Ph.D Completion

Dr. E. Arunkumar, Assistant Professor**, Department of Robotics and Automation**, has **successfully completed** his **Doctor of Philosophy (Ph.D.**) at **VIT University** in **January 2025.** His research was titled *"**Experimental Investigation and Multi-Objective Optimization of Machining Parameters using Hybrid Evolutionary Algorithms in Turning of Nimonic Alloys under NANO-MQL Machining Environment**."*

Faculty Development Program

.

Our Robotics and Automation department faculty **Prof.T.Jayachandran, HoD / R&A, Dr.E.Arunkumar, AP / R&A, and Prof.A.Aravindhan, AP/R&A** were attended the AICTE Training and Learning **(ATAL)** Academy Faculty Development Program under the title of "**AI Innovations in Additive Manufacturing for Enhanced Precision and Surface Quality of Composites in Micro machined Products**" at **MAHENDRA POLYTECHNIC COLLEGE, Namakkal** from **03/02/2025 to 08/02/2025.**


ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate


ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate


ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

Our Robotics and Automation department faculty **Prof.T.Jayachandran, HoD / R&A, Dr.E.Arunkumar, AP / R&A, Prof.A.Aravindhan, AP/R&A and Mrs.A.Vimal, AP/R&A** were attended the **AICTE Training and Learning (ATAL) Academy Faculty Development Program** under the title of **"Sustainable Carbon-Free Technologies for Hydrogen Generation and Storage"** at **National Institute of Technology, Tiruchirappalli** from **24/02/2025 to 01/03/2025**.


ATAL/2025/1740135942

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mr. JAYACHANDRAN T, Assistant Professor of DHIRAJLAL GANDHI COLLEGE OF TECHNOLOGY (AUTONOMOUS), Salem has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Sustainable Carbon-Free Technologies for Hydrogen Generation and Storage at National Institute of Technology Tiruchirappalli from 24/02/2025 to 01/03/2025.

Annad Ramanathan, Professor (Other Institute), Coordinator, National Institute of Technology Tiruchirappalli

Dr. Sunil Luthra, Director & Bureau Head, Training and Learning Bureau, AICTE


ATAL/2025/1740134469

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Dr. E ARUNKUMAR, Industry Bureaucrats/Technicians/ Professionals of DHIRAJLAL GHANDHI COLLEGE OF TECHNOLOGY (Autonomous), salem has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Sustainable Carbon-Free Technologies for Hydrogen Generation and Storage at National Institute of Technology Tiruchirappalli from 24/02/2025 to 01/03/2025.

Annad Ramanathan, Professor (Other Institute), Coordinator, National Institute of Technology Tiruchirappalli

Dr. Sunil Luthra, Director & Bureau Head, Training and Learning Bureau, AICTE


ATAL/2025/1740134373

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mr. ARAVINDHAN A, Assistant Professor of DHIRAJLAL GANDHI COLLEGE OF TECHNOLOGY (AUTONOMOUS), Salem has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Sustainable Carbon-Free Technologies for Hydrogen Generation and Storage at National Institute of Technology Tiruchirappalli from 24/02/2025 to 01/03/2025.

Annad Ramanathan, Professor (Other Institute), Coordinator, National Institute of Technology Tiruchirappalli

Dr. Sunil Luthra, Director & Bureau Head, Training and Learning Bureau, AICTE


ATAL/2025/1740135801

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mrs. A VIMAL, Industry Bureaucrats/Technicians/ Professionals of DHIRAJLAL GANDHI COLLEGE OF TECHNOLOGY (AUTONOMOUS), SALEM has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Sustainable Carbon-Free Technologies for Hydrogen Generation and Storage at National Institute of Technology Tiruchirappalli from 24/02/2025 to 01/03/2025.

Annad Ramanathan, Professor (Other Institute), Coordinator, National Institute of Technology Tiruchirappalli

Dr. Sunil Luthra, Director & Bureau Head, Training and Learning Bureau, AICTE

Our Robotics and Automation department **Prof.A.Aravindhan, AP/R&A** were attended the **Indian Institute of Industrial and Social Research (iiisr)-Faculty Development Program** under the title of **"Leveraging AI in Academic Writing and Research"** from **13th January 2025 to 17th January 2025.**

Dr.E.Arunkumar, Assistant Professor in the Department of Robotics and Automation, participated under the titled **"Masterclass Series under IP Utsav"** organized virtually by **the All India Council for Technical Education(AICTE) and Ministry of Education's innovation cell**

(MIC) From **21st April to 26th April 2025.**

SRM MADURAI
COLLEGE FOR ENGINEERING AND TECHNOLOGY
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

Certificate of Participation

This is to certify that G.Jaya from Dhirajlal Gandhi College of Technology, Salem has actively participated in the Five Days Virtual FDP "OBE Essentials :Pathway to Accreditation Excellence" organized by the Department of Computer Science and Engineering, SRM Madurai College for Engineering and Technology from 03.02.2025 to 07.02.2025.

Dr. C. Callins Christiyana
Professor and Head-CSE

Dr. Durairaj
Principal

Mrs.G.Jaya, Assistant Professor in the Department of Robotics and Automation, attended five Days Virtual FDP **"OBE Essentials: Pathway to Accreditation Excellence"** organized by **SRM Madurai College for Engineering and Technology** From **03rd February to 07th February 2025.**

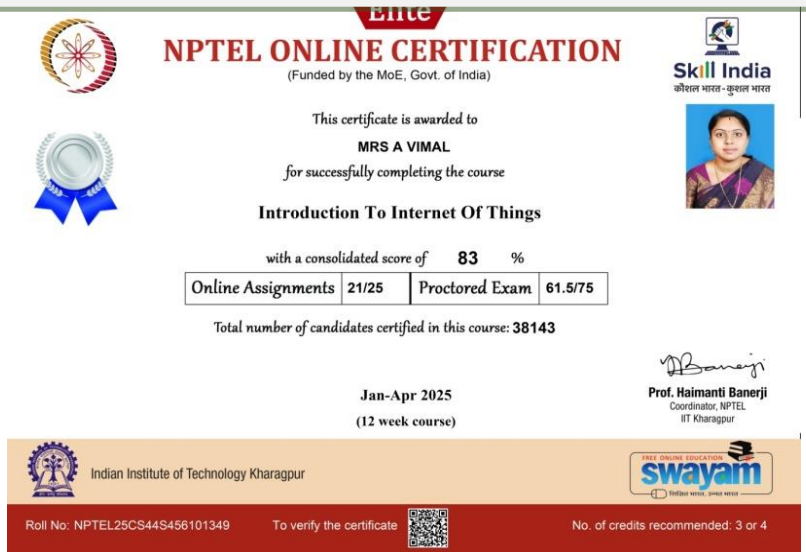
Our Robotics and Automation department faculty **Prof.A.Aravindhan, AP/R&A** were attended the **One day Faculty Development Program** organized by **Confederation of Indian Industry (CII)** at **Annapoorana Engineering College, Salem** on **19th October 2025.**

Our Robotics and Automation department all the faculties were attended the Two day Faculty Development Program **"Be a great Mentor, To be a Good Teacher"** session led by **Dr.Logasakthi kandasamy,** Certified Professional Trainer, Programme Director-BBA,RV University, Bangaluru organized by**, Dhirajlal Gandhi College of Technology, Salem**.

Workshop

Our Robotics and Automation department **faculty members** were attended the **one day workshop** under the title of **"Funding Body Schemes & Trust Research Areas"** on **09th March 2025.** The session was led by **Dr.T.Ram Prabhu**, Joint Director / Scientist DRDO, Bangalore. The program was organized by DGCT.

NPTEL


Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत - कुशल भारत

This certificate is awarded to

MRS A VIMAL

for successfully completing the course

Introduction To Internet Of Things

with a consolidated score of 83 %

Online Assignments	21/25	Proctored Exam	61.5/75

Total number of candidates certified in this course: 38143

Jan-Apr 2025

(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL25CS44S456101349 To verify the certificate No. of credits recommended: 3 or 4

Mrs. A.Vimal, Assistant Professor, Faculty of the Robotics and Automation Department, has been awarded the **Elite + Silver certificate** in the **NPTEL course** titled **"Introduction to Internet of Things,"** a 12-week program completed in **April 2025**.

CONFERENCE


BEST PAPER Award

Best Paper Award

This is to certify that Prof./Dr./Mr./Ms. A. Aravindhan / AP / Dhirajlal Gandhi College of Technology participated and presented an oral presentation for the paper entitled Enhanced Polymer Composites Utilizing Fish Scale Powder : A Mechanical Properties Investigation. which has been awarded the "Best Paper Award" in International Conference on "Additive Manufacturing Technologies (Aerospace, Automobile, AI & ML, Bio-Medical, Computer Science, Electrical, Electronics, Mechanical, Petrochemical and Construction - 3DP)" organized by Department of Mechanical Engineering, Mahendra Institute of Technology (Autonomous), Namakkal, sponsored by Science and Engineering Research Board (SERB), New Delhi during 17-18 October 2024.

CO-CONVENOR Dr. S. SADHISHKUMAR ASP/Mech., MIT

CONVENOR Dr. L. SELVARAJAN HOD/Mech., MIT

DEAN Dr. J. RAJAVEL MIT

PRINCIPAL Dr. T. ELANGO MIT

Mr.A.Aravindhan, Assistant Professor in the Department of Robotics and Automation, participated and got **Best Paper Award** for the titled **"Enhanced Polymer Composite Utilizing**

Fish Scale Powder: A Mechanical Properties Investigation" at the International Conference on Additive Manufacturing Technologies, organized by **the Mahendra Institute of Technology (Autonomous), Namakkal**. The event was sponsored by **the Science and Engineering Research Board (SERB), New Delhi,** and held during **October 17th –18th October, 2024..**

Certificate of Presentation

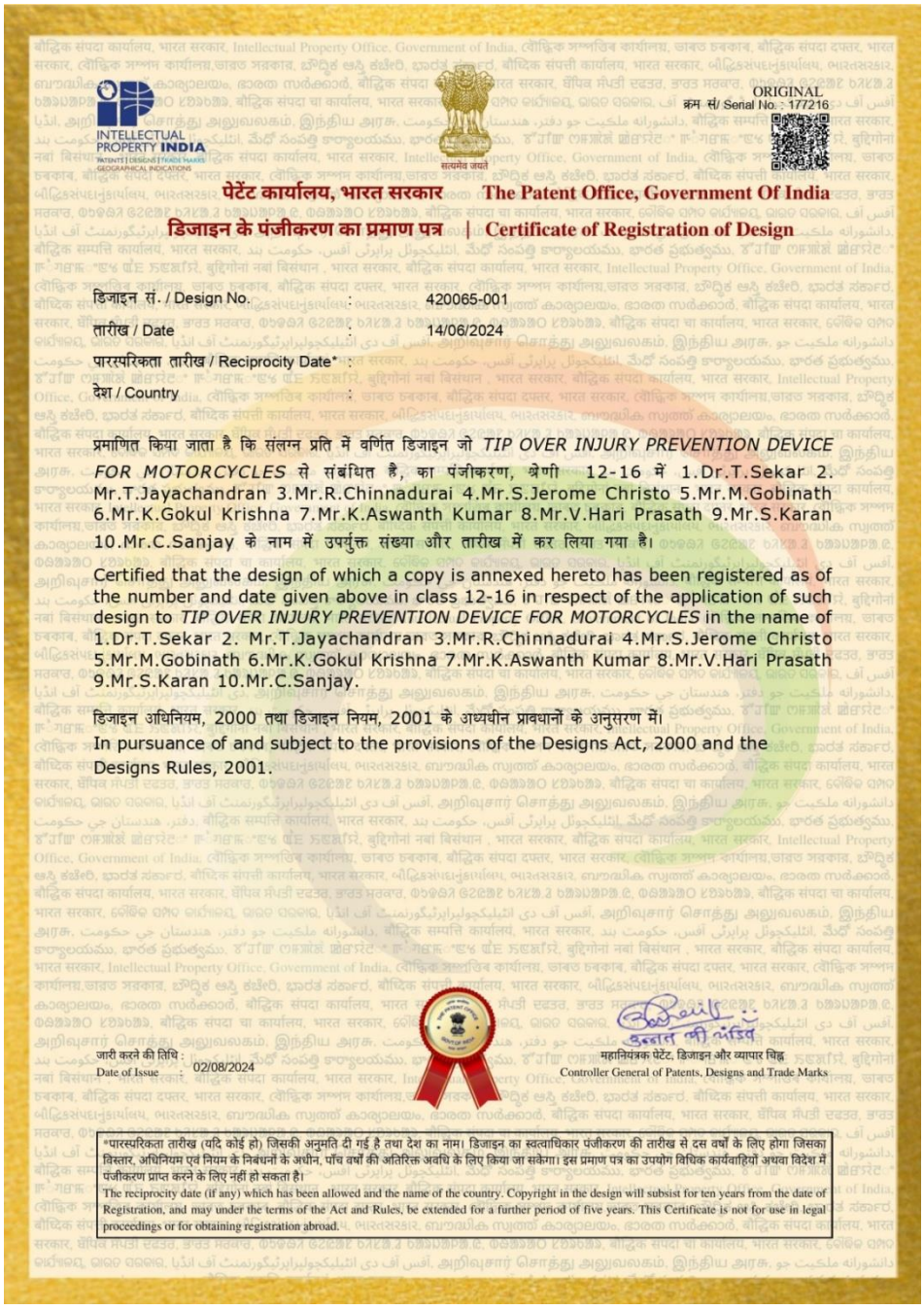
This is to certify that Prof./Dr./Mr./Ms. A. Aravindhan / AP, Dhirajlal Gandhi College & Technology, participated and presented an oral presentation for the paper entitled Performance Analysis of a Single Cylinder Diesel Engine Using Diesel with Ethanol and castor seed oil blends in International Conference on "Additive Manufacturing Technologies (Aerospace, Automobile, AI & ML, Bio-Medical, Computer Science, Electrical, Electronics, Mechanical, Petrochemical and Construction - 3DP)" organized by Department of Mechanical Engineering, Mahendra Institute of Technology (Autonomous), Namakkal, sponsored by Science and Engineering Research Board (SERB), New Delhi during 17-18 October 2024.

CO-CONVENOR Dr. S. SADHISHKUMAR ASP/Mech., MIT | CONVENOR Dr. L. SELVARAJAN HOD/Mech., MIT | DEAN Dr. J. RAJAVEL MIT | PRINCIPAL Dr. T. ELANGO MIT

Mr. A. Aravindhan, Assistant Professor in the Department of Robotics and Automation, participated and presented a paper titled "Performance **AnalysisEnhanced Polymer Composite Utilizing Fish Scale Powder: A Mechanical Properties Investigation**" at the **International Conference on Additive Manufacturing Technologies**, organized by **Mahendra Institute of Technology (Autonomous), Namakkal.** The event was sponsored by the **Science and Engineering Research Board (SERB), New Delhi**, held during **17th –18th October, 2024.**

Our Robotics and Automation department **faculty members Prof.T.Jayachandran**, HoD and **Dr.E.Arunkumar**, Assistant Professor had attended the **"International IT & Tech Conference and Start-UP Expo"** organized by **Confederation of Indian Industry (CII)** on **31st January 2025.**

PATENT



INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

सत्यमेव जयते

ORIGINAL
क्रम सं/ Serial No. : 177216

पेटेंट कार्यालय, भारत सरकार — **The Patent Office, Government Of India**

डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

डिजाइन सं. / Design No. : 420065-001

तारीख / Date : 14/06/2024

पारस्परिकता तारीख / Reciprocity Date* :

देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो *TIP OVER INJURY PREVENTION DEVICE FOR MOTORCYCLES* से संबंधित है, का पंजीकरण, श्रेणी 12-16 में 1.Dr.T.Sekar 2. Mr.T.Jayachandran 3.Mr.R.Chinnadurai 4.Mr.S.Jerome Christo 5.Mr.M.Gobinath 6.Mr.K.Gokul Krishna 7.Mr.K.Aswanth Kumar 8.Mr.V.Hari Prasath 9.Mr.S.Karan 10.Mr.C.Sanjay के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 12-16 in respect of the application of such design to *TIP OVER INJURY PREVENTION DEVICE FOR MOTORCYCLES* in the name of 1.Dr.T.Sekar 2. Mr.T.Jayachandran 3.Mr.R.Chinnadurai 4.Mr.S.Jerome Christo 5.Mr.M.Gobinath 6.Mr.K.Gokul Krishna 7.Mr.K.Aswanth Kumar 8.Mr.V.Hari Prasath 9.Mr.S.Karan 10.Mr.C.Sanjay.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यधीन प्रावधानों के अनुसरण में।
In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि :
Date of Issue : 02/08/2024

महानियंत्रक पेटेंट, डिजाइन और व्यापार चिह्न
Controller General of Patents, Designs and Trade Marks

*पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति दी गई है तथा देश का नाम। डिजाइन का स्वत्वाधिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निबंधनों के अधीन, पाँच वर्षों की अतिरिक्त अवधि के लिए किया जा सकेगा। इस प्रमाण पत्र का उपयोग विधिक कार्यवाहियों अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।

The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.

Mr. T. Jayachandran, Head of the Department of Robotics and Automation, has been granted design patent rights by the Patent Office, Government of India, for his innovation titled "**Tip Over Injury Prevention Devices for Motorcycles" (Design No: 420065-001),**
dated **June 26, 2024.**

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/11/2024

(21) Application No.202441090849 A
(43) Publication Date : 29/11/2024

(54) Title of the invention : SMART MULTI-CONTROL AUTONOMOUS VEHICLE

(51) International classification	:G05D0001000000, G06Q0010080000, G06Q0010063100, G01C0021340000, G06V0020560000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)M.ArunKumar
Address of Applicant :Associate Professor,Department of Mechatronics Engineering Hindusthan College of Engineering and Technology (Autonomous),Coimbatore-641032 ---------- ----------
2)S PAVITHRA
3)Dr.P.Vijayakumar
4)R. VIJAY
5)A.ARAVINDHAN
6)K.KATHIRESAN
7)K.SATHIYAKUMARAN
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)M.ArunKumar
Address of Applicant :Associate Professor,Department of Mechatronics Engineering Hindusthan College of Engineering and Technology (Autonomous),Coimbatore-641032 ---------- ----------
2)S PAVITHRA
Address of Applicant :Assistant Professor Department Of Internet of Things. Sri Krishna College of Technology, Coimbatore-641042 Coimbatore ---------- ----------
3)Dr.P.Vijayakumar
Address of Applicant :Assistant Professor Department of Aeronautical Engineering Nehru Institute of Technology Coimbatore - 641105 Coimbatore ---------- ----------
4)R. VIJAY
Address of Applicant :Assistant Professor Department Of Mechanical Engineering, Arulmurugan College Of Engineering, Thennilai, Aravakurichi Taluk, Karur District-639206. Karur ---------- ----------
5)A.ARAVINDHAN
Address of Applicant :Assistant Professor, Department Department Of Robotics And Automation Engineering, Dhirajlal Ghandhi College Of Technology , Salem. - 637503 Salem ---------- ----------
6)K.KATHIRESAN
Address of Applicant :Lecturer, Department Of Mechanical Engineering, Mahendra Polytechnic College,(Namakkal,Dt)- 637503. Namakkal ---------- ----------
7)K.SATHIYAKUMARAN
Address of Applicant :Lecturer Department Of Automobile Engineering, K.S.R Polytechnic College . KSR Kalvi Nagar, Tiruchengode Namakkal-637215 Namakkal ---------- ----------

(57) Abstract :
The advent of smart multi-control autonomous vehicles represents a revolutionary leap in transportation technology, promising to reshape urban mobility and road safety. This cutting-edge innovation combines advanced sensors, artificial intelligence, and multi-modal control systems to create vehicles capable of navigating complex environments without human intervention. Recent market projections underscore the rapid growth and potential of this sector. The global autonomous vehicles market is estimated to grow by USD 974.5 billion from 2024-2028, with a remarkable CAGR of 58.78%1. This explosive growth is driven by increasing demand for vehicle autonomy from OEMs and the development of autonomous vehicles for cab and parcel delivery services. The market for near-autonomous passenger cars is similarly poised for significant expansion, with an estimated growth of USD 962.1 billion from 2024-2028 and a CAGR of 60.29%5. This growth is fueled by the rising popularity of semi-autonomous vehicles and increased fundin

No. of Pages : 8 No. of Claims : 4

Mr.A.Aravindhan, Assistant Professor, Department of Robotics and Automation, has been Patent under the titled "**Smart Multi-Control Autonomous Vehicle" (Application No: 202441090849A),** dated **22/11/2024.**

Guest Lecture

Mr. T. Jayachandran, Head of the Department of Robotics and Automation, has been given the seminar under the title **"Robotic Processing Automation"** on **17th March 2025** for the Student of **Department of computer science and Engineering**.