

RESUME

Dr.K.ULAGANATHAN, BE., ME., Ph.D.,

No: 4/104, Annamalai Nagar,
Pethanicken Plalayam,
Kallipalayam Post
Coimbatore – 641 107
Tamil Nadu, INDIA
Mobile: 9976188918
Email: kulagu2006@gmail.com

PROFESSIONAL PROFILE

Ph.D with over 26 years rich experience in Product Testing, Validation, Assessment and Certification, Calibration, Laboratory Quality Management System with Scientific and Industrial Testing And Research Centre (SITARC) at Coimbatore and 10 years Teaching experience in Kumaraguru College of Technology at Coimbatore.

EDUCATIONAL QUALIFICATION

Degree	Name of Institute	Name of University	Percentage of Marks	Year
Ph.D.	Sri Ramakrishna Engineering College, Coimbatore	Anna University, Chennai	I Class	2019
M.E (Production Engineering)	P.S.G.College of Technology, Coimbatore.	Anna University, Chennai.	8.47 CGPA With Distinction	2005-2008
B.E (Mechanical Engineering)	Govt. College of Technology, Coimbatore.	Bharathiar University, Coimbatore.	73 %	1992-1996
D.M.E.	Sakthi Institute of Technology, Sakthi Nagar.	State Board of Technical Education, Tamil Nadu.	75 %	1984-1987

INDUSTRY / ACADEMIC EXPERIENCE:

SI No	Name of the Industry/Institution	Designation	Period	No of Years
1	Scientific and Industrial Testing And Research Centre, Coimbatore	Director	August 2021 to still date	2 Years 10 Months
2	Kumaraguru College of Technology, Coimbatore	Assistant Professor - III	June 2011 to July 2021	10
3	Scientific and Industrial testing And Research Centre, Coimbatore	Assistant Director (Mech) & Quality Manager	July 2000 to June 2011	11
4	The General Engineering Company, Coimbatore	Production Engineer	September 1992 to May 2000	8
5	Coimbatore Rajendra Industries, Coimbatore	Engineer-Quality Control	May 1987 to April 1992	5
Total Experience				36 Years 10 Months

AREA OF EXPERTISE:

PRODUCT TESTING

- Performance testing of all types of Domestic, Agricultural, Industrial and Process Pumps as per National /International / Customer Specifications.
- Testing of Pumps and Motors for UL and CE Certifications.
- Performance testing of all types of Valves.
- Performance and Life Cycle testing of Domestic & Bulk type Water Meter as per IS/ISO/OMIL Standards.
- Conducting Performance Testing of Electric Motors.
- Conducting Performance test on Domestic Pressure Cooker, Oil Stove, Burner, and Gas Cylinder.
- Mechanical properties of materials - Tensile, Compression, Shear, Bend, Hardness, Impact, Torsion tests.
- Microstructure Analysis of sample.
- Measurement of coating thickness.
- Welder quality Evaluation.
- Testing of Fasteners such as Bolts, Nuts, and Rivets.
- Testing of Building Materials.
- Environmental test such as Cold test, Dry Heat test, Vibration test and IP test on electrical and electronic component and products.
- Reliability tests on component and products as per product specifications and customer requirements.
- Endurance tests on component and products as per product specifications and customer requirements.
- Non – Destructive Testing and Evaluation of samples.
- Surface Roughness Measurement.
- Develop and Validate test procedure for conducting various tests as per the customer needs.

INSTRUMENT / EQUIPMENT CALIBRATION

Calibration of all types of Mechanical, Electrical and Temperature and Flow Measuring Instruments / Equipments.

- Mechanical Instruments are
 - ✓ Length measuring Instruments – Verniar Caliber, Inside / Outside Micrometers, Dial Gauges, Bore Gauges, Slip Gauges, Depth Measuring Gauges, Plain Ring Gauges, Thread Ring Gauges, Plug Gauges, Measuring Tape.
 - ✓ Pressure Measuring Instruments – Pressure Gauge, Pressure Transducer, Vacuum Gauge, Vacuum Transducer.
 - ✓ Mass – Analytical Balance, Spring Balance, Electronic Weighing Scales.
 - ✓ Speed Measuring Instruments – Contact / Non - Contact Type Tachometers.
 - ✓ Torque Measuring Instruments – Torque Wrenches.
- Flow Meter Calibration by comparison method
- On Site Calibration of

- ✓ Universal Testing Machines
- ✓ Tensile Testing Machines
- ✓ Rockwell cum Rockwell Superficial Hardness Tester
- ✓ Brinell Hardness Tester
- ✓ Vickers Hardness Tester
- ✓ Surface Roughness Tester

PARTICIPATION IN TRAINING PROGRAMME

- Three days training course on Laboratory Quality Management System & Laboratory Accreditation as per ISO /IEC 17025:1999 Organized by NABL & CIPET, Mysore during 28-30 August 2000.
- Three days training course on Emerging Trend in Plastic Injection Molding & Blow Molding Process conducted by CIPET, Mysore during June 2001.
- Vibration Analysis and Controlling Techniques conducted by Hi-Damp Institute for Vibration and Advanced Research, Coimbatore on 10 November 2002.
- Short term training course on Fluid Power Control & Flow Metering Technique conducted by Fluid Control Research Institute, Palakkad during 16 – 29 June 2003.
- Training programme on Statistical Methods in Interlaboratory / Proficiency Testing Programme conducted by NABL & CII, Pune during 8 June 2003.
- Two days training programme on Interlaboratory / Proficiency Testing conducted by NABL & CII, Pune during 9-10 June 2003.
- Three days training course on Uncertainty Measurement conducted by NABL & CETE, Bangalore during 1 – 3 August 2003.
- Short term training programme on Computational Fluid Dynamics organized by Indian Institute of Technology, Chennai during 13 – 25 June 2005.
- Two Weeks ISTE Workshop on Heat Transfer organized by Indian Institute of Technology, Mumbai during 29 November – 10 December 2011.
- Two Weeks ISTE Workshop on Computational Fluid Dynamics organized by Indian Institute of Technology, Mumbai during 10 June – 22 June 2012.
- Two Weeks ISTE Workshop on Fluid Mechanics organized by Indian Institute of Technology, Kharagpur during December 2014
- Two weeks AICTE sponsored FDP on Material Characterization and Processing conducted by Sri Ramakrishna Engineering College during November 2019
- Two days online training course on ISO/IEC 17065:2012 Conformity assessment – Requirements for bodies certifying products, processes and services organized by TCB-QCI, New Delhi.
- Five days Assessor Training Program on ISO/IEC 17025: 2017 General requirements for the competence of testing and calibration laboratories Organized by NABL at NCL, Pune during 26 August – 30 August 2022.
- One month training program on ASNT NDT Level II organized by Evergreen NDT Services, Coimbatore during 01 January – 31 January 2024.

CONDUCTING TRAINING PROGRAMME

- Training course on Laboratory Quality Management System & Laboratory Accreditation as per ISO / IEC 17025: 2005
- Training course on Certified Internal Auditor Course as per ISO IEC 17025: 2005
- Training course on Estimation of Uncertainty in Testing and Calibration.
- Training course on Testing of Materials, Pump set, and Valves & Accessories as per relevant National / International standards.
- Training course on Laboratory Management System & Laboratory Accreditation as per ISO / IEC17025:2017.
- Product specific Capsule Courses on IS 8472 / IS 9079 / IS 8034/ IS 14220/ IS 12615 for Quality Control Engineers in association with BIS.

SEMINAR / CONFERENCE PRESENTATION

- Presenting a paper on “Advanced Technologies in Pump Testing”. National Seminar on Pumps which is organised by BIS, Coimbatore and Southern India Engineering Manufacturer Association (SIEMA) during 20 -21st November 2009.
- Presenting a paper on “Efficient Use of Pump sets in Agricultural Sector”. Seminar organised by District Collector, Dindugal on 23rd January 2010.
- Sachinjith K R, Pradheep B S, K. Ulaganathan, presenting a paper ‘Design and Analysis of Portable Pedal Operated Pepper Thresher’ in International Conference on Materials Research in Science and Engineering (K-MRSE-21) organized by Kumaraguru College of Technology, Coimbatore during 23 to 25 July 2021.
- Jeya Karthick M, Thirumalaiappan S, Naveen S, K. Ulaganathan, presenting a paper ‘Design and Analysis of Radiator Fins for Improving the Performance’ in International Conference on Materials Research in Science and Engineering (K-MRSE-21) organized by Kumaraguru College of Technology, Coimbatore during 23 to 25 July 2021.

PAPER PUBLICATION IN INTERNATIONAL JOURNALS

- Ramanathan, L. and Ulaganathan, K., 2014. Nature inspired metaheuristic optimization technique-migrating bird’s optimization in industrial scheduling problem. *SSRG International Journal of Industrial Engineering (SSRG- IJIE)*, 1(3), pp.1-6.
- Ulaganathan, K. and Karuppuswamy, P., 2018. Study the effects of surface coating on impeller and volute casing to improve the efficiency of the water pump. *DESALINATION AND WATER TREATMENT*, 132, pp.79-88.
- Ulaganathan, K. and Karuppuswamy, P., 2018, Experimental and Numerical Evaluation and Design Optimization of Centrifugal Pump Impeller Parameters through Response Surface Methodology, *Journal of the Balkan Tribological Association* 24 (4), 633 – 653
- S Aswin, K Ulaganathan,2014, Design and analysis of high-pressure control valve 3000# rating, *IOSR-Journal of Mechanical and Civil Engineering*, 22-25

- Sachinjith K R, Pradheep B S, K. Ulaganathan, Design and Analysis of Portable Pedal Operated Pepper Thresher, accepted for publication in American Institute of Physics (AIP) conference proceedings.
- Jeya Karthick M, Thirumalaiappan S, Naveen S, K. Ulaganathan, Design and Analysis of Radiator Fins for Improving the Performance, accepted for publication in American Institute of Physics (AIP) conference proceedings.

Association with Industry Associations / Professional Bodies / Institution

- Technical Committee Member of The Southern India Engineering Manufactures Association (SIEMA) from August 2021 onwards.
- Technical Committee Member of BIS MED 20 Pump Sectional Committee, MED 20.5 and MED 20.6 Sub committees.
- Life Member of The Institution of Engineers (India).
- Associated with NABL as a Technical Assessor for Mechanical Testing for the past 2 years.

TITLE OF PHD THESIS:

Investigation and Optimization of Parameters for Improving the Performance of Centrifugal Pump.

Date: 23.06.2024

Place: Coimbatore

(Dr.K.Ulaganathan)

Signature