materials Processing Technology	219	237-247	2015	6.16

Sreejith Mohan, Sivapirakasham, S. P., Bineesh, P., & Satpathy, K. K.	Strategies for controlling welding fumes at the source-A review	In Applied Mechanics and Materials	592	2539-2545	2014	

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Albin Joseph, Sreejith Mohan, Arun Mathew, S.P. Sivapirakasam, M.C. Santhosh Kumar and M. Surianarayanan	Pool boiling heat transfer enhancement using nano-CuO coating	International Conference on Green Technologies and Energy Efficiency	15-19	Green Technologies and Energy Efficiency	Sakarya University, Turkey	2016

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Sreejith Mohan, Albin Joseph, Akash Poovathinkal, K. H. Akhilesh, Jerin Reji, Jithin Ninan Idicula, B. R. Vishnu, and S. P. Sivapirakasam	Performance Evaluation of Linear Solar Collector Using Hybrid Nanofluid	Lecture Notes in Mechanical Engineering,	2021	2195-4364
Ravikiran, Mohd. Jawad Shariff, H. Kaushil, S. Likhitha, Nikhil Bhootpur,and **Sreejith Mohan**	Design and Development of a Cost-Effective Reloadable Motor for Sounding Rocket	Lecture Notes in Mechanical Engineering	2021	2195-4364