

Dr.S.JesudassThomas

Associate Professor and HOD
Department of Mechanical Engineering

KCG College of Technology
Chennai-600097

Teaching Experience-28 years

Phone: 9841932001

Email: hodmech@kcgcollege.com



Research Interest

Surface Texturing
Machining

Academic and Professional Honors

- “Commendable Performance in the Department-2018”
- Commendable Contribution as Member of Admission Team-Received on 05/09/2019.
- Award received for Organising "Auto Show - KCG Octane - 1.0" on 6/7/2019 at KCG - Received on 05/09/2019.
- Second position as Supervisor of Commendable final year Project “Design and Development of Water Purifier using Vacuum Desalination Process” in IET Project Challenge - 2021.
- “Best Teacher Award” awarded by Lions Club, Shollinganallur, Received on 24/02/2025
- Received for the Department from Mathworks for the ‘Continuous Support in Adopting MATLAB and SIMULINK’ on 06/01/2026.
- Received for the Department Conferred Title of “High Impact Award” from ‘Successverse’ on 29/04/2026

Publications

International Journals:

1. S. Jesudass Thomas & K. Kalaichelvan (2018) Comparative study of the effect of surface texturing on cutting tool in dry cutting, Materials and Manufacturing Processes, 33:6, 683-694, DOI: 10.1080/10426914.2017.1376070
2. Karthikeyan, K., Divine, S. Astro, Jibin, J., Jesudass Thomas, S. International Journal of Vehicle Structures and Systems, 2023, 15(6), pp. 833-835, CFD Analysis of Air Intake Manifold System to Improve the Efficiency of Student Formula Car

3. Dhanush, N.,Anoop, S. A.,Arunamoorthy, G.,Jesudass Thomas, S.,Hariram, Venkatesan R. Journal of Vehicle Structures and Systems, 2024, 16(1), pp. 79-82, Computational Fluid Dynamics Simulation for Aerodynamic Effects of Retractable Flaps on a Passenger Vehicle.
4. Bakhirathan, Asokan,Jesudass Thomas, S.,T, Sathish,Narayanasarma, Subramani Journal of Materials Science: Materials in Electronics, 2026, 37(12), 899, hBN-rich graphene oxide-based hybrid thermal interface materials for enhanced insulation and thermal stability in electronic packaging.
5. Gopal, V.,Bharanidaran, R.,Jesudass Thomas, S.,Ashwin Prabhu, G. Journal of Micro and Bio Robotics, 2026, 22(1), 1, Design, fabrication and performance evaluation of a 3D-printed microgripper based on compliant mechanisms for precision manipulation.

National/InternationalConferences:

1. Jesudass Thomas S, Kalaichelvan K,, “Machinability Studies on Textured Tool Insert by WEDM in dry machining of Inconel – 718”, Second National Conference for Mechanical Engineering Research Scholars (MERS – 2019) at SSN Engineering College, Chennai on 29/03/2019.
2. Paper titled “Performance Improvement of Cutting Tool by Surface Texturing” Presented in the National Conference (NCMACE - 2018) on 28/03/2018 at KCG College of Technology.
3. Paper titled “Performance Improvement by Surface Texturing using WEDM on Cutting Tool” Presented in the National Conference (NCMACE - 2018) on 28/03/2018 at KCG College of Technology.
4. Jesudass Thomas S, Kalaichelvan K, “Surface Texturing by Wire cut EDM on Cutting Tool”, **National Conference** on “Advanced Research and Innovation in Mechanical Engineering” (ARIME - 2016) at KCG College of Technology, Chennai on 22/04/2016 and 23/04/2016.
5. Jesudass Thomas S, Kalaichelvan K, “Study of Chip Formation by Surface Texturing on Cutting Tool”, **International Conference** on Materials, Design and Manufacturing Process (ICMDM - 2016) at College of Engineering, Anna University, Chennai from 17/02/2016 to 19/02/2016.
6. Jesudass Thomas S, Kalaichelvan K, “Design and Development of Miniature Tensile Testing Machine”, **International Conference** on Recent Advances in Mechanical Engineering (INCROME - 2011) at Dr.M.G.R. University, Chennai on 21/04/2011 and

22/04/2011.

7. Jesudass Thomas S, Kalaichelvan K, “Miniature Specimen Tensile Testing Machine - An Innovative Technology”, **National Conference** on Advances and Innovations in Mechanical Engineering (AIME - 2011) at SKR Engineering College, Chennai on 24/02/2011.

Patent:

Published a Patent - “An Investigation of Abrasive Water Jet Machining on Glass Fiber Reinforced Polymers” Publication date: 2021/5/26; Patent office AU; Patent number- 2021101722

Published a Patent - 202441013675 - Titled “Method for fabricating a dehydration chamber with integrated waste heat recovery capabilities”.

Academic Background

- 2023 - Completed Ph.D under the Guidance of Dr. K Kalaichelvan, Professor & Head, Department of Ceramic Technology, Anna University, AC Tech. Campus, Chennai.
- 2011 - M.E Production Technology, Anna University - Madras Institute of Technology Campus, Chromepet, Chennai.
- 1993 - B.E Mechanical, Bharath Institute of Science and Technology, Chennai.

Academic and Industrial Experience:

Present

October 2018 - till date, Associate Professor & HOD, Department of Mechanical Engineering, KCG College of Technology, Chennai.

Past

- May 2014 to October 2018 - Associate Professor, Department of Mechanical Engineering, KCG College of Technology, Chennai
- April 2011 to May 2014 - Associate Professor, VIT Institute of Technology, Chennai.
- May 2006 to March 2011 - Head of the Department, Sri Durgadevi Polytechnic College, Kavarapettai.
- December 2004 to May 2006 - Head of the Department, Meenakshi Krishnan Polytechnic College, Chennai.
- January 1998 to November 2004 - Lecturer, Meenakshi Krishnan Polytechnic College, Chennai.
- September 1993 - October 1997 - Production Supervisor, M/S. Hawk Engines, Chennai.

Events Organised:

- Staff Development Programme (SDP) under ISTE in the year 2008 at Sri Durgadevi Polytechnic College, Kavarapettai.
- Organised 3 Technical Symposiums under ISTE during the academic years 2009, 2010 and 2011.

- Arranged and coordinated Industrial Visits for students and Faculty at Perambur Loco Works, Integral Coach Factory (ICF) – Perambur, Thermal Power Station – Ennore, Thermal Power Station – Athipet, Guindy Technical Training Centre and Super Auto Forge Pvt. Ltd.
- Arranged In-plant Training for students at TVS – Brakes India Ltd. Polambakkam plant, TVS – Wheels India Ltd., Simpson & Co. Ltd. Anugraha Valves & Die Castings - CBE, Nord Drive Systems – Noida, Schwing Stetter Pvt. Ltd., Ashok Leyland, Rane Brakes etc.,
- Arranged Guest Lectures from Industries for the students on various topics on recent trends in Mechanical Engineering.
- Arranged Value Added Courses for the students in various fields of Mechanical Engineering.
- Acted as member of the Interview Panel Committee for Department of Mechanical Engg. for HITS during May – 2017.
- Organized Skill Development Programme in Gas Welding with Welding Simulator conducted for Polytechnic Students in the Month of June – 2017.
- Training Coordinator for Practical Subjects Training Program in Mechanical Engineering Department Laboratories for Non-Teaching Staff from 01/11/2017 to 29/11/2017.
- Guest Lecture given on the Topic “Friction” during the Anna University approved FDP on “Kinematics of Machinery” on 16/12/2017.
- Acted as External Auditor for IQAC Academic Audit at HITS twice in the academic year 2017 – 2018.
- Coordinator for Value added course on “3D Printer Training” conducted for Third year Mechanical Engg. students in the academic year 2017 – 2018.
- Guest Lecture given on the Topic “Hydraulic and Pneumatic Systems” on 24/01/2018 at HIET Polytechnic College.
- Organised AICTE Sponsored two weeks FDP on "The Role of Smart Materials in Digital Manufacturing and Fourth Industrial Revolution" (Factories for Future) from 10/10/2019 to 23/10/2019.
- Organised "Auto Show-KCG Octane-1.0" on 6/7/2019 at KCG Campus.
- Organised Guest Lecture on "Mechanical Engineers- Expectations of Industry" on 22/07/2019.
- Organised State Level Project Competition – AnVer - 2K19 for Polytechnic students on 02/03/2019.
- Organised the Webinar on "Advanced Trends in Surface Treatment Solutions", presented by our department Alumni Mr. Johnson Mathew, DGM, Air Blast Surface Treatment Solutions on 12/05/2020.
- Organised “Design Now Challenge” Workshop for students to learn Fusion 360 conducted by ICT Academy in coordination with Autodesk in the year 2021.

Events Attended:

- Attended the webinar on ‘The Voice of Start-Ups MY STORY – Motivational Speech by Successful Entrepreneurs’, Presented by Mr. Vishnu Vardhan, Director and Mr. Samba Siva Rao, Project Coordinator, Crion Technologies on 07/01/2022.
- Attended the webinar on “Research, Project & Internship Opportunities in Mechanical Engineering” conducted by AICTE on 06.01.2022.
- Attended the Webinar on “Role of Start-ups in Indian EV Transition” presented

by Mr. SivamSakthivel, Director, Yali Mobility, organized by Department of Mechanical Engineering conducted on 28th December – 2021.

- Given a Guest Lecture for the Course “Strength of Materials” for III Sem. DME Students on 02/12/2021 and 03/12/2021 at HIET Polytechnic students.
- Attended the IIT-PALS event Industry speaks - Core lecture on ‘PRODUCT RELIABILITY ENGINEERING’ host by KCG College of Technology on 27/08/2021.
- Attended five days AICTE-ISTE approved Orientation/Refresher Program on Thermal Engineering, organized by Kalpatru Institute of Technology, Tiptur, Karnataka from 17/02/2021 to 21/02/2021.
- Completed the following 5 Online Certification Courses, certified by Coursera – 1. Material Processing 2. Introduction to Engineering Mechanics 3. Mechanics of Materials I: Fundamentals of Stress & Strain and Axial Loading 4. Materials Science: 10 Things Every Engineer Should Know 5. Fundamentals of Fluid Power in the year 2020.
- Attended five days virtual FDP on “ME8493 - Thermal Engineering - I”, organized by Sri Sairam Engineering College from 28/12/2020 to 04/01/2021.
- Attended Webinar on “Biomedical Engineering – Prospectus and Opportunities”, presented by Dr. A Thirugnanam, Associate Professor, NIT- Rourkela on 06/11/2020.
- Attended Webinar on “Computational Fluid Dynamics (CFD)-The Answer to what, Why and How!” – Presented by Ms. Suryasree Roy Chowdhury, Research Scholar - IIT, Madras on 06/10/2020.
- Attended Webinar on “Key Organizational Activities – Explanation Through TQM Practices” presented by Mr. Dilip Kumar, Deputy Manager – Product Management, Rane Brake Linings Ltd. on 06/08/2020.
- Attended five days virtual FDP on “Manufacturing, Machining and Testing of Composites”, organized by Sri Sairam Institute of Technology from 15/06/2020 to 19/06/2020.
- Acted as Judge for the Science Expo, Conducted for school level students, organized by HIET Polytechnic College on 31/01/2020.
- GATE Coaching from 13 – 09-2019 to 08 – 07– 2020. (For only one course).
- Consultancy on Pump Testing for CJ Titanium Pvt.Ltd. on 11/12/2019.
- Attended ‘Train the Trainer’ – Training at BOSCH Training Centre – Bangalore from 02/12/2019 to 06/12/2019.
- Three Days FDP on Teaching Pedagogy at Teaching Learning Centre, IIT Madras, from 13/9/18 to 15/9/18
- One Day Training on “ISO 9001:2015 Standard Requirements” on 21/3/2018 at KCG College of Technology
- Two Days Workshop on “Additive Manufacturing” on 19/3/2018 and 20/3/2018 at Anna University - CEG Campus.
- Session on “Cognitive Learning Techniques” on 10/2/2018 at KCG College of Technology.
- Seven Days Anna University approved FDP on KOM from 13/12/2017 to 19/12/2017 at KCG College of Technology.
- One day Seminar on “Nuances in Research Proposal Writing” on 30/11/2017 at KCG College of Technology.
- Two days Course on “Geometric Dimensioning and Tolerancing” on 8/9/2017 and 9/9/2017 at Anna University - AC Tech. Campus, Chennai.

- OnedaySeminaron“A ForesightintoResearch”on27/6/2017atKCGCollegeofTechnology.
- Two Days IQAC Training Program on “Management of QC’s for Effectiveness of EducationalInstitutions” On 22/6/2017 and 23/6/2017 at KCG College of Technology.
- TwoDaysFDPonDynamicsofMachineryon16/6/2017and17/6/2017atKCGCollege of Technology
- Participatedinthe **One day Seminar on“Ceramic Coatings”** held during 13/03/2017organized by Department of Ceramic Technology, Anna University, AC Tech. Campus, Chennai – 600025.
- TwoDaysSeminaronPorousCeramicson27/05/2016&28/05/2016 -
2DaysatAnna University - AC Tech. Campus, Chennai.
- Conferenceon“AdvancedResearchandInnovationinMechanicalEngineering”on 22/04/2016 & 23/04/2016 at KCG College of Technology
- InternationalConferenceonDesign,Materials&Manufacturing,“ICMDM 2016”on 17/02/2016to 19/02/2016 at Anna University -
- DigitalManufacturingon29/07/2015atHotelCrownPlaza,Adyar,Chennai
- OneDaySeminaron“AbrasiveWaterJetMachining”on15.03.2015atAnnaUniversity, Chennai.
- FacultyDevelopmentTrainingProgrammeon“AppliedHydraulicsandPneumatics”on 04/06/2012 to 10/06/2012 at Anna University - MIT Campus, Chennai
- StaffDevelopmentProgrammeon“HydraulicSystemsanditsRecentTrends”on 13/07/2009 to 25/07/2009 at Sri Sairam Polytechnic College, Chennai.
- TwoDaysWorkshopon“AdvancesinLeanManufacturingandApplications”on 13/03/2009 & 14/03/2009, Anna University - MIT Campus, Chennai.

SubjectsTaught/Teaching

- FluidMechanicsandMachinery
- DesignofTransmissionSystems
- ThermalEngineering
- AppliedHydraulicsandPneumatics
- MaintenanceEngineering
- EngineeringMetrologyandMeasurements
- EngineeringThermodynamics
- Strengthof Materials
- EngineeringMechanics
- BasicCivilandMechanicalEngineering
- PowerPlantEngineering

- ManufacturingTechnology-I
- ProcessPlanningandCostEstimation

ProfessionalAffiliations

- LifeMember-ISTEIndia
- LifeMember-IEI

Dr. S Jesudass Thomas