

Profile

Prof. Dr. N. P. SUBIRAMANIYAM

Assistant Professor

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Working Experience: 29 + years

- Working as an Assistant Professor Department of Physics at K.S. Rangasamy College of Arts and Science from September 2021 to Till date
- Worked as a Professor and Head Department of Electronics at Nehru Arts and Science College from June 2013 to September 2021.
- Worked as an Assistant Professor Department of Electronics at AJK College of Arts and Science from July 2011 to March 2013.
- Worked as an Associate Professor and Head Department of Electronics at Cherraan's Arts Science College from August 1995 to April 2011.
- Worked as a Lecture Department of Electronics at Sankara College of Science and Commerce from July 1994 to August 1995

Educational Qualifications:

- Ph.D., Electronics.
Thesis Title: Characterization of Brush Electrodeposited CuInSe_2 , CuGaSe_2 and $\text{CuIn}_{1-x}\text{Ga}_x\text{Se}_2$ Thin Films for Solar Cell Applications.
- M.Sc. Physics.
- M. Phil. Electronics.
- M.Sc. Applied Electronics.
- B.Sc. Electronics.

Research Guidance

- M. Phil. Completed : 13
- Ph. D. Completed: 3
- Ph. D. On-going: 1

Membership in Professional Bodies:

- Member, Board of Studies Electronics PG: Bharathiar University:2007-2009
- Member, Board of Studies Electronics PG: Bharathiar University:2010-2012
- Chairman, Board of Studies Electronics PG: Bharathiar University:2013-2016
- Member, Standing committee Academic Affair : Bharathiar University:2013-2016
- Member, Board of Studies Electronics PG: Bharathiar University:2017-2019
- Life Member, Indian Science Congress Association
- Member, Board of Studies Electronics VLB Janakiammal College of Arts and Science: 2016-2017
- Member, Board of Studies Electronics Hindustan College of Arts and Science:2016-2017
- Member, Academic Council Member Nehru Arts and Science College: 2018-2019
- External Doctoral Committee Member for PhD (Bharathiar University Nominee).
- Chairman ,Board of Studies Nehru Arts and Science College2019-2020
- Coordinator, Department star College Scheme, DBT, Nehru Arts and Science College

Reviewer:

- Reviewer in International Research Journal: Oriental Journal of Chemistry.
- Reviewer in Journal of Materials Science: Material in Electronics. Springer.
- Reviewer in Jordan Journal of physics.
- Reviewer in International Journal of Springer nature.

Book Published:

- Fundamental of Digital Electronics, Pallavi Publication (ISBN: 978-93-80024-25-7).
- Advance Microcontroller, Pallavi Publication (ISBN: 978-93-80024-26-4)

Journal Published:

2023

- “Multilevel Thresholding for Multi-Spectral Image Using Convolutional Fuzzy Clustering Algorithm and Gradient Multilayer Kernelized Perceptron” International Journal of Intelligent Systems and Applications in Engineering

2022

- “Image Segmentation through Weighed Quantum Particle Swarm Optimization Threshold to improve the efficiency of image” Stochastic Modeling & Applications, June 2022
- “A Hybrid Approach of Adam Optimization with CNN to Remove Noise on Images” IEEE Xplore, August 2022

2020

- “Deep learning-based production assists water quality warning system for reverse osmosis plants” H₂ Open Journal , December 2020 ,IWA
- “Controllable synthesis of ZnO nanorods at different temperatures for enhancement of dye-sensitized solar cell performance” Materials Letters, September 2020 Elsevier
- “Investigation on the structural, optical and photocatalytic degradation properties of Zns/Mn: Zns thin films under visible light irradiation” Materials today,Proceedings Journal ,June 2020Elsevier
- “Effect of Annealing Temperature on The Improved Photo Catalytic Degradation of Zinc Sulfide Thin Films Under Visible Light Irradiation” International Journal of Recent Technology and Engineering (IJRTE), May2020
- “A novel green synthesis approach for improved photocatalytic activity and antibacterial properties of zinc sulfide nanoparticles using plant extract of Acalypha indica and Tridax procumbens” Journal of Materials Science: Materials in Electronics ,May 2020,Springer
- “Monitoring and Intelligible Alert System to control Water Quality in Reverse Osmosis Plants” International Journal of Innovative Technology and Exploring Engineering (IJITEE) ,April 2020
- “Dye-sensitized solar cells based on TiO₂ nanoparticles-decorated ZnO nanorod arrays for enhanced photovoltaic performance” Journal of Materials Science: Materials in Electronics , April 2020,Springer

2018

- **“Microstructure, electrical and humidity sensing properties of TiO₂/polyaniline nanocomposite films prepared by sol–gel spin coating technique” ”Journal of Materials Science: Materials in Electronics ,February 2018, **Springer****

2017

- **“Synthesis and Characterization of Tin Oxide: A Review” International Journal for Research in Applied Science & Engineering Technology, November 2017**
- **“Fluorine-doped nanocrystalline ZnO powders prepared via microwave irradiation route as effective materials for photocatalyst” Journal of Materials Science: Materials in Electronics , July 2017, **Springer****
- **“ structural and humidity Sensing properties of Zinc doped Tin Oxide single crystalline nanorods ”Cikitusi journal for multidisciplinary Research, July 2017**
- **“Photocatalytic activity of different organic dyes by using pure and Fe doped SnO₂ nanopowders catalyst under UV light irradiation” Journal of Materials Science: Materials in Electronics , June 2017, **Springer****

2016

- **“Review on Carbon Nonmaterial Field- Effect Transistor(FET)-Based Electrical Biosensors” Indo Global Journal of Applied Engineering, April2016**
- **“Performance Comparison of Noise Reduction in Mammogram Images” International Journal of Research in Engineering and Technology, February2016.**

2015

- **“Synthesis and Phase Stability Studies on TiO₂-SiO₂ Binary oxides” Nehru E-journal, December 2015**
- **“Speech Enhancement Based On Spectral Subtraction For Speech Recognition System With Dpcm” International Journal of Modern Engineering Research, July 2015**
- **“A study on Cu²⁺ Doped CaAl₂Si₂O₈ Glass-Ceramic by Sol-gel Technique” International Journal of Multidisciplinary Educational Research, July 2015**
- **“Structural and Electrical Properties of Brush Plated Copper Indium Selenide(CIS) Films” Nehru E-journal, January 2015**

2014

- **“A Study on Fixed Priority Schedulling Based RTOS in Automotive Domain” Journal of Nanoscience and Nanotechnology, February 2014**

- “A Survey on Nono-Robotics in Nano-Medicine “Journal of Nanoscience and Nanotechnology, February 2014

2013

- “Photoconductive Properties of Brush Plated Copper Indium Gallium Selenide Films” Journal of Coating, September 2013
- “Effect of Current Densities on Structural and Optical Properties of Brush Plated CuInSe₂(CIS) Thin Films” Journal of Environmental nanotechnology, June 2013
- “Structural, Optical and Photoconductive Properties of Brush Plated Copper Gallium Selenide Films” Journal of Environmental nanotechnology, March 2013.

Conferences Presented Papers:

International:

- “An Effective Image denoising Algorithm Using Deep Convolutional Neural Network” Innovation in Science and Technology, Nehru Arts and Science College, 2021
- “Structural Morphological and Antimicrobial Activity of undoped and Aluminium doped zinc sulfide nanoparticles” Interdisciplinary Research Innovations in Science and Humanities, Nehru Arts and Science College, 2018
- “Optimum Transparent Conductive Oxides Materials Investigation for Thin Film for Solar Cell Application” Interdisciplinary Research Innovations in Science and Humanities, Nehru Arts and Science College, 2017
- “Flexible Electronics technology-An overview” Interdisciplinary Research Innovation in Computer Science, Biosciences and Electronics, Nehru Arts and Science College, 2016
- “An Irrigation Approach and Sensing of Plant Moisture Control with Automation Process” International conference on interdisciplinary research in Electronics and Instrumentations Engineering , Bharathiar University, 2015

National:

- “ PIC Based Document transferor Robots” Interdisciplinary Innovations in Electronics, VLB Janakiyammal College of Arts and Science, February 2017
- “ Studies on the Structural, Optical , Electrical properties and photocatalytic Activity of Niobium Doped TiO₂ Nanostructured Thin Films” Emerging Trends in

Science Engineering and technology, Nehru Institute of Engineering and Technology, March 2016

- “GSM and GPS Based Vehicle Tracking and Locking System” Trendy Technologies in Computer Science & Applications, Maharani Arts and Science College, January 2015
- “GSM Based Data Management Systems” Research Issues in Big Data, Rathinam College of Arts and Science, September 2015
- “Embedded Based Industrial Automation Systems” Embedded Systems & Technology, AJK College of Arts and Science, February 2014
- “Brush Plated Copper Indium Selenide films and their Characteristics” Recent Trends in Modern Science and Linguistics, Velalar College of Engineering and Technology, March 2013
- “Brush Plated Copper Indium Selenide films and their Characteristics” Contemporary Issues in Social Science and Science Research, SNR Sons College, January 2013
- “Brush Plated Copper Indium Selenide films” Innovation Physics and Chemistry, Tejjashakthi Institute of Technology for Women, February 2012

Work Shop Attended

- “Robotics”, NRC, ARK & IIT Bombay
- “Botics” NRC, ARK & IIT Bombay
- “Research Challenges & Security Issues in Wireless Networks” Dr. N.G.P. Institute of Technology, Coimbatore, 2015
- “The Significance of Curriculum Design and Delivery Process in Outcome Based Education” Nehru Arts & Science college, Coimbatore

Award Received:

- “Award of Excellence” NRC India, IIT Bombay

Abroad Visited:

- Indonesia for International Conference Paper Presentation

Faculty Development Program Participated:

- “Smart Technologies for Social Impact” Hindusthan College of Arts & Science, Coimbatore, September 2024.

- **“Teaching Pedagogy and Life Skill Management” Hindusthan College of Arts & Science, Coimbatore, March 2023.**
- **“Selection of Scholarly Journals & Web Visibility Strategies and Techniques” Dhanraj Baid Jain College, February 2023.**
- **“Autonomy and Outcome Based Education” Nehru Arts and Science College, May 2017**
- **“Autonomy and Outcome Based Education” Nehru Arts and Science College, May 2015**
- **“Outcome Based Education” Nehru Arts and Science College, September 2013**

Administrative Experience:

- **Chief Superintendent**
- **Exam Coordinator for University Exam**
- **NSS Program Officer**
- **Exam Coordinator for Autonomous Exam**