

## Dr. SAJAN JEROME

M.Tech, Ph.D., MIE(India), MISTE, MECS, MISHMT

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### **ACADEMIC EXPERIENCE: 19 Years 02 Months (including research)**

Period	Position Held	Institution	Years
04-07-2024 till date	Asst.Prof.	LBS Institute of Technology for Women, Poojappura, Trivandrum	--
01-09-2021 to 03-07-2024	Asst.Prof.	LBS College of Engg, Kasaragod	2 Years 10 Months
02-07-2021 to 31-08-2021	Asst.Prof.	LBS Institute of Technology for Women, Poojappura, Trivandrum	2 Months
04-07-2018 to 01-07-2021	Research Scholar (QIP)	National Institute of Technology Thiruchirappalli Tamil Nadu	3 Years
06-06-2012 to 03-07-2018	Asst.Prof.	LBS Institute of Technology for Women, Poojappura, Trivandrum	6 Years 7 Months
28-02-2008 to 05-06-2012	Asst.Prof.	LBS College of Engg, Kasaragod	4 Years 4 Months
03-01-2007 to 27-02-2008	Lecturer	Mar Baselios College of Engg. & Technology, Bethany Hills, Nalanchira, Trivandrum	1 Year 1 Month
04-08-2003 to 03-01-2005	Lecturer	Mary Matha College of Engg. & Technology, Trivandrum	1 Year 4 Months

**Core Subjects Handled:** Advanced Energy Engg., Refrigeration & Air Conditioning, Thermal Engg., Heat & Mass Transfer, Fluid Mechanics, Fluid Machinery, Thermodynamics, Machine Design, Mechanical Measurements & Instrumentation, Machine Drawing, Industrial Management, Basic Mechanical Engg., Engg. Graphics.

*(Had been appointed as examiner by university for Centralized Valuation & Revaluation of all these subjects).*

**Labs Handled:** Fluid Mechanics & Machinery Lab, Thermal Engg. Lab, Heat Transfer Lab, Computer Aided Design & Analysis Lab.

*(Had been appointed as internal & external examiner by university for of all these labs).*

## **PROFESSIONAL & EDUCATIONAL QUALIFICATIONS:**

<b>Qualification</b>	<b>Year of Passing</b>	<b>Board/ University</b>	<b>Institution</b>	<b>Percentage (%)</b>
Ph.D.	2024	National Institute of Technology Trichy	National Institute of Technology Trichy	--
M.Tech (Industrial Refrigeration & Cryogenic Engg.)	2006	University of Kerala	TKM College of Engg. Kollam	8.78 (CGPA)
B.Tech (Mechanical Engg.)	2002	Cochin University of Science & Technology	College of Engg. Adoor	72.5
Pre-Degree (First Group)	1998	University of Kerala	Mar Ivanios College Trivandrum	First Class
S. S. L. C	1996	Board of Public Examinations, Kerala	St. Thomas High School Trivandrum	Distinction

**Ph.D THESIS:** A comprehensive study on electric vehicle adoption in India.

## **PUBLICATIONS:**

- “Assessment of gasoline consumption and greenhouse gas emission reduction on using battery electric two-wheeler in India”, Sajjan Jerome, M Udayakumar. Journal of the Brazilian Society of Mechanical Sciences and Engineering. (2021) DOI: [10.1007/s40430-020-02756-x](https://doi.org/10.1007/s40430-020-02756-x)
- “A Study on Cost Effective Electric Vehicle Charging Infrastructure in India Through Open Access Power Procurement”, Sajjan Jerome, M Udayakumar. Arabian Journal for Science and Engineering. (2021) DOI: [10.1007/s13369-021-06012-9](https://doi.org/10.1007/s13369-021-06012-9)
- “An Economic Feasibility Study of Electric Vehicle Charging Stations in India”, Sajjan Jerome, M Udayakumar. In: Krishna, V., Seetharamu, K.N., Joshi, Y.K. (eds) Recent Advances in Hybrid and Electric Automotive Technologies. Lecture Notes in Mechanical Engineering. Springer, Singapore. (2022) DOI: [https://doi.org/10.1007/978-981-19-2091-2\\_17](https://doi.org/10.1007/978-981-19-2091-2_17)

## **CONFERENCES:**

- "Theoretical Studies of Single Stage Orifice Pulse Tube Refrigerator", Proceedings of VII National Conference on Technological Trends 2006, (205-209), College of Engg., Thiruvananthapuram
- "A Comparison on Total Cost of Ownership for Internal Combustion Engine and Battery Electric Two-Wheelers in India", Proceedings of National Conference on Advances in Energy Efficient Technologies (NCAEET-2019), (205-209), Marian Engineering College., Thiruvananthapuram
- "Design and development of multi-functional wheelchair for physically challenged Persons", Proceedings of Second International Conference on Recent Advancements in Engineering &

Technology (ICORETech-2024), LBS College of Engineering, Kasaragod, 8<sup>th</sup> to 9<sup>th</sup> February 2024

- "*Automated crack detection system for railway tracks*", Proceedings of Second International Conference on Recent Advancements in Engineering & Technology (ICORETech-2024), LBS College of Engineering, Kasaragod, 8<sup>th</sup> to 9<sup>th</sup> February 2024

#### **TRAINING PROGRAMS ATTENDED:**

- "AutoCAD L-I", Autodesk Authorized Training Centre Course at CADPOINT, Thiruvananthapuram.
- "AutoCAD L-II", Autodesk Authorized Training Centre Course at CADPOINT, Thiruvananthapuram.
- "Three-day workshop on Ansys 10.0", InterCAD Institute Pvt. Ltd.

#### **FACULTY DEVELOPMENT PROGRAMS ATTENDED:**

- "Induction Training Programme", LBS Institute of Technology for Women, Poojappura, Trivandrum  
(04/06/2008 to 06/06/2008, 03 days)
- "Simulation Software and Loco Engineering", Department of Electrical & Electronics Engg., LBS College of Engg., Kasaragod  
(27/03/2009 to 28/03/2009, 02 days)
- "Research Orientation Programme on Numerical Simulation", Department of Mechanical Engg., Govt. Engg. College Batron Hill, Thiruvananthapuram  
(22/06/2009 to 03/07/2009, 12 days)
- "Automobile Technology-Status and Challenges", Department of Mechanical Engg., College of Engg., Thiruvananthapuram  
(14/12/2009 to 19/12/2009, 06 days)
- "Research Methodology", Department of Mathematics, LBS Institute of Technology for Women, Poojappura, Thiruvananthapuram  
(04/03/2013 to 08/03/2013, 05 days)
- "Information Technology and Green IT", TATA Consltancy Services  
(31/05/2013, 01 day)
- "Trends and advancements in Aerospace Engg.", Department of Mechanical Engg., SCT College of Engg., Pappanomcode, Thiruvananthapuram  
(17/10/2013 to 30/10/2013, 14 days)
- "Outcome Based NBA Accreditation ", Department of Computer Science & Engg., LBS Institute of Technology for Women, Poojappura, Thiruvananthapuram  
(28/01/2015 to 30/01/2015, 03 days)
- "Pedagogical Training.", Teaching Learning Centre., Indian Institute of Technology, Madras  
(23/04/2015 to 25/04/2015, 03 days)

- “Research Methodology for Science, Engineering & Management.”, Department of Mechanical Engg., National Institute of Technology, Calicut  
(25/05/2015 to 30/05/2015, 06 days)
- “LATEX- A Tool for Effective Documentation.”, Department of Electronics & Communication Engg.,LBS Institute of Technology for Women, Poojappura, Thiruvananthapuram  
(06/07/2015 to 08/07/2015, 03 days)
- “Engineering Graphics.”, Department of Mechanical Engg.,Marian Engg. College, Thiruvananthapuram  
(20/06/2016 to 22/06/2016, 03 days)
- “Timeless Leadership-Ignite the Spark in your Heart.”,Translational Research & Professional Leadership Centre(TPLC), Govt. Engg. College Batron Hill, Thiruvananthapuram  
(27/06/2016 to 30/06/2016, 04 days)
- “Installation Testing and Maintenance of Solar Thermal Systems.” , APEX Hi- Tech Institute, Govt. of India, Bangalore  
(18/07/2016 to 22/07/2016, 05 days)
- “Technology Enabled Teaching & Learning.” , Indian Institute of Management, Kozhikode  
(08/08/2016 to 12/08/2016, 05 days)
- “Research Scope in Thermal Engineering.” Department of Mechanical Engg., Government College of Engg. Salem  
(13/12/2016 to 19/12/2016, 07 days)
- “Solar Energy Technologies.”, GIAN Course, Department of Mechanical Engg., National Institute of Technology, Tiruchirappalli  
(08/05/2017 to 18/105/2017, 11 days)
- “Recent Trends in Solar Energy and Instrumentation.”, Department of Mechanical Engg., National Institute of Technology, Tiruchirappalli  
(09/06/2017 to 11/06/2017, 03 days)
- “E-Vehicle: A Green Approach for Sustainable Development (EV-GASD’19).”, Department of Electrical & Electronics Engg.,Mar Baselios College of Engg. & Technology, Nalanchira, Thiruvananthapuram  
(07/01/2019 to 11/01/2019, 05 days)
- “E-Mobility.”, Department of Mechanical Engg. & Division of Electrical Engg., SCT College of Engg. & Technology, Pappanamcode, Thiruvananthapuram  
(26/06/2019 to 01/07/2019, 06 days)
- “Combustion Generated Pollution Control.”, Department of Mechanical Engg., National Institute of Technology, Tiruchirappalli  
(16/12/2019 to 20/12/2019, 05 days)
- “Emerging Trends in Alternative Energy Resources.” Department of Mechanical Engg., St. Thomas Institute for Science & Technology. Trivandrum

(13/02/2023 to 15/02/2023, 03 days)

- “Machine Learning and Deep Learning using Python.” Department of Electronics & Communication Engg., St. Thomas Institute for Science & Technology. Trivandrum (17/08/2023 to 19/08/2023, 03 days)
- “Outcome Based Education and Essential AI Tools for Teachers.” The Internal Quality Assurance Cell, Department of Computer Science, St. Albert’s College (Autonomous) Ernakulam in association with The Kerala State Higher Education Council (KSHEC). (02/11/2023 to 09/11/2023, 07 days)
- “Research Methodology using ChatGPT & AI tools and Funding Opportunities for Research.” PG Department of Computer Applications, The Internal Quality Assurance Cell and Lincoln University College Marian Research Centre (LUC MRC) of Marian College (Autonomous in association with The Kerala State Higher Education Council (KSHEC). (23/11/2023 to 01/12/2023, 08 days)
- “IoT and Image Processing in Robotics and UAV Applications.” National Institute of Technical Teachers Training and Research, Chennai, Ministry of Education, Government of India. (11/03/2024 to 15/03/2024, 05 days)
- “Advanced Materials for Engineering Applications.” Department of Mechanical Engg., Vidya Academy of Science & Technology, Thrissur in association with Institution of Engineers (India) and IQAC VAST. (18/03/2024 to 20/03/2024, 03 days)
- “Energy, Thermal and Refrigeration & Air Conditioning.” National Institute of Technical Teachers Training and Research, Chennai, Ministry of Education, Government of India. (25/03/2024 to 29/03/2024, 05 days)
- “Recent Developments in Mechanical Engineering.” National Institute of Technical Teachers Training and Research, Chennai, Ministry of Education, Government of India. (24/06/2024 to 28/06/2024, 05 days)

#### **WORKSHOPS ATTENDED:**

- State level one day workshop for NSS Programme Officers at Conference Hall, Kerala State Science & Technology Museum, PMG, Thiruvananthapuram. National Service Scheme, Higher Education Department, Government of Kerala (14 December 2022, 01 day)
- Kasaragod District Level workshop for NSS Programme Officers of ASAAD Sena, Nehru College of Arts & Science, Kanhangad. Social Service Department & Higher Education Department, National Service Scheme State Cell, Government of Kerala (02 March 2023, 01 day)
- Clean Tech Challenge Grand Finale & Annual Meet, Thiruvananthapuram, APJ Abdul Kalam Technological University, National Service Scheme Cell in association with Energy management Centre, Kerala (12 & 13 April 2023, 02 days)

**SPONSORED PROJECTS:**

Title of Project	Amount (Rs.)	Funding Agency	Period	Remarks
Design and development of multi-functional wheelchair for physically challenged persons	50000	Centre of Excellence for Disability Studies (CeDS), Poojappura, Thiruvananthapuram-695012	2024	Ongoing

**RESPONSIBLE POSITIONS HELD:**

- ✓ Staff Advisor for class: LBSCE Kasaragod, LBSITW Thiruvananthapuram
- ✓ Faculty in Charge: Road Safety Club, LBSCE Kasaragod
- ✓ Faculty in Charge: Machine Shop, LBSCE Kasaragod
- ✓ Resident Tutor: LBSCE Kasaragod
- ✓ Secretary, Staff Club: LBSCE Kasaragod
- ✓ Faculty in Charge, Fluid Mechanics & Machinery Lab: LBSITW Thiruvananthapuram
- ✓ Assistant Placement Officer: LBSITW Thiruvananthapuram
- ✓ Member, Anti Ragging Squad: LBSITW Thiruvananthapuram
- ✓ Member, Time Table Committee: LBSCE Kasaragod, LBSITW Thiruvananthapuram
- ✓ Nodal Officer, Equity Action Plan, TEQIP II: LBSITW Thiruvananthapuram
- ✓ Member, University Exam Cell: LBSITW Thiruvananthapuram
- ✓ Member, Question Paper Scrutiny Committee: LBSITW Thiruvananthapuram
- ✓ Member, Committee for Building and Civil Work: LBSITW Thiruvananthapuram
- ✓ Co-Ordinator, Anti Ragging Squad: LBSITW Thiruvananthapuram
- ✓ Member, Internal Examination Cell: LBSCE Kasaragod
- ✓ Member, Career Guidance and Placement Cell: LBSCE Kasaragod
- ✓ Member, Internal Quality Assurance Cell: LBSCE Kasaragod
- ✓ Member, Grievances and Appeal Committee: LBSCE Kasaragod
- ✓ Member, Industry Institute Interaction Cell: LBSCE Kasaragod
- ✓ NSS Programme Officer: LBSCE Kasaragod
- ✓ Convener, Canteen Committee: LBSCE Kasaragod
- ✓ Faculty in Charge, Heat Transfer Lab: LBSCE Kasaragod
- ✓ Convener, ASAAD Sena: LBSCE Kasaragod
- ✓ Member, Institute Level Student Project Monitoring Committee: LBSCE Kasaragod
- ✓ Member, Institute Level Technical Evaluation Committee: LBSITW Thiruvananthapuram

**CONTRIBUTION TO SOCIETY:**

- Successfully Co-ordinated a seven-day special camp from 23/12/2022 to 29/12/2022 for the NSS volunteers of LBS College of Engineering, Kasaragod held at Govt. Mappila L P School, Muliya, Kasaragod. The camp involved the cleaning activities of the school campus Govt. Mappila L P School, awareness programs against drug abuse for the local people, collection of e-waste from the house holds of Muliya Grama Panchayat, cleaning of a canal passing through Ward numbers 1 and 2 of the Muliya Grama Panchayat.
- Successfully Co-ordinated a seven-day special camp from 22/12/2023 to 28/12/2023 for the NSS volunteers of LBS College of Engineering, Kasaragod held at Govt. HSS Patla, Madhur,

Kasaragod. The camp involved the cleaning of the school campus of Govt. Higher Secondary School and Govt. High School Patla, awareness programs against drug abuse for the local people, initiated “Sneharaman” project (a flagship program under NSS) at Madhur Grama Panchayat.

- Mentored the participants of the “Carbon Zero Challenge Hackathon” held on 14/02/2024, Sponsored by Innovation and Entrepreneurship Development Centre (IEDC) at LBS College of Engg., Kasaragod.

**MEMBERSHIP IN PROFESSIONAL BODIES:**

Organization	Grade	Year of Induction
Indian Society for Technical Education (ISTE)	LM 65176	2009
The Institution of Engineers (India) (IEI)	M-1657652	2019
Energy Conservation Society (ECS)	LM 2672	2020
Indian Society for Heat and Mass Transfer (ISHMT)	LM 1651	2022

**PERSONAL PROFILE:**

**Date of Birth** : 21 MAY 1981  
**Father’s Name** : JEROME P  
**Marital Status** : Married  
**Linguistic Ability** : English, Malayalam, Hindi  
**Hobbies** : Reading Books and Periodicals.

**DECLARATION:**

I hereby declare that the information furnished above is true to the best of my knowledge.

Date: 09/07/2024

Place: Thiruvananthapuram

Sajan Jerome

Sajan Jerome is currently working as an Assistant Professor in the Department of Mechanical Engineering, LBS College of Engg., Kasaragod, a Government of Kerala institution. He has more than 17 years of teaching and 3 years research experience. He did his B.Tech in Mechanical Engineering from College of Engg., Adoor, affiliated to Cochin University of Science & Technology. He graduated M.Tech. Degree in Industrial Refrigeration & Cryogenic Engg. from TKM College of Engg., Kollam affiliated to University of Kerala and Ph.D. Degree in Mechanical Engineering from National Institute of Technology (NIT-T), Tiruchirappalli, Tamil Nadu. His research interests include: energy policy, renewable energy, alternate fuels, electric vehicles, refrigeration. Sajan Jerome is a Life Member of Indian Society for Technical Education, Institution of Engineers (India), Energy Conservation Society and Indian Society for Heat and Mass Transfer.