

Dr. P A Manoharan obtained his Ph. D, Technology (Instrumentation), Titled, Design of MEMS-based capacitive sensor with Novel Support Structure and PZT Sensing Element for Pressure Sensing Applications, May 2013, Central Instrumentation & Service Laboratory, University of Madras, Chennai, Tamilnadu, India; M Tech (Polymer Science & Engineering), Inhibition Resin for solid Propellant Rocket Booster”, SHAR, ISRO, Jan 1999, Anna University, Chennai, Tamilnadu, India ; Bachelor of Engineering (Electrical Engineering), Jan 1992; BMS College of Engineering, Bangalore University, Karnataka, India.

He is currently serving as the Director, M/s Robota Technology Innovation Pvt. Ltd., Chennai. He is involved in research projects of Nano-Drone and prototype design and development of passenger drone. Former Technical Officer, professionally involved in various breakthrough projects and Research Programs of DRDO Laboratories during his glorious 38 years and 6 months of service in DRDO. Officer has been associated in Defence related projects for the design, prototype developments, configuration, calibration and testing of electronics and control systems. He is diligent, highly motivated, team leader and voluntarily shouldered the responsibility of essential tasks of Server Management, DRONA System Administration, Cyber security and EPABX system.

PROFESSIONAL EXPERIENCE

- ❖ Design and Development of Personnel Bio-Metric Attendance System using Mobile Wi-Fi Hotspot.
- ❖ Design simulation of Novel Capacitive Pressure Sensor.
- ❖ Engine Monitoring System, 20 Channel Data Logger for T72 Main Battle Tank.
- ❖ Design Evaluation of Electronically Controlled Vehicle for Border area surveillance.
- ❖ PZT Pressure Sensor Design, Simulation and Fabrication for the Arjun Tank, fuel level sensing.
- ❖ MEMS capacitive fuel level Sensor design and development.
- ❖ Design Modeling and Fabrication of Human-Humanoid Robot Communication
- ❖ Participated in firing trials MBT's, Bore sight calibration at ITR, Balasore.
- ❖ Defect analysis of 15 Nos. of MBT Arjun Tank at 43 Regiment at Jaisalmer.
- ❖ Augmentation of 200 lines EPABX and its configuration for the CVRDE Telephone Exchange.
- ❖ CNC Machine Programming, O&M and PLC.
- ❖ CAM, Auto CAD, Pro-E, 3D Modeling of project components and PLM.
- ❖ PCs and Networking Configuration, Operation and maintenance.
- ❖ Design & Development Pressure valve and its assembly for Vijayanta, Battle Tank.

AREAS OF EXPERTISE

- *MEMS fabrication*
- *Embedded System*
- *Instrumentation*
- *MEMS Sensor Design*
- *Polymer Science*
- *Silicon Device Fabrication*
- *Purchase Management*
- *Inventory Control*
- *PCB Design*
- *Server Networking*
- *Skill Development Program*
- *Humanoid Robot*

RESEARCH CONTRIBUTIONS

He has associated in Research programs, contributed and published in various International journals in the areas of Pressure Sensor design, PZT based sensing element, MEMS fabrications, Biometric attendance system, Instrumentation and Humanoid Robots.

AWARDS

1. DRDO Award, Best Performance Award for the “Design & Development of PZT Pressure Sensor and MEMS Based Sensor Design and Development”, 2015.
2. RIC Lab Award “Outstanding Contribution in the development of systems of Defence relevance”, 2013.
3. RIC Lab Award “**Outstanding Contribution in electronics of various projects development of Defence relevance**”, 2016.