

A. PATRICK PRABHU
Associate Professor of Physics
St. Joseph's College
Tiruchirappalli 620 002.



PERSONAL DETAILS:

Date of Birth : 20.10.1965
Father's Name : S. Arockiam
Spouse Name : W. Nirmala
Mother Tongue : Tamil
Religion : Christian (RC)
Caste : BC (Vanniar)
Mobile Phone Number : 97866 09229
E-mail ID : patrickprabhu.app@gmail.com
Patrickprabhu_ph2@mail.sjctni.edu

Address for communication : RT Residency
S3, B Block
Ramalinga Nagar First Main Road
Tiruchirappalli 620 003. TN.

Office Address : Department of Physics
St. Joseph's College
Tiruchirappalli 620 002. TN.

IFHRMS Employee ID Number : 20010605855
Date of Appointment : 13.01.2000

Date of Completion of Probation : 12.01.2002
Date of SG /AGP 8000/LEVEL 12 : 16.01.2011
Date of Asso.Prof/AGP 9000/L-13A : 22.07.2013

EDUCATIONAL QUALIFICATION:

- 10 Standard (1981) from RC Higher Secondary School, Tiruchirappalli 1. Secured 418/500.
- 12 Standard (1983) from St. Joseph's College Higher Secondary School, Tiruchirappalli 2. Secured 911/1200 with Physics, Chemistry, Maths and Biology stream.
- B.Sc. Physics (1983 – '86) from St. Joseph's College, Tiruchirappalli 2 with Overall percentage of 63.67 (First Class).
- M.Sc. Physics (1986 –'88) from St. Joseph's College, Tiruchirappalli 2, with Overall percentage of 65.03 (O Grade). Specialization : Integrated Electronics and Microprocessors.
- M. Phil. Physics 1988-'89 from St. Joseph's College, Tiruchirappalli 2, with the Overall Percentage of 77.92 (Distinction). Area of Specialization Integrated Electronics and Microprocessors.

TEACHING EXPERIENCE:

1. Lecturer in Physics at Loyola Academy, Old Alwal, Secunderabad, AP during 1989-1990.
2. Senior Physics Teacher at Loyola Public School, Guntur, AP between 1990 and 1992.
3. Junior Physics Lecturer at Laidlaw Memorial Jr.College, Ketti, TN between 1992 and 1996.
4. Lecturer in Physics at Mookambigai College of Engineering , Pudukkottai, TN between 1996 and 1999.
5. Lecturer in Physics and Electronics at St. Joseph's College (Evening Section) during the period between 1996 and 1999.
6. Lecturer in Physics at St. Joseph's College (leave vacancy) during 1999-2000.
7. Associate Professor of Physics at St. Joseph's College, Tiruchirappalli 620 002, TN from January 2000 – till Date.

SUBJECTS TAUGHT:

B.Sc. Physics - Mechanics and Properties of Matter, Electricity and Magnetism, Mathematical Physics, Quantum Mechanics, Analog Electronics, Digital Electronics and Microprocessors, Astro Physics, Communication Systems, Optics, Spectroscopy and Lasers...

B.Sc. Electronics – Analog Electronics, Digital Electronics and Microprocessors, Digital Systems, Electronic Instrumentation

M.Sc. Physics – Mathematical Physics, Nuclear and Particle Physics, Microprocessors and Microcontrollers, Statistical Mechanics, Communication systems, Methods of Spectroscopy...

M.Sc. Electronics – Microprocessors and Microcontrollers, Digital Electronic Instrumentation, Signals and Systems...

RESOURCE PERSON:

1. Board of Studies – External Member – Raja Serfoji College, Tanjore during the period 2005-'06.
2. Resource Person at Rama Krishna College, Perambalur District – Delivered a talk on “Electron Microscope – Design technique and Applications” during the year 2008.
3. Acted as a Consultant and Resource Person in Coaching the Aspirants for the IAS Preliminary Examinations during 2015-'16 at IAS Academy, St. Joseph's College, Trichy 2.sd
4. Delivered a speech on LIVE BROADCAST in **ALL INDIA RADIO**, FM, KODAIKANAL- on HOW TO APPROACH NEET 2017. (05.06.2017).
5. Course Coordinator for CSIR-UGC -NET Crash Course held at St. Joseph's College, Trichy 2 from 23-28, May,2022.

EDUCATIONAL CONSULTANT:

1. NEET advisor – GAIT EDUCATION, TRICHY 1. (2009 – 2018)
2. NEET/IIT Foundation Programme Co-ordinator at Champion Anglo-Indian Hr.Sec.School, Trichy 1. (2017-'18)
3. NEET Adviosr – KCM Matriculation School, Nilokottai, Dindigul.(2017-'18)
4. NEET Advisor – Green Park Matriculation School, Attur, Salem, 2018-'19.
5. NET Coordinator – Department of Physics, St. Joseph's College, Trichy 2 between 2018-2019.

RESEARCH EXPERIENCE:

B.Sc., Project - "Solar Energy Utilization"

M.Sc., Project – "Elastic Properties of ZnSe Semiconductor".

M.Phil. Project – "Microprocessor Based Smart Weighing Machine"

PROJECT WORK GUIDED FOR M.PHIL. AND M.SC. (PHYSICS & ELECTRONICS):

1. APRIL,2000 R.KARTHIKEYAN (986327)* AUTOMATION OF CALIBRATION PROCESS (DIGITAL METERS)
2. APRIL,2000 B.K. FRANCIS JOE ARUL PRABHU (983762) STUDY OF LUMINESCENCE ON APATITE MATERIALS AND THEIR APPLICATIONS.
3. APRIL,2000 B.SARAVANAN (986317)* AUTOMATION OF CALIBRATION PROCESS (DIGITAL METERS).
4. APRIL,2000 J.MICHAEL DENNIS (983760) STUDY OF LUMINESCENCE ON BISMUTH STRONTIUM VANADATE AND OTHER LIKE COMPOUNDS.
5. APRIL,2001 S.N. JALAL AHAMED (997211)* AUTOMATION IN DRIP IRRIGATION.
6. APRIL,2001 V.KARTHIKEYAN (19997233)* FABRICATION OF ELECTRONIC GENERATORS.
7. APRIL,2001 R.RAMKUMAR (997226)* SETTING UP OF TELEPHONE EXCHANGE.
8. APRIL,2001 S. KARTHIK KANNA (2000 8322)* DIGITAL TEMPERATURE CONTROL IN UTILITY BOILERS.
9. APRIL,2001 P.SURESH (1999 7234)* PROCESS MONITORING AND CONTROL SYSTEMS.
10. APRIL,2002 ANTONY INIGO (2000 3716) MICROPROCESSOR BASED IC TESTER FOR 8-BIT DAC AND ADC.
11. APRIL,2002 R.ANTONY LOUIS (20003722) COMPUTER AIDED TEACHING IN PHYSICS USING "C" GRAPHICS.
12. APRIL,2002 M.D. SELAVARAJAN (20008312)* MICROPROCESSOR BASED FULLY AUTOMATIC WASHING MACHINE (TOP LOADING).
13. APRIL,2002 M.JAYAMOCHAN (2000 8311)* MICROCONTROLLER BASED TELEPHONE CALL METER.
14. APRIL,2003 D.GUNA SEKERAN (CAPL 013)* REMOTE AUTOMATION THROUGH TELEPHONE LINES.

15. APRIL,2003 M.PREM KUMAR (CAPL 0012)* WIRELESS COMMUNICATION BETWEEN MICROCONTROLLER AND MICROPROCESSOR.
16. APRIL,2003 M.RAJESH (CAPL 031)* MICRO CONTROLLER BASED TRAFFIC OPTIMIZER.
17. APRIL,2003 S.REX AMALORPAVADASAN (APP 004) DIGITAL VERNIER CALLIPERS.
18. APRIL,2004 A.JESCE (02PL831)* SWITCHED MODE POWER SUPPLY (48V/10A).
19. APRIL,2004 R.PURUSHOTHAMAN (02PL830)* ORBITAL SHAKING INCUBATOR.
20. APRIL,2004 JOHNNY T.S. (02PP129) A STUDY ON DESIGN OF NUCLEAR REACTORS.
21. DECEMBER,2004 R. SURESH(2K3FT-11926) MICROPRESSOR BASED FULLY AUTOMATIC WASHING MACHINE.
22. APRIL,2004 E.PATRICK ANTONY NOEL (02PL832)* SMART CARD SECURITY.
23. MARCH,2005 N.CHRISTEENA (03PO119) FORCES OF NATURE – A PHYSICAL REVIEW.
24. APRIL,2005 V.THIVYARAJ (03PP121) EXCESS VOLUMES OF BINARY LIQUID MIXTURES OF PROPANOL+ DIMETHYL FORMAMIDE.
25. AUGUST ,2005 D.MEENAKSHI (04CD-15357) * WIRELESS COMMUNICATION BETWEEN MICROCONTROLLER AND PERSONAL COMPUTER.
26. AUGUST, 2005 S.KARTHIGA (04CD-15354)* SMART CARD SECURITY USING EMBEDDED SYSTEMS.
27. AUGUST,2005 N.ARUL PRASATH (05CD-19854)* INVERTER STATUS MONITOR AND ERROR DETECTOR.
28. JULY,2005 K. OMSAKTHI (05 MPH 108) EVALUATION OF THERMODYNAMIC PARAMETERS OF VARIOUS BINARY MIXTURES AT 313.15K AND 318.15K.
29. APRIL,2006 PRABHU S. (04PPH115) MICROPROCESSOR BESED ELEVATORS FOR BUILDING.
30. APRIL,2006 P.RAJASEKER (04PPH830) THERMODYNAMIC PARAMETERS OF VARIOUS BINARY MIXTURES OF PROPANOL + CYCLOHEXANE.
31. APRIL,2006 S.RICHARD (04PPH832) THERMODYNAMIC PARAMETERS OF VARIOUS BINARY MIXTURES OF PROPANOL + HEXANE.
32. MARCH,2007 MARY SHIBILA (05PPH127) ULTRASONIC STUDIES OF VARIOUS BINARY MIXTURES OF CHLOROFORM +1,2 DICHLOROFORM ETHANE AT 35°C.
33. AUGUST,2007 D.MAHESWARI (06CD-26767) MICRO-CONTROLLER BASED INVETER.
34. AUGUST,2007 T.GEETHA (06CD -24729)* SMS BASED STUDENTS DATA BASE USING GSM TECHNNOLOGY.
35. AUGUST, 2007 D.SAKTHI (06CD-24752) EMBEDDED SYSTEM BASED WIRELESS ARM CONTROLLER.

36. APRIL,2008 BERBETH MARY. S (06PPH114) MICROPROCESSOR BASED AUTOMATIC LOADING AND UNLOADING OF BEAMS FOR DETERMINING YOUNG'S MODULUS.
37. APRIL,2009 MERCY JENNIFER M.D (07PPH123) SOME PRINCIPLE OF PHYSICS AND CHEMISTRY UNDER BIOLOGICAL BANNER.
38. APRIL,2009 BETCY VIOLA D. (07PPH101) FUNDAMENTAL ASPECTS AND BIOLOGICAL APPLICATIONS OF MASS SPECTROMETRY.
39. MARCH,2012 S.EDWINRAJ (10PPH132) MOLECULAR INTERACTIONS STUIN THE LIQUID MIXTURES (MRTHYL METHACRYLATE +2 BUTOXY ETHANAL AT 308K) USING ULTRASONIC TECHNIQUE.
40. APRIL,2013 A.ALEXANDAR (11 PPH 120) A SUGGESTION FOR LOW COST WIND MILL.
41. APRIL,2013 VIJAY V. (11PPH115) SOME USEFUL TIPS FOR A BETTER PPROACH FOR A FEW COMMON PHYSICS EXPERIMENTS.
42. APRIL,2018 NOORBERT M. (16PPH114) MICROPROCESSOR BASED TIMER FOR 100 m DASH – (8 TRACKS).
43. AUGUST, 2016 J. JENIFER (15MPH123) STUDY OF THERMODYNAMIC PROPERTIES OF SPME LIQUID MIXTURE N-N DIMETHYL FORMAMIDE + ETHYL ACETATE AT 303K.
44. AUGUST,2016 R.SCINDIA (15MPH116) STUDY OF THERMODYNAMIC PROPERTIES OF SPME .
45. AUGUST, 2017 ANTONY ANANIYA (16MPH128) A STUDY ON THERMO DYNAMICAL PARAMETERS OF BINARY LIQUID MIXTURE (1,4-DIOXANE + ANISOLDHYDE) AT 303K,313K, 323 K AND FTIR STUDIES.
46. APRIL 2017 VALAN DENVER (15PPH103) AUTOMATIC RAILWAY GATE USING INDUCTION METHOD
47. AUGUST, 2018 DINESH KUMAR (17MPH112) MICROPROCESSOR BASED FAKE – VOTING MACHINE.
48. MARCH 2020 LEO BESKEE (18PPH119) SALINE MONITORING SYSTEM USING ARDUINO
49. MARCH, 2021 ROBIN (19PPH112) SIGNAL ANALYSIS AND FOURIER SERIES
50. APRIL 2023 ANTONY BOSE (21PPH104) GENERATION OF DIFFERENT WAVEFORMS USING FOURIER SERIES – Partially Experimental.

ORIENTATION PROGRAMME, REFRESHER COURSE ATTENDED:

1. Completed the UGC Sponsored Orientation Course conducted by UGC- Academic Staff College, Bharathidasan University, Tiruchirappalli 23, between 16th Aug 2002 and 12th September, 2002.

2. Completed the UGC Sponsored Refresher Course in Physics conducted at UGC-Academic Staff College, Bharathidasan University, Tiruchirappalli 23, between 18th Jan 2006 and 7th Feb.2016.
3. Completed the UGC Sponsored Refresher Course in Physics conducted at UGC-Academic Staff College, Bharathidasan University, Tiruchirappalli 23, between 1st Feb.2014 and 21st Feb.2014.
4. Completed the UGC Sponsored Online Refresher Course in Nano Science (Interdisciplinary) conducted at UGC Human Resource Development Centre, Bharathidasan University, Tiruchirappalli 23, between 25th Nov 2020 and 8th December 2020.

CONFERENCES, SEMINARS AND WORKSHOPS ATTENDED:

1. Attended the International Conference on “Lasers and their Applications” during March, 01-04, 2000, organized by the Department of Physics, St. Joseph’s College, Trichy 2.
2. Participated in the One-day Workshop on LATEX conducted by the Department of Physics, St. Joseph’s College, Trichy 2 on 27.01.2003.
3. Participated in the one-day seminar on “Recent Trends in Thin Film Technology” held on 14th Feb.2003 in the Department of Physics, St. Joseph’s College, Tiruchirappalli 2
4. Participated in the UGC sponsored National Seminar on Emerging Trends in Molecular Physics (NASETMP-2004) organized by the Department of Physics, Annamalai University on 8th and 9th March, 2004.
5. Participated in the National Seminar on Lasers in Technological and Biomedical Applications conducted by the Department of Physics, St. Joseph’s College, Tiruchirappalli 2 between 27 and 28th January, 2005.
6. Attended the National Seminar on Digitalised Information Exchange for Quality Systemance and Enhancement Among Accredited Institutions on 3rd and 4th March, 2005, conducted by St. Joseph’s College, Tiruchirappalli 2.
7. Attended the one day workshop on VLSI DESIGN USING FPGAS, conducted by the Department of Electronics, St. Joseph’s College, Trichy2 on 3rd March, 2006.
8. Attended the National Workshop on “APPLICATIONS OF RADIATION AND RADIO ISOTOPES (NWARRI-2008)” jointly organized by the Department of Physics, St. Joseph’s College, Trichy 2 and IGCAR, Kalpakkam on 15th and 16th February, 2008.
9. Participated in the “INDO-US WORKSHOP AND INTERNATIONAL CONFERENCE” organized by the Department of Physics, St. Joseph’s College, Tiruchirappalli 2 during 12-14th January, 2011.
10. Participated in the Orientation Programme for Research Scholars organized by the Research Advisory Committee (RAC), St. Joseph’s College, Tiruchirappalli 2 on 18th January, 2011.

11. Attended the One day workshop on “Research Data Analysis with SPSS Package” organized by Arrupe Library, St. Joseph’s College, Tiruchirappalli 2 held on 5th January 2013.
12. Participated in the National Conference on Advanced Materials (NCAM-2015) organized by the Department of Physics and Department of Electronics, St. Joseph’s College, Tiruchirappalli 2 on 6th February, 2015.
13. Conducted a Workshop on Advance Physics Experiments for College Teachers held on December 18-19, 2015 conducted by the Department of Physics, St. Joseph’s College, Tiruchirappalli 2.
14. Participated in the one day National Conference on Advanced Materials – 2016 organised by Department of Physics, St. Joseph’s College, Tiruchirappalli 2 on 7th October, 2016.
15. Attended the Orientation Programme on “ Physics Experiments Through Simulation Softwares” conducted by the Department of Physics, St. Joseph’s College, Tiruchirappalli 2 during 18-21, April, 2018.
16. Participated in the International Web Conference on ADVANCED MATERIALS (iwcam 2019), from 28th Feb to 1st March, 2019, organized by Department of Physics, St. Joseph’s College, Tiruchirappalli 2
17. Participated in the International Conference on Current Research and Advancements in Materials Science and Spectroscopy (ICCAMS 2023) held on 10th and 11th Feb.2023 at Department of Physics, St. Joseph’s College, Tiruchirappalli 2.
18. Participated in the ANU AWARENESS Programme 2023 on Atoms in the Service of the Nation on 30th Nov.2023 jointly organized by the Department of Physics, St. Joseph’s College, Tiruchirappalli 2 and IGCAR, Kalpakkam, Chennai.
19. Participated in the International Conference on Advanced Materials (ICAM 2025), held on 30th and 31st of January 2025 in the Department of Physics, St. Joseph’s College, Tiruchirappalli 2.

RESEARCH ARTICLES AND PAPERS PUBLISHED:

1. Journal of Information and Computational Science ISSN: 1548-7741 “ GRWOTH CHARACTERISATION AND QUANTUM CHEMICAL COMPUTATIONS OF L-ARGININE SINGLE CRYSTAL”
2. Journal of Applied Science and Computaions. ISSN: 1076- 5131. “SYNTHESIS, GROWTH, MECHANICAL, OPTIXCAL, PIEZOELECTRIC AND NLO STUDIES OF L-ARGININE PHOSPHATE MONOHYDRATE (LAP) SINGLE CRYSTALS FOR NLO APPLICATIONS”

3. Journal: Diamond and Related Materials Publication Date : 2024/6/8; Pages : 111285; Publisher: ELSEVIER. “ FABRICATING HIGH-PERFORMANCE SYMMETRIC COIN CELL SUPERCAPACITOR USING MnO₂/CuO/Co₃O₄ decorated on fGO sheets as electrode material. [Impact factor : 4.3, Cite score 6]
4. Journal Materials Letters. Publisher: North-Holland, Volume : 350, Pages: 134950, Publication Date : 2023/11/11 “EXPLORING A NOVEL COUNTER ELECTRODE MATERIAL (nI_o/Co₃O₄/CuO anchored on rGO) AS AN EFFICIENT REPLACEMENT OF PLATINUM IN DYES SENTIZIED SOLAR CELLS. [Impact factor : 2.7, cite score : 5.6]

BOOKS WRITTEN:

1. Written a book entitled “**EVERYDAY PHYSICS – VOLUME I**” . JAYZM PUBLICATIONS, Trichy 23. **ISBN: 978-81-971137-5-8** , March.2023.
2. Written a book entitled “**EVERYDAY PHYSICS – VOLUME II**”. JAYZM PUBLICATIONS, Trichy 23. **ISBN: 978-81-971137-0-3** , April, 2023.

VARIA:

1. Ooty – Open Chess Championship – 1994: Winner
2. Trichy - Open Chess Championship -1996: Winner
3. Inter Collegiate Chess Tournament held at Jamal Mohd. College, Trichy 2002: Joint Winner
4. State Level Chess Championship for College Teachers, Held at Rathinam College, Coimbatore, 2024 – Winner.
5. NSS Co-ordinator – 2000-'01 at St. Joseph’s College, Trichy 2.
6. Department Association President during year 2009-10, Department of Physics, St. Joseph’s College, Trichy2.
7. Library Committee Member- 2007, St. Joseph’s College, Trichy 2.
8. Department NET coaching Coordinator during the year 2018.
9. Class Mentor for
 1. M.Sc. Electronics 2000 Batch, St. Joseph’s College, Trichy 2.
 2. B.Sc. Physics, 2003 batch, St. Joseph’s College, Trichy 2.
 3. B.Sc. Physics, 2015 batch, St. Joseph’s College, Trichy 2.
 4. B.Sc. Physics, 2019 batch, St. Joseph’s College, Trichy 2.