

## **Faculty Profile**



**Dr. U. Sabura Banu, BE, MS(By Research), PhD**  
Professor / EEE

### **HIGHLIGHTS:**

- Number of Journal Publications: 17
- H-Index: 7
- Project Funding Received : 3
- Patents Published: 4
- Patents Granted: 2

### **PROFESSIONAL LINKS:**

- Scopus ID: 6506862354
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=6506862354>
- Google Scholar ID: <https://scholar.google.com/citations?user=Vcyom3kAAAAJ&hl=en>
- Anna University Faculty ID: 311075
- AICTE Faculty ID: 1-44788444181
- LinkedIn: [www.linkedin.com/in/sabura-banu-bba628105](https://www.linkedin.com/in/sabura-banu-bba628105)

### **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 18 yrs
- Industrial Experience : 7 years

### **INTERNATIONAL EXPOSURE:**

- **Dubai : Keynote lecture in an International Conference** on Mechanical, Automobile and Biodiesel Engineering (ICMABE 2012) organized by the Planetary Scientific Research Centre held in Holiday Inn Hotel, Dubai – Downtown Dubai, Al Rigga street, Deira Dubai, UAE on 6<sup>th</sup> and 7<sup>th</sup> of October 2012
- **London : Presentation in an International Conference** SAI Intelligent Systems conference (Intellisys), London, United Kingdom, 10-11 November 2015 and **Visited Innovation centres** in Cambridge University, Sussex University, London Business school
- **Malaysia : Presentation in 9th IEEE Control and System Graduate Research Colloquium (ICSGRC 2018)** organized by IEEE Control Systems Society Chapter, Malaysia and the Faculty of Electrical Engineering, UiTM held in the Grand BlueWave Hotel, Shah Alam, Malaysia on 3-4 August 2018.

## **AREA OF SPECIALIZATION:**

- Automation
- AI, ML, DL, Gen AI
- Embedded System and IoT
- Computer Vision
- Instrumentation

## **SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:**

### **Project Proposal granted**

- Dr. Nafeena Abdul Munaf, Villa College, Maldives, Principal Investigator, Dr. Gnana Jeba Das, Villa College, Maldives, Dr. U. Sabura Banu, Saveetha Engineering College, India, Abdulla Ziyaan Thothath, Assistant Enforcement Officer, URA, Maldives, Co-PIs were awarded a research grant worth MVR 64,137,70 (INR. 3,66,855.84/-) for the project title "Deployment of IoT-Based Ambient Air Quality Monitoring System with Data Analytics and Prediction in the Maldives" on 10<sup>th</sup> September 2025 for the Institute for Research & Innovation, Villa College Research Grant, Maldives.
- Dr. U. Sabura Banu, Prof./EIE awarded travel fellowship by Centre for International co-operation in Science (CICS) for attending and presenting a research article in an International Conference INTELLISYS 2015 held in London, UK.
- Sanctioned Travel Grant under International Travel Scheme (ITS) from Department of Science and Technology (DST), SERB, GoI, India for attending and presenting a research article in an International Conference INTELLISYS 2015 held in London, UK.
- Received a grant for the IDDS project "Neonatal temperature measurement" and implementation of the project is carried out by Dr. U. Sabura Banu, Mr. Suryarajan and their team in January 2016.
- MoU has been signed between B.S. Abdur Rahman University, Vandalur and Tamil Nadu Pollution Control Board, Maraimalai Nagar, Kancheepuram District on 8th February 2016. Dr. U. Sabura Banu, Professor, Department of Electronics and Instrumentation Engineering and Dr. C. Tharini, Professor, Department of Electronics and Communication Engineering were instrumental for the establishment of Continuous Ambient Air Quality Monitoring station in the proposal. B.S. Abdur Rahman University has been identified as one of the 25 centres for monitoring continuous ambient air quality, vide letter No. TNPCB/P&D/F.15950/2015/Dated 10.12.2015
- Collaborative projects on neonatal temperature measurement and BMI - FoodNutrition projects completed
- Collaborative project on "Electrical Impedance Tomography for Tannery Process" for Central Leather Research Institute
- Designed and fabricated a "Turbine flow meter for Underwater High Pressure applications" for National Institute of Ocean Technology.
- Dr. U. Sabura Banu, Prof. /EIE designed and developed TempIT in August – October 2015.

### **Project Proposal accepted for next round**

Dr. U. Sabura Banu submitted a project proposal titled "IoT-Based Climate-Resilient Aquaculture Monitoring System" to MSME Ideathon 2.0 on 25<sup>th</sup> July 2025 and I round presentation completed on 13.08.25. Shortlisted for round II.

## **Project Proposal Submitted**

Dr. U. Sabura Banu submitted a project proposal title “LullaTell – AI-Powered Baby Cry Language Translator” to EDII, TN – Voucher A Programme on 20<sup>th</sup> September 2025.

Dr. U. Sabura Banu submitted a project proposal titled “AI-Based Smart Microgrid Controller for Rural MSMEs” to MSME Ideathon 2.0 on 30<sup>th</sup> July 2025.

Dr. R. Senthilkumar, Dr. U. Sabura Banu, Dr. S.Kavitha, “Design and Operation Optimization of a Hybrid Power Plant Integrating Wind Turbines, Solar Photovoltaics, and Battery Energy Storage Systems to Minimize Levelized Cost and Maximize Profitability”, AICTE, Research Promotion Scheme on 31<sup>st</sup> July 2025

## **PATENTS PUBLISHED/GRANTED:**

### **Utility Patent Published**

- SOMNOALERT : Wearable somnambulism detector and alert system – 202541008231 Dated 31.01.2025
- RLOCATOR : Compact tracking device with Bluetooth connectivity for locating personal valuable belonging - 202541008240 Dated 31.01.2025

### **Design Patent Published and Certified**

- Hybrid Solar-Wind Petal Blade design - 465622-001 Dated 14.07.2025, published on 24.10.25
- Voice Controlled Portable Closet Organizer - 465620-002 Dated 14.07.2025, published on 31.10.25
- Biomedical device to help paralytic & disabled persons
- Multi function gadget to measure Height, volume of overhead tank, status of septic emptying
- Remote controlled bulb holder

## **COURSES CERTIFIED:**

- Completed the Online course on Internet of Things – Current Developments conducted by BECH-RUSA 2.0, Bharathidasan University, Pakalaiperur, Tiruchirapalli during 8<sup>th</sup> – 12<sup>th</sup> May 2020.
- Completed AICTE Training and Learning (ATAL) Academy online FDP on “Blockchain” from 20.04.2020 to 24.04.2020 at JNTUA College of Engineering, Pulivendula
- Completed self paced training course on Machine Learning Onramp conducted by Mathworks Training Services on 5<sup>th</sup> May 2020
- Completed self paced training course on Deep Learning Onramp conducted by Mathworks Training Services on 29<sup>th</sup> April 2020

## **ACHIEVEMENTS AND AWARDS:**

- Dr. U. Sabura Banu serves as an Editorial Board member for "Journal of Instrumentation Technology & Innovation" and "Journal of Control and Instrumentation", STM publications
- Received "Shiksha Rattan Purashkar" by India International Friendship society, New Delhi on 12<sup>th</sup> October2011 at 3.30 p.m. at Speaker Hall, Constitution Club, Rafi Marg, New Delhi for service to research and teaching.
- Dr. U. Sabura Banu, Assoc. Prof / EIE selected for inclusion in "2000 outstanding intellectuals of the 21<sup>st</sup> Centruy, 2011" by the International Biographical Centre, Cambridge, England.
- Dr. U. Sabura Banu, Assoc. Prof / EIE selected for inclusion in "Who's Who in the World 2012 issue" by Marquis Who's Who Biographical Centre.
- Selected as one among "Top 100 Educators 2011" by International BiographiesCentre, Cambridge, England.
- Inclusion in Who's Who in the world 2011, 28<sup>th</sup>issue, Marquis Biographical Centre, USA
- Mentored the project titled "Rehabilitation of paralysed using Hand Gestures/EEG through Bluetooth" which won first and third prize in AIU-ANVESHAN South Zone competition and National Competitions during 2016
- Dr. U. Sabura Banu, Prof./EIE is appointed as an Advisory Committee Member for Valliammai Engineering College, SRM Nagar, Kattankulathur
- Dr. U. Sabura Banu serves as an Editorial Board member for "Journal of Instrumentation Technology & Innovation" and "Journal of Control and Instrumentation", STM publications
- Member of ACDOS, an NMO of International Federation of Automatic Control(IFAC)
- Reviewed book Chapter - Evolutionary computation: Techniques and Applications, Apple Academic press Inc: Taylor and Francis
- Dr. U. Sabura Banu has served as a reviewer for International Journals like Advances in Modeling and Simulation Enterprises (AMSE) France, Chemical Engineering Communication from Taylor and Francis, Swarm and Evolutionary Computation from Elsevier Journal and 10th Asian Control Conference 2015, Australian Control Conference MSC 2015, etc.,
- Reviewer of leading Journals like Applied Soft computing, Elsevier Journal, Advances in Modeling and Simulation Enterprises (AMSE) France, Chemical Engineering Communication from Taylor and Francis, Instrumentation science and Technology from Taylor and Francis, Swarm and Evolutionary Computation from Elsevier Journal, Modeling and Simulation Journal from ACTA press, International Conference track chair Asian Control Conference, etc

## **SPECIAL SESSIONS DELIVERED:**

- Resource person for a value added course in "Computer Vision using OpenCV and Python" for students of ECE Department, Vels institute of science technology & advanced studies, Pallavaram in September 2024.
- Conducted a Value added course on "MOBIBOT" for Final year students of Sairam Engineering College in 2018.
- Conducted a value added course on "Image processing using Matlab" for Final year students of St.Joseph"s Engg. College in 2018.
- Conducted a training programme on "Computer vision for Industrial applications" for Industrial personnel from IT sector in 2018.
- Conducted a faculty development programme on "Research directions using computer vision" for faculty members from Engineering Institutions in 2019.
- Conducted a training programme on "Computer vision for Industrial applications" for Industrial personnel from Automation Industries in 2018.
- Conducted Value added programme on "Design and development of Robotics using ESP32" for final year students of St. Joseph Engg. College from Feb 5, 2024 to Feb 9, 2024.
- Conducted VAC on "Computer Vision and AI" for third year students of St. Joseph Engg. College students in March 2024
- Conducted VAC on "Computer vision using OpenCV and Python" for third year students of Manakula Vinayagar Institute of Technology, Pondichery in April 2024.
- Conducted one month internship on "Embedded systems", "IOT", "Computer vision", "Artificial Intelligence", "Automation" for UG and PG student during June – July 2018, June –July 2021, May-June 2022, May-June-July 2023, May-June 2024 for Engineering and Science students.

## **Motivational Lecture conducted to encourage Innovation activities in educational Institutions**

- Resource person for a Guest Lecture on "Machine Learning Algorithms and their Applications" conducted for Department of Artificial Intelligence and Data Science, Karpaga Vinayaga College of Engineering and Technology, Madurantakam on 31st August 2024
- Resource person for a One Day Seminar on "Building a Supportive Ecosystem for Women Entrepreneurs" for Department of Electronic Instrumentation , Saveetha Institute of Medical and Technical Sciences, Chennai, TN, India on 27th August 2024.
- Delivered a motivation lecture cum demo on "Entrepreneurship and Innovation" on 23.8.2024 at DMI College of Engineering, Palanchur-Nazarethper Post, opp. Queens Land, Chennai, Tamilnadu 600123.
- Delivered a motivational lecture cum Demonstration on "From classroom to Boardroom : The Hackathon route to Entrepreneurial success" on 23<sup>rd</sup> January 2024 at APJ Conference Hall, Vels Institute of Science, Technology and Advanced studies.
- Delivered a guest lecture on "Motivation towards Hackathon participation" on January 9, 2024 at SRM Valliammai Engineering College.
- Delivered an expert talk on "Developing creative thinking and innovation skills" at Manakula Vinayagar Institute of Technology, Pondichery on 23.12.2024.
- Delivered an expert talk on "Process of Innovation Development : Technology Readiness Level (TRL); Commercialization of Lab Technologies and Tech-Transfer with

Demonstration” at Prince Dr. K. Vasudevan College of Engineering and Technology on 13 December 2023.

- Resource person for the one day seminar on “Developing skills to create Innovative projects” in Sri Ramanujar Engineering College on November 11, 2023.
- Resource for the technical seminar on “Awareness on state-of art technologies with Industrial case studies” at Rrase College of Engineering on November 17,2023.
- Delivered a talk in the webinar on “Campus to CEO” organized by Department of ECE in association with Texas Innovation Laboratory and Entrepreneurship Development cell at Karpaga Vinayaga College of Engineering and Technology on October 6, 2023.
- Served as Chief guest and motivated students for innovation organized by GKM Innovation Cell on 18<sup>th</sup> October, 2023.
- Delivered an Invited talk on “From Campus to CEO” organized by Innovator“s club at Madras Christian College, on October 5, 2023.
- Acted as a resource person on “Technical solutions to real life problems using State-of- technologies” organized by School of Electrical Engineering, VIT, Chennai on 11/1/2023.

### **Guest Lectures delivered**

- Delivered a Technical Talk on “Embedded Real Time applications with Use Cases” in St. Joseph’s Institute of Technology on 7<sup>th</sup> August 2025
- Delivered a Technical Talk on “Deep Learning on Medical Image Processing” on 29<sup>th</sup> and 30<sup>th</sup> April 2025 at St. Joseph's Institute of Technology
- Delivered a speech on “Demystifying Artificial Intelligence: A beginners guide to smart machines” in TOSSCONF 25 held during 18<sup>th</sup> and 19<sup>th</sup> July 2025 organized by Kaniyam Foundation
- Served as jury member for the Ideathon 1.0 held on 28.02.2025 at St. Joseph’s College of Engineering
- Served as a resource person for a technical session for ATAL FDP on “Artificial Intelligence for Biomedical Research” at Jaya Sakthi Engineering College on 20<sup>th</sup> October 2025
- Served as a resource person for a technical session for ATAL FDP on “Advanced Artificial Intelligence Techniques for Biomedical Research : Focus on Unet Segmentation” at Jaya Sakthi Engineering College on 25<sup>th</sup> October 2025
- Delivered a motivation lecture cum demo on “Entrepreneurship and Innovation” on 23.8.2024 at DMI College of Engineering, Palanchur-Nazarethper Post, opp. Queens Land, Chennai, Tamilnadu 600123.
- Delivered a motivational lecture cum Demonstration on “From classroom to Boardroom : The Hackathon route to Entrepreneurial success” on 23<sup>rd</sup> January 2024 at APJ Conference Hall, Vels Institute of Science, Technology and Advanced studies.
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December 2023.

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- Acted as a resource person on “Technical solutions to real life problems using State-of-technologies” organized by School of Electrical Engineering, VIT, Chennai on 11/1/2023.
- Delivered guest lecture to MCA students on Galileo Arduino on 22<sup>nd</sup> October 2019
- Guest Lecture on Data acquisition using Labview organized by SELECT, VIT on 8<sup>th</sup> October, 2019
- Visited King’s Engineering college on 5<sup>th</sup> October 2019 regarding a training programme
- Conducted a value added course on “Matlab basics” to EEE and EIE II year students on 4<sup>th</sup> October 2019
- Served as a session chair for oral presentation in the International Conference on Applications of Biotechnology and Nanotechnology (ICBN 2019), Organized by B.S. Abdur Rahman Crescent Institute of Science and Technology in association with University of Missouri, USA, September 30 & October 1, 2019,
- Served as a resource person for a two days Workshop on "Deep Learning and ImageProcessing for Medical and Control Applications" in GKM College of Engineering and Technology on 27.09.19
- Served as a resource person for delivering a guest lecture on “Data Acquisition usingLabview” in SELECT, VIT, Chennai on 17<sup>th</sup> September 2019
- Served as a resource person for a faculty development programme on “Machine Learning & Artificial Intelligence in Automation” in St. Joseph’s college of Engineering, OMR, Chennai 119 on 21<sup>st</sup> August 2019
- Served as a resource person for a value added programme on "Machine Learning andComputer Vision" for III year students of the department of Electronics and Instrumentation Engineering, St. Joseph's College of Engineering during 20 & 22, June 2019.
- Served as a resource person for a workshop on “Satellite Image Processing using Artificial Intelligence & Machine Learning”, on March 2 & 3, 2019 in Intellectz Tech4All.
- Served as the Chief Guest in the National Conference on “Wireless Communication & Signal Processing” on 15.02.2019 and delivered the Keynote speech on “IoT & its applications” at Arunai Engineering College, Tiruvannamalai.
- Served as a resource person in an inplant training for Engineering College Students during December 15-18, 2018.
- Served as a resource person in a FDP on "Computer Vision using Artificial Intelligence, Machine Learning & Deep Learning" for faculties from Engineering Colleges & Universities during December 10-14, 2018.
- Served as a resource person in an internship on "Internet of Things & Robotics" during 28<sup>th</sup> November-1<sup>st</sup> December 2018.

- Delivered a guest lecture on Measurements and Instruments using LABVIEW on September 24, 2018 to second year students, EEE Department, VIT, Chennai.
- Served as resource person for the practical training on Optimization using Evolutionary Optimization Technique on June 13, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the Hands-on training on Neuro Fuzzy for Modeling, Control and Classification on June 8, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the Workshop on Latest Trends in Image Classification using Matlab on Jue 7, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the Practical sessions on Feature Extraction and Representation June 6, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the Hands on Training in Fuzzy Logic Control using Matlab on June 1, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the Training sessions on Neural Network for Modeling, Control & Optimization on May 31, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the workshop on IOT with Matlab & Thingspeak on May 30, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the workshop on Mobibot on March 16 & 17, 2018 atIntellectz Tech for All, West Tambaram, Tamilnadu
- Served as resource person for the Summer Internship on Computer Vision and Imae Processing during May 14 & May 18, 2018 at Intellectz Tech for All, West Tambaram, Tamilnadu
- Served as a resource person for a Faculty Development programme on May 24, 2018 at Valliammai Engineering College, Kattangulathur, Tamilnadu.
- Delivered a lecture on "Neural Networks and Fuzzy Logic Controller" in SELECT, VIT, Chennai Campus in April 2017
- Dr. U. Sabura Banu delivered a lecture on "New Approaches in teaching and learning - case studies" on 12/1/2017 in the Induction training programme conducted by Faculty Training Academy, B.S. Abdur Rahman University
- Dr. U. Sabura Banu delivered a lecture on "Electronic PID control, Auto/Manual Transfer" in the Faculty Development Training Programme on "EI6602 Process" held at Sri Sairam Engineering College, West Tambaram, Chennai- 44 on 20/12/2016.
- Dr. U. Sabura Banu delivered a lecture on "Internal Model Control, Model Predictive Control, Adaptive Control" in the faculty development training programme on Process Control on 8th December 2016 at Easwari Engineering College, Ramapuram, Chennai - 600 089.
- Dr. U. Sabura Banu, delivered a lecture on "Introduction to Strain Gauges, LVDT and Data Acquisition systems & Hands on Training in Instrumentation Laboratory" on 21.4.2016 in the SERB & INSA sponsored National Workshop on "Impact of Climate change on durability of RCC structures", ICCDRS' 16- Environmental Effects, Mechanism of Attack onStructures, Preventive Measures and Rehabilitation techniques during 19-24, April, 2016.
- Dr. U. Sabura Banu served as a resource person for a workshop on "Matlab Simulation" held in College of Engineering, Kancheepuram on 3rd March 2016.
- Dr. U.Sabura Banu, Prof./EIE delivered a guest lecture in the B.S. Abdur Rahman Research Forum on the topic "Process Optimization using Swarm Intelligence technique" on 10th July 2015 at 11 a.m.
- Dr. U. Sabura Banu made a presentation on the research activities of EEE, ECE, EIE, Mechanical and Polymer department to the delegation from FESTO Controls Private Limited, Bangalore.
- Dr. U. Sabura Banu Prof. /EIE served as a resource person for the one day hands on training in "Matlab and its applications" on 5.9.15.
- Delivered a guest lecture on "Evolutionary Optimization techniques for Process Control Applications" on 11.4.2015 at Valliammai Engineering College, SRM, Kattankulathur.

- Delivered a keynote speech on “Implementation of Intelligent Controllers for power electronics applications” for the Post Graduate students of EEE Department of Rajalakshmi Engineering College on 5<sup>th</sup> March 2015.
- Delivered a lecture on “Typical Audit Questions” in the Interactive workshop on “ISO 9001:2008 – Documentation” in B.S. Abdur Rahman University for the new departments on May 18<sup>th</sup>, 2015.
- Served as a judge (paper presentation) for the National Conference on Emerging Trends in Electronics, Instrumentation and Control (EtEIC 15)” held on 11<sup>th</sup> April 2015 at Valliammai Engineering College, Kattangulathur
- Served as a chairperson for the technical session in an International Conference on Recent discoveries of diabetic biomarkers and challenges ahead (ICDB – 2015) held during 3<sup>rd</sup> March 2015 by School of Life Sciences, B.S. Abdur Rahman University.
- Delivered a guest lecture on “Introduction to Fractional Order Modeling and Control” on 15.3.2013 at Kongu Engineering College, Perundurai, Erode.
- Delivered a keynote speech on “Swarm Intelligence based Optimal Process Automation” at the International Conference on Mechanical, Automobile and Biodiesel Engineering (ICMABE 2012) organized by the Planetary Scientific Research Centre held in Holiday Inn Hotel, Dubai – Downtown Dubai, Al Rigga street, Deira Dubai, UAE on 6<sup>th</sup> and 7<sup>th</sup> of October 2012.
- Delivered a guest lecture on “Evolutionary Optimization techniques for Process control Applications” in EIFA conducted on 13<sup>th</sup> August, 2012 organized by the Department of Electronics and Instrumentation Engineering, Bharath University
- Delivered a guest lecture on “MATLAB” and provided hands-on training in programming and Intelligent tools in MATLAB for the programme on “MATLAB and its applications” held in EIE department of BS Abdur Rahman University for the faculty and students of BS Abdur Rahman Univ. on 29<sup>th</sup> and 30<sup>th</sup> March 2012.
- Delivered a guest lecture on “LABVIEW” provided hands-on training in LABVIEW programming in the programme on “LABVIEW and its applications” held in EIE department of BS Abdur Rahman University for the faculty and students of BS Abdur Rahman Univ. on 26<sup>th</sup> March 2012.
- Dr. U. Sabura Banu, Assoc. Prof/EIE delivered a guest lecture on “Image Processing Tool in Matlab” for ICMR sponsored National workshop on “Biomedical Image Processing using MATLAB and LABVIEW” on 14<sup>th</sup> December 2011 at BS Abdur Rahman University.
- Dr. U. Sabura Banu, Assoc. Prof/EIE delivered a guest lecture on “Fuzzy Logic toolbox in Matlab” for the CSIR sponsored National Workshop on “Intelligent Modeling and control using MATLAB and LABVIEW” at Eswari Engineering College on 26/08/2011
- Dr. U. Sabura Banu, Assoc. Prof/EIE delivered a guest lecture on “Particle Swarm Optimization, Bee Colony Optimization & Fuzzy clustering” for the faculty development programme on “Soft computing techniques” at Anna University on 26/11/2010
- Dr. U. Sabura Banu, Assoc. Prof/EIE delivered a guest lecture on “Genetic Algorithm” & “Particle Swarm Optimization” at two day national workshop conducted by CSE & Maths Dept., BSAU held on 6/12/2010 & 7/12/2010
- Dr. U. Sabura Banu, Associate Professor/EIE delivered lectures on “Particle Swarm Optimization” and handled the tutorial session “MATLAB toolboxes” for a two day National Workshop on “Research Oriented Intelligent Modeling and Control using MATLAB” organized on 9/3/10 and 10/3/10.
- Dr. U. Sabura Banu, Asso. Professor/EIE delivered a lecture on “Applications of MATLAB tools for control systems” at Faculty Development programme on “Control Systems” on 4<sup>th</sup> December 2009 at Velammal Engg. College, Chennai.
- Dr. U. Sabura Banu, Asso. Professor/EIE delivered a lecture on “Fuzzy clustering for CSTR” for DRDO sponsored two day workshop on “MATLAB & LABVIEW for Electrical & Process

Applications" held on 18<sup>th</sup> December 2009 at Eswari Engg. college, Chennai.

- Ms. U. Sabura Banu AP/ICE delivered a lecture on "Model Predictive Control" at the Anna University sponsored FDP on "Advanced Control systems" held at Power Electronics division, Anna University, Chennai on 13/6/09.
- Ms. U. Sabura Banu AP/ICE delivered a lecture on "Genetic Algorithm with applications & tutorial on GA" at the AICTE sponsored FDP on "Artificial Intelligence applied to Electrical appliances" held at Easwari Engg. College on 2/6/09.

## **PUBLICATION PUBLISHED**

- U. Sabura Banu, "Walrus Optimization-Enhanced ResNet-50 for AI-Driven Renal Malignancy Prediction with Occlusion Sensitivity-Based Interpretation", Asian Pacific Journal of Cancer Prevention, Volume 26, Issue 8, August 2025, pp. 2995-3004. Doi : [10.31557/APJCP.2025.26.8.2995](https://doi.org/10.31557/APJCP.2025.26.8.2995).
- U. Sabura Banu, "AI-Powered Skin Lesion Diagnosis using Whale Optimization Algorithm Enhanced ResNet 50 for Cancer Prediction", Asian Pacific Journal of Cancer Prevention, Volume 26, Issue 8, August 2025, pp. 2919-2928. Doi : [10.31557/APJCP.2025.26.8.2919](https://doi.org/10.31557/APJCP.2025.26.8.2919).
- U. Sabura Banu, "Breast Cancer Classification Refined using ResNet50 Parameter Tuning with Lyrebird Optimization", Int. J. of Reasoning-based Intelligent Systems (Accepted for Publication).
- U. Sabura Banu, "Comparative Analysis of Unidirectional and Bidirectional RNNs for ECG Arrhythmia Detection Using Augmented MIT-BIH Data", Bulletin of Electrical Engineering and Informatics (Accepted for Publication).

## **CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:**

1. U. Sabura Banu presented a paper titled "Deep Learning based Air Quality classification using ResNet50" in International Conference on Social Research and Innovation 2025, September 10 - 11, Male, Maldives.
2. Successfully completed two weeks live online FDP in "Application of Moodle LMS" organized by DY Patil College of Engineering jointly with B.S. Abdur Rahman Crescent Institute of Science and Technology and Jamai Millai Islamia, New Delhi during 11<sup>th</sup> and 25<sup>th</sup> June 2020.
3. Participated in an online Faculty development programme on "Modern IOT technology tools and design for real time applications" from 3<sup>rd</sup> June 2020 to 9<sup>th</sup> June 2020 organized by Sri Sairam Institute of Technology, West Tambaram, Chennai
4. Completed faculty development programme on "Deep learning applications – Design, Development and Deployment in IoT Edge" from 27.05.2020 to 29.05.2020 organized by the department of Electronics and Communication Engineering, SRM TRP Engineering College, Thiruchirapalli, Tamilnadu.
5. Participated in the faculty development program on Machine learning for signal Processing organized by Sri Venkateswara College of Engineering during 19<sup>th</sup> and 23<sup>rd</sup> May 2020
6. Completed the Online course on Internet of Things – Current Developments conducted by BECH-RUSA 2.0, Bharathidasan University, Pakalaiperur, Tiruchirapalli during 8<sup>th</sup> – 12<sup>th</sup> May 2020.
7. Attended faculty development program on "Digital Transformation- An Introductory Course" from 08.05.2020 to 12.05.2020 conducted by Department of Electronics and Instrumentation

- Engineering, Easwari Engineering College.
- 8. Attended AICTE's 4 days online course on Examination Reforms during April 15-18, 2020 nominated by our Institute as one among seven members.
  - 9. Completed AICTE Training and Learning (ATAL) Academy online FDP on "Blockchain" from 20.04.2020 to 24.04.2020 at JNTUA College of Engineering, Pulivendula
  - 10. Attended National Summer training programme (NSTP) on "Embedded System and Robotics" conducted by EDC - IIT, Roorkee and Department of Electronics and Instrumentation Engineering during July 18 - 24, 2016
  - 11. Attended one week short term training programme (STTP) on "Learning and Teaching Robotics:Modeling, Simulation and Practice" conducted at the Indian Institute of Information Technology Design & Manufacturing (IIITDM), Kancheepuram, Chennai - 600127 during 20-25 June 2016

12. Dr. U. Sabura Banu attended Indian Control Conference in Indian Institute of Technology, Madras during January 5-7, 2015
13. Dr. U. Sabura Banu attended a course in Process Control in Indian Institute of Technology, Madras during 15.12.2014 and 19.12.2014.
14. Dr. U. Sabura Banu attended a Workshop on “Industrial Applications of Advanced Control and Estimation” organized by Automatic control and Dynamics Optimization Society(ACDOS) at IISc banaglore on 17.10.14 and 18.10.2014.
15. Attended an Industrial training program on Siemens PLC from 14<sup>th</sup> June 2013 to 22<sup>nd</sup> June 2013 in Vi Micro Systems, Perungudi
16. Dr. U. Sabura Banu attended a Short term course on Control System Design in the Department of Avionics, Indian Institute of Space Science and Technology, Trivandrum during December 4-8, 2012.
17. Dr. U. Sabura Banu, Assoc. Prof., EIE attended an intensive faculty training on “DCS Overview” conducted by the Training centre of Yokogawa India Ltd. From 15/11/2011 to 19/11/2011 at BS Abdur Rahman University.
18. Attended a Quality improvement programme on “Labview and its applications” between 2<sup>nd</sup> November and 6<sup>th</sup> November 2009 at NITTTR, Taramani.
19. Attended a Faculty Development Programme on “IC1301 – Nonlinear Control System” held during 5<sup>th</sup> to 16<sup>th</sup> December 2006 organised by the Dept. of Electrical and Electronic Engg., Anna University, Chennai.
20. Attended an one week webinar on “Neuro Linguistic Programming (NLP)” organized by the Centre for Leadership (CFL), Department of Management Studies in association with Placement & Training Cell, BSA Crescent Institute of Science and Technology, Vandalur, Chennai from 10.06.2020 to 16.06.2020
21. Attended a webinar on “Micro sensors & IOT” organized by Department of Electronics and Instrumentation Engineering, Kumaraguru College of Technology, Coimbatore in association with International Society of Automation (ISA), Bangalore Section on Tuesday, 19<sup>th</sup> June 2020.
22. Attended a webinar on “Future Technology Tools – For a process automation Engineer” organized by Department of Electronics and Instrumentation Engineering, Kumaraguru
23. College of Technology, Coimbatore in association with International Society of Automation (ISA), Bangalore Section on Tuesday, 16<sup>th</sup> June 2020.
24. Attended five day workshop on “Deep Learning” conducted by Department of Information Technology, Kongu Engineering College, Perundurai from 08.06.2020 to 12.6.2020
25. Attended a webinar on “Application of AI and ML in Process Industries” conducted by Kumaraguru College of Technoogy, Coimbatore and International Society of Automation, Bangalore section held on 15<sup>th</sup> June 2020
26. Attended 5 days workshop on Deep Learning from 08.06.2020 to 12.06.2020 organized by Department of Information Technology, Kongu Engineering College
27. Attended a webinar “How EDII TN promotes innovation & entrepreneurship through IEDP & IVP conducted by Indra Ganesan College of Engineering, Tiruchirappalli – 12 held on 04.06.2020.
28. Participated in Webinar on CO-PO attainment computation and Outcomes Analysis on May 30,2020 by Inpods Ed-tech
29. Participated in workshop on “Data Science Using Python” conducted by 360DigiTMG, India on May 26,2020
30. Participated in a live webinar on “Deep Learning for Computer Vision” on 23<sup>rd</sup> May 2020, organized by the Department of ICE & ISA Chapter, St. Joseph’s College of Engineering

31. Participated in the Webinar on “Various project opportunities for DST Funding – Strategies on International Cooperation” by Sri. Sanjeev Kumar Varshney, Advisor & Head, International Division, Department of Science and Technology, Government of India on 23.05.2020 organized by Office of Research, ESPAC and FR & FTA at B.S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai : 48.
32. Participated in the three days workshop on “Basic Arduino Programming” conducted from 19<sup>th</sup> May 2020 to 21<sup>st</sup> May 2020 by Department of Information Technology, Kongu Engineering College, Perundurai, Erode.
33. Attended a virtual seminar on “Quality Assurance in Online Teaching-Learning & Evaluation” organized by Vellore Institute of Technology, Vellore on 19<sup>th</sup> May 2020
34. Participated in the online workshop on “Scientific Writing for Journals” organized by Springer Nature on 15<sup>th</sup> May 2020
35. Participated a webinar on “10 steps to become an Entrepreneur” on 13<sup>th</sup> May 2020 by Crescent Innovation and Incubation Centre.
36. Participated in the webinar on “Automation for Process Industries” on 11<sup>th</sup> May, 2020 conducted by the department of Electronics and Instrumentation, Karpagam College of Engineering, Coimbatore
37. Participated in the webinar “C-Camp’s C-CIDA Accelerator Supporting COVID Innovations for Larger Impact” on 9<sup>th</sup> May 2020 organized by CIIC, BSACIST.
38. Participated in the webinar on “Startup Story:GroTron – Artificial Intelligence Preceision Agriculture Controller” organized by CIIC on 8<sup>th</sup> May 2020
  
39. Participated in the webinar on “Blue Ocean Strategy for startups to swim across the Covid-19” organized by CIIC on 7<sup>th</sup> May 2020.
40. Attended a Webinar on “How to Use Turnitin Software for your Research (Turnitin Online on Campus)” held on May 04,2020 organized by Guru Nanak Institute of Management Studies, Affiliated to University of Mumbai
41. Attended and presented a paper titled “Fault Detection and Isolation for Three Interacting Tank Control” 3<sup>rd</sup> online International Conference on Recent Trends in Science and Technology organized by GKM College of Engineering and Technology & TECHOWN, Chennai on 6<sup>th</sup> May 2020.
42. Attended a webinar on “Art of fundraising for Entrepreneurs and Wannable Entrepreneurs” Organized by Crescent Innovation Incubation Council on 29<sup>th</sup> April 2020.
43. Attended and presented a paper in an International Conference PECCON 2019 at SELECT, VIT, Chennai on 13.12.2019
44. Attended and presented a paper at the 9th World Engineering Education Forum (WEEF- 2019), November 13<sup>th</sup> to 16<sup>th</sup> 2019, at ITC Grand Chola, Chennai, India
45. Attended R programming workshop conducted by IIT Bombay on 9<sup>th</sup> November 2019
46. Attended an interactive session with Dr. Parthasarathy, Professor, IISC, Bangalore for funded project proposal submission on 13<sup>th</sup> September 2019
47. Attended a workshop on “Industrial IOT using Raspberry PI” in EEE department,SRM University, Ramapuram on 10<sup>th</sup> August 2019
48. Attended Edumeet on Factory Automation on 8<sup>th</sup> August 2019 organised by Mitsubishi Electric India in association with MIT, Anna University, Chennai at MIT, Chrompet.

49. Attended awareness camp by C-Camp partnered with CIIC on Biotech Ignition Grant scheme on July 12, 2019
50. Attended induction program on 8<sup>th</sup> and 9<sup>th</sup> July 2019
51. Participated in the Two days Workshop on Kaizen Internet of Things conducted at IIT Madras Research Park on 3rd & 4th March 2018.
52. Participated in the three day workshop on "Deep Learning in Image Processing and Computer Vision" organized by the Department of Computer Science and Engineering, Anna University held during 7th - 9th February 2018.
53. Participated in the National Conference on Large Scale Multi-disciplinary Systems of National Significance- Trends & Challenges - Students' special symposium on June 25, 2016.
54. Attended the Maser class followup on Business Incubation at VITTBI, Vellore on April 1, 2016
55. Attended National Conference on Recent Trends in Instrumentation and Control, Madras Institute of Technology held on 18th March 2016.
56. Attended a workshop on 22.1.2016 at 10 a.m. in Seminar Hall (III Floor) of New Mechanical Sciences Block on "Hands-on Experience sharing on writing Fundedproposals to Agencies"
57. U. Sabura Banu participated in one-day workshop on "Gift yourself" held on 18th January 2016 organized by women empowerment cell, B.S. Abdur RahmanUniversity.
58. Attended the workshop on "Successful Proposal writing for funding Agencies" organized by the Centre of Energy Research and Studies in Seminar Hall 2 of B.s. Abdur Rahman University on 12th January 2016.
59. Dr. U. Sabura Banu, Prof./EIE attended the Introductory meeting for the Establishment of Continuous Air Quality Monitoring Stations (CAAQMS) on 16th December 2015in TNPCB, Guindy, Chennai - 32.
60. Dr. U. Sabura Banu, Prof./EIE attended the Interactive session with Prof. Kevin D. Jones, Executive Dean, Science & Engineering, Plymouth University on December 15th, 2015
61. Dr. U. Sabura Banu, Prof./EIE participated in the Executive Colloquium on "Initiatives on Strategic skill Development" on 26th November 2015 at Hilton Hotel, Guindy, Chennai.
62. U. Sabura Banu, Lakshmanaprabu S.K, "Multivariable centralized fractional order PID controller tuned using harmony search algorithm for two interacting conical tankprocess", SAI Intelligent Systems conference (Intellisys), London, United Kingdom, 10-11 November 2015
63. Dr. U. Sabura Banu, Prof./EIE participated in the Masterclass event in TIECON 2015 on 31st October 2015.
64. Dr. U. Sabura Banu, Prof. /EIE, Ms.G. Anidha, AP (Sr.Grade)/EIE, Ms.P.R.Hemavathy AP(Sr.Grade)/EIE and Mr.N.Sivaramakrishnan, AP/EIE attended a workshop of "Role of mathematics in Bio modeling" conducted by department of mathematics BSAU on 1.8.15
65. Dr. U.Sabura Banu, Prof./EIE participated in Faculty Development Program on Integrated Electronic Circuits Education using NI platform on Integrated Electronics Circuits Education using NI platform at Dhanalakshmi College of Engineering, Chennai from 20th to 22nd July 2015 conducted by DCE, Chennai in association with ICT Academy of Tamilnadu and National Instruments
66. Dr. U.Sabura Banu, Prof./EIE attended a complementary seminar on Matlab and Simulink for Engineering Education conducted by National Instruments on 8th July 2015 at Le Royal Meridian Chennai
67. Attended a training program on "Labview and its applications" in Mechanical Engineering Department during 23<sup>rd</sup> to 25<sup>th</sup> May 2013 and 30<sup>th</sup> and 31<sup>st</sup> May 2013.
68. Participated in the International Conference on Innovations in Intelligent Instrumentation, Optimization and Signal Processing in Karunya University on 1<sup>st</sup>and 2<sup>nd</sup> March 2013.
69. Attended the demonstration of Installation of Siemens PLC on 11<sup>th</sup> January 2013.
70. Attended PLC training on Siemens PLC on 18<sup>th</sup> and 19<sup>th</sup> January 2013.
71. Attended the demonstration on Wheel Type flow meter and demonstration of Embedded System on 9<sup>th</sup> and 10<sup>th</sup> January 2013 given by Vi Micro Systems Pvt. Ltd.

72. All the faculty members attended a demonstration on Embedded Control and PressureControl Loop by VI Micro Systems Pvt. Ltd on 3<sup>rd</sup> November 2012 in Process Control Lab
73. U. Sabura Banu attended Campus @IT Program held in Computer Science Department, BS Abdur Rahman University on 22<sup>nd</sup> November 2012.
74. Dr. U. Sabura Banu, Assoc. Prof., EIE attended a three days Orientation Workshopon “E-content Development” programme from 23<sup>rd</sup> to 25<sup>th</sup> January 2012 organizedby the Faculty Training Academy, BS Abdur Rahman University in partnership with Department of Education Technology, Bharathidasan University, Tiruchirapalli.
75. Dr. U. Sabura Banu, Assoc. Prof/EIE attended the CSIR sponsored National Workshop on “Intelligent Modeling and control using MATLAB and LABVIEW” at Eswari Engineering College during 26/08/2011 & 28/8/2011.
76. Dr. U. Sabura Banu, Assoc. Prof/EIE has successfully completed a course on “Introduction to COMSOL MULTIPHYSICS version 4.2” organized by COMSOL on 3<sup>rd</sup> August 2011 at SRM University.
77. Dr. U. Sabura Banu, Professor/EIE Department and Ms. P. Nageswari attended A Workshop On “Best Teaching Practices” held in Seminar Hall I, Convention Centre organized by Faculty Training Academy on 22<sup>nd</sup> November 2012.
78. All the faculty members attended a demonstration on Temperature Control Loop by VI Micro Systems Pvt. Ltd on 29.11.12 in Process Control Lab.
79. Attended “Educators day” on 17<sup>th</sup> October 2012 at Chennai Trade Centre organized by National Instruments Pvt. Ltd.
80. Attended Matlab Workshop on 5<sup>th</sup> October 2012 organised by the Mechanical Department of BS Abdur Rahman University alongwith MATHWORKS pvt. Ltd.
81. Attended the Brain Storming Session on “Outcome Based Learning” on 18<sup>th</sup> September 2012 in BS Abdur Rahman University.
82. Attended a Workshop on “Advances In Nanomaterials” conducted by Nano Centre and Polymer Department, BS Abdur Rahman University on 18<sup>th</sup> August 2012.
83. Attended the complimentary seminar on Matlab and Simulink for Engineering Eduction on 24<sup>th</sup> August 2012.
84. Attended a one day collaborative workshop on “Excellence in Academic Performance and Leadership skills” on 6<sup>th</sup> July 2012 organized by Department of Computer Science and Engineering and Department of Electronics and Instrumentation, BS Abdur Rahman University.
85. Attended a workshop on “How to write funded projects” on 5<sup>th</sup> July by the Director, Sponsored Research, B.S. Abdur Rahman University.
86. Dr. U. Sabura banu, Professor attended “Educators Day, 2012” in Chennai Trade Centre organized by National Instruments, on 16<sup>th</sup> and 17<sup>th</sup> October, 2012.
87. Dr. U. Sabura Banu, Professor attended the complimentary seminar on MATLAB and SIMULINK for Engineering Engineers on 24<sup>th</sup> August 2012.
88. Dr. U. Sabura Banu, Professor attended an one day workshop on “Control Valves, Actuators and their Industrial Applications” organized by ISA South India Section, Chennai at BS Abdur Rahman University on 22.8.2012
89. Dr. U. Sabura Banu, Associate Prof,, EIE attended a seminar on “Advanced materials and composites for Marine Applications”, AMCMA 12 on 18th July 2012 organized by Polymer Nano Technology Centre, BS Abdur Rahman University, Vandalur and Naval Research Board, New Delhi.

90. Dr. U. Sabura Banu, Assoc. Prof/EIE attended a workshop on “Hands on Training onMEMS softwares” between 1<sup>st</sup> and 2<sup>nd</sup> August 2011 at SRM University in associationwith National Programme on Micro and Smart Systems.
91. Dr. U. Sabura Banu, Assoc. Prof., EIE attended a complimentary seminar on “MATLAB & Simulink for Engineering Education : Image Processing and Advanced Control System” organized by Mathworks India Pvt. Ltd., on 15<sup>th</sup>& 16<sup>th</sup> March 2011.
92. Dr. U. Sabura Banu, Assoc. Prof., EIE attended the two days Interactive workshopon “Multimedia Tools- Adobe Photoshop” on March 12<sup>th</sup> and 13<sup>th</sup>, 2011 organizedby the Faculty Training Academy in association with NSS.
93. Dr. U. Sabura Banu, Assoc. Prof., EIE attended the ISA Leadership Meet 2011 at Sri SaiRam Engineering College on 11<sup>th</sup> March 2011.
94. Dr. U. Sabura Banu, Assoc. Prof., EIE attended a 2-day Internal Auditor Training on “Quality Management System as per ISO 9001:2008 standard” at BS Abdur Rahman University held on 28<sup>th</sup> February and 1<sup>st</sup> March 2011 by DET NORSKE VERITAS.
95. Attended a one day workshop on “The application of Nonlinear circuits and systems”on February 22<sup>nd</sup> 2011 organized by Physics Department of BSAU.
96. Dr. U. Sabura Banu, Assoc. Prof., EIE attended a advanced level intensive workshop on “Neural network for image and signal processing” at PSG College of Technology,Coimbatore held on 10<sup>th</sup>& 11<sup>th</sup> January 2011.
97. Dr. U. Sabura Banu attended the workshop on “Motivation and Promotion of faculty members for sponsored and collaborative research” held on 4<sup>th</sup> December 2010organised by BSAU.
98. Dr. U. Sabura Banu, Assoc. Prof/EIE attended the Educator’s Day conducted by ICTACT & National Instruments at Chennai Trade Centre on 14<sup>th</sup> December 2010.
99. Dr. U. Sabura Banu, Assoc. Prof/EIE attended a one day workshop on “Recent Trends in Evolutionary Computation in Electrical Engineering” organized by Dept.of EEE of BSAU, Chennai – 48 on 2<sup>nd</sup> November 2010.
100. Dr. U. Sabura Banu, Assoc. Prof/EIE attended a one day seminar on “Safety Integrity a life cycle approach” organized by ISA South India Section, Chennai at IC & SR Auditorium, IIT Madras on 27<sup>th</sup> November 2010.
101. Dr. U. Sabura Banu, Assoc. Prof./EIE attended a two day workshop on “Wireless sensors networks and its applications” organised by Dept. of ECE, B.S.A.U., on 4<sup>th</sup> and 5<sup>th</sup> August 2010.
102. Dr. U. Sabura Banu, Assoc. Prof./EIE attended a one day workshop on “e-content development” organised by Dept. of CSE, B.S.A.U., on 19<sup>th</sup> August 2010.
103. Dr. U. Sabura Banu, Associate Professor/EIE attended a CSIR sponsored workshop on “Intelligent Modeling and control using MATLAB and LABVIEW” organized by the Department of Electronics and Instrumentation Engineering during 28-30, June 2010 at Easwari Engineering College.
104. Attended a National seminar on Instrumentation Engineering – Practices, Teaching and Research (NSIE-2006) jointly organized by ISA south India section, Chennai and Department of Instrumentation Engineering, MIT, Anna University, Chennai.

105. Attended a short-term training programme on “Recent trends in Process Control and Instrumentation” at SRM Deemed University from 22-11-05 to 24-11-05.
106. Attended a short-term training programme on “Recent trends in Biomedical Instrumentation” at SRM Deemed University on 25-11-05 & 26-11-05.
107. Participated in one day seminar on “Advances in Process Control” held on March 1<sup>st</sup>,2005 in BSAR Crescent Engineering College.
108. Participated in the AICTE-ISTE Short term Training Programme on “Trends in Intelligent Measurement and Control” conducted in the Department of Instrumentation Engineering, MIT, Anna University from 22<sup>nd</sup> to 27<sup>th</sup> November 2004.
109. Attended a two days workshop on “Adobe Photoshop” organized by the Faculty Training Academy, BS Abdur Rahman University, during 12<sup>th</sup> and 13<sup>th</sup> March 2011.
110. Attended a two days workshop on “Wireless Sensor networks and its applications” Orgnized by Department of ECE, BSAU, on 4<sup>th</sup> and 5<sup>th</sup> August 2010.
111. Attended a one day workshop on “e-content development”organised by the Department of CSE, BSAU on 20<sup>th</sup> August 2010.
112. Attended a workshop on “Advanced Communication Systems” held on 18<sup>th</sup> November 2009 organised by Department of ECE, BS Abdur Rahman University.
113. Attended a Workshop on “Control theory and its applications to practical problems” held during 16<sup>th</sup> to 18<sup>th</sup> October 2008, in Anna University, Chennai.
114. Attended a workshop on “High Impact Teaching Skills” conducted by Dale Carnegie
115. -Wipro between 18<sup>th</sup> August &19<sup>th</sup> August 2008 in BSA CEC
116. Attended a workshop on “Controller for Complex Systems” at St. Joseph Engg. College, Chennai on 13<sup>th</sup> August 2008.
117. Attended a Workshop on “Process simulation in Chemical Industries” held on 27<sup>th</sup> October 2007 in the Department of Chemical Engineering, A.C. Tech Campus, Anna University, Chennai.
118. Participated in three day workshop on “PLC and SCADA” held from 9.2.2006 to 11.2.2006 in Easwari Engineering College.
119. Attended a National level workshop on “Recent trends in Biomedical Instrumentation” at St. Joseph’s college of Engg. 3<sup>rd</sup> August 2005.
120. Attended a workshop on Emerging trends in Electronics and Communication Engineering in Crescent Engg. College from 19.4.2004 to 21.4.2004.
121. Attended a workshop on PLC And SCADA organized by ICE Department, Crescent Engg. College on 8.3.2004.
122. Attended a two day workshop on Advances in Process Control and Instrumentationin St. Joseph’s College of Engineering held on 13<sup>th</sup> and 14<sup>th</sup> February 2004.
123. Attended an In-House Orientation Program in Crescent Engineering College from 16<sup>th</sup> to 18<sup>th</sup> June 2003.

#### **PROFESSIONAL MEMBERSHIPS:**

- ✓ Dr. U. Sabura Banu, Prof./EIE received the Lifetime Membership certification from ISRD : Membership ID: F3140900203 in Fellow category in International Society for Research and Development (ISRD membership), UK.
- ✓ Member of ACDOS, an NMO of International Federation of Automatic Control(IFAC)

#### **OTHER DETAILS (If any):**

##### **Institutional /Departmental Responsibilities**

- ✓ Departmental Responsibilities
  - Class Advisor for M.Tech/EIE Department (2012-2014 Batch)
  - Class Advisor for M.Tech/EIE Department (2011-2013 Batch)
  - Class Advisor for B.E./ICE Department (2006-2010 Batch)

- Lab-in-charge
    - Industrial Instrumentation (MI I & II Labs)
    - Process Control Lab
    - Consumables purchase in-charge
    - Computer Lab Incharge
  - International Society of Automation ISA –Faculty Advisor
  - IIPC Co-ordinator
  - R&D Co-ordinator
  - eSRM Co-ordinator
  - Project Co-ordinator
  - Class Committee Chairperson
  - Admission and Project Scrutinizing committee member
  - Sponsored Research and Consultancy Department Co-ordinator
  - Ph.D & M. Tech Selection Committee Member
  - Student Counselor
  - ISO Internal Auditor
  - DAAC member
  - Department co-ordinator for Women Empowerment Cell
  - NBA - UG/EIE
  - NBA - PG/EIE
- ✓ At Institutional Level
- IQAC Coordinator
  - NAAC Mock Committee Member
  - UGC Quality Mandate Overall Co-ordinator
  - NIRF Planning and Monitoring Committee – Overall Co-ordinator
  - Director (Sponsored Research and Industrial Consultancy)
  - HoD of Electrical and Electronics Engineering Department in SRM University, Ramapuram
  - Co-ordinated Department UGC committee activities and NAAC committee activities in SRM University, Ramapuram
  - HOD of Electronics and Instrumentation Engineering Department in B.S.Abdur Rahman University
  - Chairman of Board of Studies
  - Member of Academic Council
  - ISO Internal Auditor
  - APJ Abdul Kalam Innovation Centre Convenor
  - Co-ordinated the preparation for the Miscellaneous components of ISO Manual designed for BS Abdur Rahman University
  - NIRF ranking committee
  - Regulation revision committee
  - Member for condoning the lab equipments of EEE department
  - Member in Lesson Plan updating committee
  - University Research Forum Co-ordinator
  - Academic Council Member - B. S. Abdur Rahman University
  - Advisory Committee member - Valliammai Engineering College
  - Ph.D. Scrutiny Committee (Inch Committee) member
  - Member of Anti-ragging squad

## Consultancy and Training

- ✓ Taken classes for Industrial personnel from Apollo Tyres pvt. Ltd. And guided few industrial projects.
- ✓ Collaborative projects on neonatal temperature measurement and BMI - Food Nutrition projects completed
- ✓ Collaborative project on "Electrical Impedance Tomography for Tannery

Process"for Central Leather Research Institute

- ✓ Designed and fabricated a "Turbine flow meter for Underwater High Pressure applications" for National Institute of Ocean Technology.
- ✓ Dr. U. Sabura Banu, Prof. /EIE designed and developed TempIT in August – October2015.
- ✓ Dr. U. Sabura Banu, Prof. /EIE visited FESTO, Bangalore on 29<sup>th</sup> September 2015.
- ✓ Project proposal submission to IDDS by Thalir Team on 29<sup>th</sup> September 2015.
- ✓ Dr. U. Sabura Banu, Prof. /EIE interacted with IDDS participants on 1.8.15 andfinalized two collaborative projects
  - Neonatal temperature measurement
  - BMI - Food Nutrition
- ✓ Dr. U. Sabura Banu, Prof./EIE visited Festo Controls Pvt Ltd - FESTO Didactic - Global Production Centre - Technology and Engineering Centre along with Dr. V M Periasamy , Vice Chancellor, Dr. S Prince Arockia Doss - Director, International Collaboration, Dr. R Raja Prabu, Dean (Academic Research), Dr. M Murugan, Dean, School of Mechanical Sciences, on 12th June 2015 and had elaborate discussions with Mr.Rashmikant Joshi, MD Festo Controls Pvt. Ltd and with Harish Nachnani, National sales Manager, Didactic.
- ✓ Dr. U. Sabura Banu, Professor visited Universities and Innovation Centres in United Kingdom during 10<sup>th</sup> November to 15<sup>th</sup> November 2015. She visited many colleges,i.e., King's College, Trinity College, St. John's college and labs such as Watson's and Crick's Lab, Mathematical bridge, Cavendish Lab, in Cambridge University on 11<sup>th</sup> November 2015 and visited the research facilities in the Biotechnology Unit and

Chemical Engineering Department. She visited Sussex Innovation Centre. The centre helps in start-ups by way of mentoring to get-off right start, to get smart decision in selecting the right job and organize workshops/seminars to help them build skills. She then visited the Impact Hub Westminster on 13th November 2015, which was established in 2011, a global network housing flexible working spaces for incubators with positive social and environmental impact which provides a platform for the start-ups through collaboration and support. She visited Entrepreneurship Career Centre at London Business School on 14th November 2015.

- ✓ Dr. U. Sabura Banu, Prof. /EIEvisited IIT Madras Incubation centre in connectionwith Innovation Centre on 10th August, 2015.
- ✓ Dr. U. Sabura Banu, Prof. /EIE visited the following organization in connection withSelf Help Group hand in hand societal needs on 8<sup>th</sup> September 2015.
- ✓ Executed training worth Rs.49,742/- by way of conducting MATLAB training courseto students and remuneration for handling class to FORD personnel"s.
- ✓ Visited NIOT regarding projects on "Crawler slip control", "Desalination of seawater" and "Power generation using the heat difference in sea surface and deep sea"
- ✓ Consultancy for "Signal conditioning and measurement of strain using strain gauge"was carried out for the Civil Department during Nov. 2009.
- ✓ Handled classes on "Instrumentation" for Ford personnel from 2007 till date