

FACULTY PROFILE



Name of the Staff : Dr. A. Panimaya Valan Rakkini

Official Address with E-mail Id : Assistant Professor/Physics
Department of Science and Humanities
National Engineering College,
K.R Nagar, Kovilpatti.
saviolaura74@gmail.com

Mobile Number : 9994572357

1. Personal Details:

Age : 46 years

Date of Birth : 14/08/1974

Sex & Marital Status : Female/Unmarried

Citizenship : Indian

Qualification : M.Sc., B.Ed., M.Phil., Ph.D

Area of Specialization : Thin Films

| Degree | Programme and Specialisation | Class/CGP A | Month and Year of passing | Institute/ University |
|----------|------------------------------|-------------|---------------------------|--|
| U.G | B.Sc. Physics | First | April 1995 | St. Mary's College/M.S University |
| P.G | M.Sc. Physics | First | April 1997 | Department of Physics/ M.S University |
| | M.Phil. Physics | First | Nov. 2006 | DDCE/ M.S University |
| Doctoral | Ph.D Physics/Thin films | - | May 2018 | M.S. University |
| Others | B.Ed./Physical Science | First | April 1999 | St. Ignatius' College of Education/ M.S University |

Date of joining: 02/07/2018

Present status: Assistant Professor

Professional Experience: 13 years

| Designation | Institution/Organisation | Period | Nature Duties |
|---------------------|--|-------------------------|---------------|
| Assistant Professor | National Engg. College, Kovilpatti | 02/07/2018 - till date | Teaching |
| Assistant Professor | Francis Xavier Engineering College – Tirunelveli-3 | 01/06/2007 - 20/06/2015 | Teaching |
| Lecturer | St. Ignatius' College of | 01/09/2003 | Teaching |

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|---------------|--|-------------------------------|----------|
| | Education, Palayamkottai | – 31/10/2003 | |
| P.G Assistant | Rose Mary Model School, Palayamkottai | 04/06/1999 – 05/06/2001 | Teaching |

Courses taught:

| Course Title | UG or PG |
|---|----------|
| Engineering Physics I and II, Physics Laboratory I & II, Semiconductor Physics, Semiconductor Physics Lab, Electromagnetic Theory, Electromagnetics Lab, Physics for Civil Engg | UG |

Short term Courses / Seminars / Conference/ Workshops Attended:

| S.No | Title | Period | No of Participants | Venue |
|------|---|---|--------------------|---|
| 1 | International Conference on Materials for the Millenium – MATCON 2019 | 14 th -16 th March 2019 | 300 | Cochin University of Science and Technology (CUSAT) - Kochi |
| 2 | Summer Internship Programme on Nanotechnology | 15 th -17 th June 2016 | 40 | Dept of Nanoscience and Nanotechnology, Sri Ramakrishna Engg. College, CBE |
| 3 | International conference on ‘Recent Trends in Advanced Materials’(ICRAM) | 20 th – 22 nd Feb 2012 | 300 | VIT Vellore |
| 4 | International Conference on Advanced Materials (ICAM 2012) | 5 th -7 th Jan 2012 | 200 | Dept. Of Physics, Loyola College, Chennai |
| 5 | AICTE-STTP on ‘Recent Trends in Atmospheric Sciences’ | 16 th – 22 nd Aug 2008 | 35 | Dept. Of Physics, IIT Madras |
| 6 | One day National Workshop on ‘Nanomaterials-Synthesis Characteisation and Applications’ | 29 th Aug 2007 | 75 | Mepco Schlenk Engg College, Sivakasi |
| 7 | National Seminar on ‘Advances in Materials Science’ | 27 th , 28 th Mar.2006 | 100 | Dept. Of Physics, M.S.University Tvl |
| 8 | State level Seminar on ‘Expectations’ | 12 th , 13 th Aug 2003 | 150 | St. Ignatius’ College of Education, Palayamkottai |
| 9 | 3 rd National Workshop on ‘Nuclear Structure Physics’ | 29 th Jan – 2 nd Feb 1996 | 150 | Inter University Consortium for DAE facilities Calcutta Centre (IUC-DAEF)& M.S University |

Expert Lecture Delivered: 1

| S.No | Title | Venue | Date | Participants |
|------|-------------------------|-------|------------|--|
| 1. | Leacture on 'PHOTONICS' | NEC | 28/11/2018 | LAPC Physics Faculty members- Kovilpatti |

Webinars Attended:

| S.No | Title | Date |
|------|--|--|
| 1. | Research Outcomes: Technical paper writing, Research proposal, Patent Filling-Dr. Ch. Hima Bindhu -Conducted by Data Teach.ai | 22/04/2020 |
| 2. | Webinar Series – Saurashtra University –Rajkot-Gujarat 1. Materials for New Technology-Prof. D.G. Kuberkar 2. Space Science for us - Prof. Hari Om Vats 3. Plasma and its Applications - Dr. Mukesh Ranjan 4. Computational Software for Physicists and Engineers. | 05/05/2020 06/05/2020 07/05/2020 08/05/2020 |
| 3. | Education Uninterrupted –Career Launcher Edn Foundation (AP) 1. Online Learning & Analytics- Amit Mahensaria 2. Aspiration.ai Platform- Gautam Bawa 3. Cloud Labs as a service- Venkatesh Perumal | 08/05/2020 |
| 4. | Simulink an Overview - Conducted by Data Teach Labs | 25/06/2020 – 30/06/2020 |
| 5. | Kesterite Solar Cell – Basics and Design – International Webinar, St. Aloysius College Edathua Kerala | 27/06/2020 |
| 6. | Semiconductor Science and Technology – East West College of Engineering - Bangalore | 13/08/2020 |
| 7. | Use of LMS, Virtual Teaching and OBS software for Engineering Colleges - Faculty Development Programme- Vmedulife Software Services | 20/08/2020 |

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| 8. | Course on MATLAB Masters - Data Teach Labs | 12/10/2020 -11/11/2020 |
| 9. | "Industry - Institute Interaction Webinar On Optical and Electrical Modelling Software for Semiconductor Devices (OEMSSD - 2020)" – Bharathiyar University -Coimbatore | 15/12/2020 |
| 10. | FDP - Research proposal: Writing and Opportunities-Government College of Technology, Coimbatore | 06/01/2021-08/01/2021 |
| 11. | National Webinar on NEP 2020: Vision to Action – IIIT –Kalyani West Bengal | 13/05/2021 |
| 12. | National Level FDP on Advance Topics in Physics – Marian Star Centre Dept of Physics St. Mary's College (Autonomous) Tuticorin sponsored by Dept of Biotechnology Ministry of Sci & Tech Govt of India. | 12/07/2021 -17/07/2021 |

Research Achievements:

Publications:

Journal publications:

International Journal Publications

| S.No | Title of the Paper | Name of the Journal | Vol.No & Page No. | Month & Year |
|------|---|--|------------------------------------|--------------|
| 1 | "Effect of different combinations of precursors of zirconium and selenium in the electrodeposited ZrSe ₂ thin films" A. Panimaya Valan Rakkini and K. Mohanraj | Ionics [I.F 2.289) | Vol. 24, Iss.4, pp1243-1252 | April 2018 |
| 2 | "Influence of pH of the electrolyte on the formation and properties of electrodeposited ZrSe ₂ thin films" A. Panimaya Valan Rakkini and K. Mohanraj | Inorganic Nano metal Chemistry (IF 1.63) | DOI: 10.1080/24701556.2021.1913420 | April 2021 |

International Conference Publications

| S.No | Title of the Paper | Name of the Conference | Organizer | Month & Year |
|------|---|---|---|---|
| 1. | "Effect of deposition potential on Composition and Morphology of ZrSe ₂ thin films electrosynthesized from different | International Conference on Materials for the Millenium | Cochin University of Science and Technology | 14 th -16 th March 2019 |

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|----|---|---|--|-------------------|
| | cation precursors” | | (CUSAT) - Kochi | |
| 2. | “Study of concentration effect of complexing agent on electrodeposited ZrSe ₂ thin films” - A. Panimaya Valan Rakkini and K. Mohanraj, | International Workshop on Advanced Functional Materials and Devices IWAFMD 2017 | Dept. of Physics, Manonmaniam Sundaranar University Tirunelveli. | 8-12 January 2017 |

National Conference Publications

| S.No | Title of the Paper | Name of the Conference | Organizer | Month & Year |
|------|---|---|--|--|
| 1 | “Effect of annealing on the photosensitivity of ZrSe ₂ thin films electrodeposited from different cation sources” - A.Panimaya Valan Rakkini and K. Mohanraj, | 4 th National Seminar on Technologically Important Crystalline and amorphous Solids (TICAS-2018) | Kalasalingam Academy of Research and Education, Krishnankoil, Srivilliputtur | 2 nd and 3 rd March 2018 |
| 2 | “Morphological and optical studies on ZrSe ₂ thin films electrodeposited from different cation sources” - A.Panimaya Valan Rakkini and K. Mohanraj, | National Conference on Processing and Fabrication of Advanced Materials 2018 (NCPFAM 2018) | Department of Physics, Indian Association for Crystal Growth at SSN college of Engg, Chennai | 1 st and 2 nd March 2018 |
| 3 | “The effect of pH variation on the structural and optical properties of electrodeposited ZrSe ₂ thin films” - A. Panimaya Valan Rakkini and K. Mohanraj, Awarded as best poster | National Seminar on Advances in Materials Science NSAMS 2017; | Dept. of Physics, Manonmaniam Sundaranar University Tirunelveli. | 2&3 March 2017 |

Honors / Awards: -

Academic Achievements

Short term Courses / Seminars / Conference/ Workshops/ Webinars organised:

| S.No | Title | Period | No of Participants | Venue |
|------|--|------------|--------------------|--------|
| 1. | ‘Understanding of Solar PV Value Chain and Advancement in Solar PV Technologies and Business | 07/08/2020 | 140 | G-meet |

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|------|--|------------|-----|---------------------|
| | Opportunities'. – Dr. C.V. Kannan, Head Technology- R &D & Product Development, Adani Solar, Mundra, Gujarat | | | |
| . 2. | Karka Kasadara- Empowering You for Better Learning”- Dr. S.S.SRINITHI, Consultant Psychologist, SANMIRA Centre for Psychological Interventions, Tirunelveli | 07/10/2020 | 342 | G-meet & YouTube |

Additional Responsibilities held :

1. Time Table in- charge(2019-2020 Even Sem onwards till date);
2. Physics Lab –in Charge (2019-2020 onwards till date)