

Name : Dr. N. Arumugasamy  
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### **Papers presented in the international/National Seminars/Conferences**

1. Presented a paper entitled “Estimation of Higher Heating Values (HHV) of various Biomass fuels based on proximate analysis data: A New Approach” in the International Conference on Advanced Materials and their Applications (ICAMA-2018) on 27<sup>th</sup> December 2018, held at Department of Chemistry, V.O. Chidambaram College, Tuticorin, Tamilnadu.
2. Presented a paper entitled “Theoretical and Experimental Analysis of Heating Value of *Samanea saman* Woody material by Ultimate analysis” in the UGC sponsored National Seminar on Emerging Trends in Physics, Organized by Department of Physics, Sadakathullah Appa College, Tirunelveli, on 10<sup>th</sup> and 11<sup>th</sup> January 2019.
3. Presented a paper entitled “Theoretical Calculation of Higher Heating Values (HHV) of various woody Biomass materials based on Ultimate analysis data” in the ISTE and RIT sponsored National Conference on Materials for Sustainable Development, held at Ramco Institute of Technology, Rajapalayam, on 11-12, January 2019.

### **Papers published in the Journals (With ISSN)**

1. Published a paper entitled, “Woody material of *Cassia fistula* for Power Generation: An eco-friendly approach”, International Journal of Research and Analytical Reviews, Volume 5, Issue 4, 2018, pp.: 987 - 992, ISSN : 2349-5138.
2. Published a paper entitled, “*Dalbergia sissoo* woody material for Power Generation: A green approach”, Journal of Applied Science and Computations, Volume VI, Issue I, 2019, pp: 741-750, ISSN : 1076-5131.
3. Published a paper entitled, “*Samanea saman* wood material for Power Generation: A green approach”, Journal of Emerging Technologies and Innovative Research (JETIR), Volume 6, Issue 2, 2019, pp: 714-723, ISSN: 2349-5162.
4. Published a paper entitled, “*Bioenergy Potential of Simarouba Glauca* Wood Material for Power Generation”, International Journal of Advance and Innovative Research, Volume 6, Issue 1 (I), 2019, pp: 165-171, ISSN : 2394 – 7780.

### **Orientation/ Refresher Courses attended**

1. Attended the UGC Sponsored Orientation Course conducted by the UGC Academic Staff College, Bharathiar University, Coimbatore from 07.05.2010 to 03.06.2010.

2. Participated in the 10 days Orientation Course from 18th to 27th August 2010, conducted by Training and Orientation Centre-National Service Scheme, Avinashilingam Deemed University for Women, Coimbatore.

3. Attended the UGC Sponsored Refresher Course in Physics conducted by the UGC Academic Staff College, Bharathiar University, Coimbatore from 09.11.2010 to 29.11.2010.

4. Attended the UGC Sponsored Refresher Course in Physics conducted by the UGC Academic Staff College, Madurai Kamaraj University, Madurai from 02.11.2016 to 22.11.2016.

12. 5. Attended the online Refresher course in Physics sponsored by UGC and conducted by the UGC- Human Resource Development centre, Madurai Kamaraj University, Madurai, for 14 days from 09.12.2020 to 22.12.2020.

### **International/National Seminar/Conference attended**

1. Participated in the one day State level Seminar on Crystal Growth and Nanotechnology on 18th October 2008, organized by Department of Physics, Aditanar College of Arts and Science, Tiruchendur.

2. Participated in the one day National Seminar on Green Energy and Material Science(GEMS) – 2010 conducted by the Department of Physics and Chemistry on 11th December 2010 at St.Mary's College, Thoothukudi.

3. Participated in the one day UGC Sponsored State level Seminar on Material Characterization Techniques on 22nd December 2010, organized by P.G. and Research Department of Physics, The Madura College, Madurai.

4. Participated in the one day UGC Sponsored State level Seminar on “Nano and Thinfilm Solar Materials” on 29th December 2011, organized by P.G. and Research Department of Physics, The Madura College, Madurai.

5. Participated in the one day National Seminar on “Recent trends in Material Research and Nanotechnology”, conducted by Holy Cross College, Nagercoil, on 4th February 2012.

6. Participated in the one day UGC Sponsored National Seminar on “Advanced Method of Preparation and Characterization of Newer Materials”, conducted by Holy Cross College, Nagercoil, on 19th and 20th December 2012.

7. Attended one day State level seminar on “Exploration of Nanomaterials” organized by Sri Rangasamy Naidu Memorial College, Sattur, on 20.09.2015.

8. Attended two days National level conference on “Nanophotonics (NCNP-2016)” organized by the School of Physics, Bharathidasan University, Trichirappalli, during 18th and 19th March, 2016.

9. Attended two days National conference on “Advanced materials and their Applications (NCAMA-2016) organized by the P.G and Research Department of Chemistry, V.O.Chidambaram College, Tuticorin, during 21st and 22nd January 2016.

10. Attended the Webinar Series on “Conceptual and Applied Physics”, jointly organized by Department of Physics, School of Science, RK University and Department of Nanoscience and Advanced Materials. Saurashtra University, Rajkot during 5<sup>th</sup> to 8<sup>th</sup> May 2020.

11. Participated in the International Webinar on Recent Advances in Materials Science and Nanotechnology, Organized by the Department of Physics, Bannari Amman Institute of Technology, Sathyamangalam, Erode District, Tamilnadu during June 4 – 6, 2020.

13. Participated in a Webinar on A Journey towards Wave Mechanics, an online event organized by Department of physics, B.S.Abdur Rahman Crescent Institute of Science and Technology, Chennai, held on 12<sup>th</sup> June 2020.

14. Participated in the International e-Conference on Advanced Functional Materials and Optoelectronic Devices (ICAFMOD-2020) organized by Centre for Renewable Energy, Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study and Research, VBS Purvanchal University, Janupur from 13 – 15, 2020.

15. Participated in the Webinar on Century of Quantum Mechanics and Still Going Strong jointly organized by Applied Physics Department, Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda (MSUB), Gujarat Science Academy (GSA), Indian Physics Association (IPA) Baroda Chapter and Indian Association of Physics Teachers (IAPT-RC7) in association with National Academy of Sciences, India (NASI) Delhi Chapter held during 15 – 17 June 2020.

16. Participated in the Webinar on Electronic Spectroscopy and Pericyclic Reactions organized by Seethalakshmi Ramalakshmi College, Trichy, on June 17<sup>th</sup> and 18<sup>th</sup>, 2020.

17. Participated in the International Webinar on “Tuning the Morphology of nanomaterials for Electrochemical sensing applications” Organized by Department of Chemistry, Kongunadu College of Engineering and Technology, Trichy, Tamilnadu, on 19<sup>th</sup> June 2020.

18. Participated in one day Webinar on “Career Options after Class 12th” held on 21<sup>st</sup> June, 2020, organized by Pacific Academy of Higher Education and Research University, Udaipur.

19. Participated in the International Webinar on “Nanotechnology in Aerospace” organized by the Department of Physics, Auxilium College, Vellore, Tamilnadu, on 22<sup>nd</sup> June 2020.

20. Attended the Webinar on “Electrospun 1 D\_Nanomaterials And their Applications in DSSC” Organized by Department of Physics, Saveetha Engineering College, on 23<sup>rd</sup> June 2020.

21. Participated in the International Virtual conference on “Innovative Research in Chemical Sciences (IRCS-2020)” organized by the Department of Chemistry, SRM Institute of Science and Technology, Ramapuram Campus, Chennai, during 29<sup>th</sup> and 30<sup>th</sup> June 2020.

22. Participated in International Virtual Conference on “High-Performance Materials for Energy, Environment & Healthcare in the Digital Era” organized by Centre for Materials Technology, School of Advanced Sciences, VIT, Vellore, India during 30<sup>th</sup> June & 1<sup>st</sup> July 2020.

23. Participated in the Webinar on “Time Resolved Raman Spectroscopy of Dynamically Shocked Materials” held on 10<sup>th</sup> July, 2020, organized by Annai Vailankanni College of Engineering, Kanyakumari.

24. Participated in the Two days International Webinar on “Research Evolution Towards Current Scenario” held on 13<sup>th</sup> & 14<sup>th</sup> July, 2020, Organized by PG & Research Department of Chemistry, Periyar EVR College, Trichy, Tamilnadu.

25. Participated in the Webinar “Additive Manufacturing: Fundamentals and Applications”, Organized by the Department of Mechanical Engineering, Francis Xavier Engineering College, Tirunelveli on 14.07.2020.

26. Participated in the virtual Webinar on Fusion of Ragasakthi-Healing Resilience organized by Department of Science, St.Josph’s College of Engineering from 15<sup>th</sup> July 2020.

27. Participated in the Webinar on “Chemistry and Biology of Virus, Bacteria and Parasites” organized by Department of Chemistry, Dr.Zakir Husain College, Ilayangudi, Sivagangai, Tamilnadu, on 19.07.2020.

28. Participated in the National Webinar on “Sensor Materials and Applications”, organized by Department of Physics, B.S.Abdur Rahman Crescent Institute of Science and Technology, Chennai, on 26<sup>th</sup> July 2020.

29. Participated in the National Webinar on “Neutrino” in remembrance of Hiroshima Nagasaki organized by PG and Research Department of Physics and IQAC of The M.D.T.Hindu College, Tirunelveli, Tamilnadu jointly with National Green Corps, Ariyalur District and TNSF, Tirunelveli, on 09.08.2020.

30. Participated in the International Webinar on “Scientific Advancements on Solutions and Testings in Industry”, organized by Department of Science and Humanities - Physics, University College of Engineering, Nagercoil, on 10<sup>th</sup> August 2020.

31. Participated in the Webinar series “Getting Smart” on “Bio Hacking” and “Internet of Things”, organized by Department of Science, St.Joseph’s College of Engineering, on 11.08.2020 and 12.08.2020.

32. Participated in the Webinar on “Ethics and Entrepreneurship – Smart Tips”, organized by Department of Physics, St.Joseph’s College of Engineering on August 13<sup>th</sup> 2020.

33. Participated in the Webinar on “Coal Fundamentals and Utilization”, presented by Dr.Liza Elliott, Research Associate, Newcastle Institute for Energy and Resources, University of Newcastle, Australia and organized by the Department of Mechanical Engineering, Francis Xavier Engineering College, Tirunelveli, on 15.08.2020.

34. Participated in the National Webinar on “Emerging Trends in Physics”, organized by Department of Physics, Government Arts College for Women, Salem, held on 20.08.2020.

35. Participated in the International Virtual Conference on “Innovations in Chemical Sciences-2020: An International Meet for Quality and Quantity (ICSIMQQ-2020)”, organized by Division of Chemistry, School of Advanced Sciences, Vellore Institute of Technology, Chennai, during 21<sup>st</sup> & 22<sup>nd</sup> August 2020.

36. Participated in the Webinar on “Lasers and Nano-Optics”, organized by NITT-OSA and NITT-SPIE Student Chapters, Department of Physics, National Institute of Technology, Trichy, on 25<sup>th</sup> August 2020.

37. Participated in the International Virtual Conference, AFM-2020, held on August 26-28, 2020, at Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, Bhubaneswar, Odisha, India.

38. Participated in the International Virtual Conference on “Recent Trends in Energy Materials (INCRTEM-2020)”, organized by the Department of Physics, Alagappa University, Karaikudi from 9.9.2020 to 11.09.2020.

39. Attended the one day Seminar on “Energy Materials” Organised by Centre of Excellence for Energy Research, Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai on 4<sup>th</sup> June 2021.

40. Participated in the Webinar on “Raman Spectroscopy – Instrumentation and Analysis” Organised by ISAS Tamilnadu Chapter in association with the Department of Chemistry, Bhaktavatsalam Memorial College for Women, Chennai on 7<sup>th</sup> June 2021.

41. Participated in the Webinar on “Solar cells an overview” organized by the Department of Physics, J.P.College of Arts and Science, Tenkasi, on 9<sup>th</sup> June 2021.

42. Participated in a International Webinar on “Indian Nuclear Power Programme” entitled “The Radical Power of the Atom: Peaceful Applications of the Nucleus” Organised by the Department of Applied Physics, Karunya Institute of Technology and Sciences, Coimbatore on 15.06.2021.

43. Participated in the Webinar on Diversity and Inclusion – An Epitome of Unity, organized by NITT – OSA and NITT – SPIE Student Chapters, Department of physics, National Institute of Technology, Trichy, held on 25<sup>th</sup> June 2021.

44. Participated in the one day International Webinar on “Recent Advances in emerging 3D Nanomaterials for Real world energy Technologies” organized by PG & Research Department of Chemistry, T.B.M.L.College, Porayar, on 26<sup>th</sup> June 2021.

45. Participated in the Virtual International Conference on “Revolution and Transformation in Culture and Myth in all Disciplines” held on 14<sup>th</sup> to 16<sup>th</sup> July 2021, organized by Immaculate College for Women, Cuddalore.

46. Participated in NAAC Sponsored Two Days National Virtual Conference on “The Role of IQAC in Quality Sustenance and Quality Enhancement in the Context of Revised Assessment and Accreditation Framework (RAAF) in Higher Education Institution (HEI)” on 15.09.2022 & 16.09.2022 organised by Internal Quality Assurance Cell (IQAC), The Madurai Diraviyam Thayumanavar Hindu College, Tirunelveli, Tamil Nadu.

47. Participated in the Webinar on “Nanotechnology for Electrochemical Energy”, organized by the PG & Research Department of Physics jointly with Internal Quality Assurance Cell (IQAC) of The Madurai Diraviyam Thayumanavar Hindu College, Tirunelveli, Tamil Nadu, India on 30.09.2022.

48. Participated in the “Two Days International Conference on Advanced Materials and Their Applications (ICAMA)-2023” on 14-15<sup>th</sup> December 2023 organized by PG & Research Department of Chemistry, V.O. Chidambaram College, Tuticorin, Tamil Nadu, India.

49. Participated in the one day International Conference on “Recent Advancements in Materials Science and Nuclear Energy Research (ICRAMNR-2024)” in association with Indian Association for Crystal Growth (IACG) during February 16, 2024 organized the Department of Physics, Government Arts and Science College, Kovilpatti.

#### **Workshops/Faculty Development Programme/Short Term Course/Internship attended**

1. Participated in an Orientation Workshop on “Disaster Management: Addressing Risk, Vulnerability and Social Exclusion” for NSS Programme Officers, Conducted by National Service Scheme and Centre for Study of Social Exclusion and Inclusive Policy held at Senate Hall, M.S. University, Tirunelveli, on 14.02.2009.

2. Participated in the one day Training Programme conducted by Dr.MGR Home and Higher Secondary School for the speech and hearing impaired, MGR Gardens, Chennai, for Readers and Lecturers of Colleges, on Higher Education of Students with Hearing Impairment on 7th March 2009.

3. Participated in the one day UGC Sponsored Workshop on “CONFLICT MANAGEMENT” for the NSS Programme Officers held on 14.12.2010 conducted by National Service Scheme, M.S. University, Tirunelveli.

4. Attended one day State Level Workshop on ”Nurturing the Spirit of Research among Undergraduate Students” sponsored by TNSCST, Chennai and NCSTC, NewDelhi, organized by the Department of Zoology, A.P.C. Mahalaxmi College for Women, Thoothukudi, on 27th January 2011.

5. Attended one week workshop on “Nanotechnology in Engineering Applications” organized by Indian Society for Technical Education – ISTE Staff Chapter of Government College Engineering, Tirunelveli held during 14.11.2011 to 19.11.2011.

6. Attended the two-day workshop on “Instrumental Techniques in Chemical Research – ITCR 2012” organized by the Department of Chemistry, B.S. Abdur Rahman University, Chennai, on 23 – 24 February 2012.

7. Attended the two days Workshop on “Advances in Nanotechnology: Fabrication, Processing and Applications” during February 28th & March 1st, 2014 held at the Centre for Nanoscience and Nanotechnology, School of Physics, Bharathidasan University, Tiruchirappalli.

8. Attended two days Short term course on “Magnetic and semiconducting Nanomaterials (MSN-2014)” organized by the Department of Physics, National Institute of Technology, Tiruchirappalli – 620015, between 31st October 2014 and 01 November 2014.

9. Participated in the Short term programme on “Nanostructured materials: Processing and Characterization” organized by the Department of Physics, National Institute of Technology, Tiruchirappalli – 620015, between 7th November 2014 and 08th November 2014.

10. Participated in the Winter Internship Program on Nanomaterials, organized by the Department of Nanotechnology, Sri Ramakrishna Engineering College, Coimbatore, from December 15th to 19th, 2014.

11. Participated in the three days lecture workshop on “Selected topics in pure and applied physics” held during February 6 – 8, 2015 at Centre for Nanoscience and Technology, K.S.Rangasamy College of Technology sponsored by Indian Academy of Sciences (IAS), Bangalore, Indian National Science Academy (INSA), New Delhi and the National Academy of Sciences (NAS), Allahabad.

12. Participated in the Workshop on “Computer interfaced science experiments” on 30.06.2018 at National College, Tiruchirappalli.

13. Attended the Faculty Development Programme on “Application of New Materials in Emerging Field” organized by the Department of Physics, Sathyabama Institute of Science and Technology, Chennai, during 24 – 30, June 2020.

14. Participated in the Five days Virtual workshop on “Analytical Instrumentation” from 5<sup>th</sup> to 9<sup>th</sup> July 2020 organized by the Department of Chemistry, B.S.Abdur Rahman Crescent Institute of Science and Technology, Chennai, Tamilnadu.

15. Acted as Resource Person in the Internship Program on “Renewable Energy Resources and its Applications” conducted by PG & Research Department of Physics jointly with Internal Quality Assurance Cell (IQAC) of The Madurai Diraviyam Thayumanavar Hindu College, Tirunelveli, Tamilnadu, during 13.07.2020 to 17.07.2020.

16. Participated in the “Online Hands on Training Programme on Remote Sensing and GIS Data analysis” under DBT Star College Scheme organized by the Post Graduate and Research Department of Physics, Jamal Mohamed College, Trichy, during the period 20.07.2020 to 24.07.2020.

17. Participated in the Two Week Faculty Development Programme on “Advances in Computational and Experimental Research in Physics”, organized by Department of Physics, SRM Institute of Science and Technology, Chennai, from 27<sup>th</sup> to 8<sup>th</sup> August 2020.

18. Attended Online Outreach Programme on Constructive Use of Nuclear Power under DBT Star College Scheme organized by Post Graduate and Research Department of Physics, Jamal Mohamed College, Trichy, in collaboration with Tamilnadu Science Forum, Trichy, in Connection with International Day against Nuclear Tests on 30.08.2020.

19. Attended online Faculty Development Programme on “Recent Trends in Physics”, organized by Department of Physics, St.Joseph’s College of Engineering, Chennai, 31<sup>st</sup> August to 2<sup>nd</sup> September 2020.

20. Attended the TEQIP-III Sponsored one week Short Term Course on Current Trends in Condensed Matter Physics, organized by Department of Physics, Dr.B.R.Ambedkar National Institute of Technology, Jalandhar from 25.09.2020 to 29.09.2020.

21. Participated in the National level Technical Meet on “Micro and Nano fabrication and characterization Techniques”, organized by Department of Physics, Kamaraj College, Thoothukudi, on 9<sup>th</sup> November 2020.

22. Attended the Virtual Workshop on “Effective Research Paper writing and Patent Filing”, organized by PSGCAS Institutional Innovation Council (IIC) in association with PSGCAS Intellectual Property Rights (IPR) cell, PSG College of Arts & Science, Coimbatore, on 26.12.2020.

23. Participated in a three day online FDP on “Growth, Characterization of NLO materials and Spectroscopic Studies” Organised by Department of Physics, Mohamed Sathak A J College of Engineering, Chennai, held from 10.06.2021 to 12.06.2021.

24. Participated in National level Virtual Faculty Development Programme on “Recent Trends in Materials Physics” Karpagam Academy of Higher Education, Coimbatore, between 22 and 28, June 2021.

25. Attended Five days International Online Faculty Development Program on emerging Trends in Science and Technology, Organized by Department of Physics, Easwari Engineering College, Ramapuram from 01.07.2021 to 06.07.2021.

26. Attended “Two Weeks International Workshop on Emerging Trends in the field of Science and Technology” organised by the Department of Physics, Sathyabama Institute of Science and Technology, Chennai, from 16 to 28 August 2021.

27. Participated in the UGC sponsored online Short Term Course on “Renewable Energy and Green Technology”, organized by UGC-HRDC, University of Mumbai, Mumbai, from 26.12.2022 to 31.12.2022.

28. Participated in the Faculty Development Program on “Data analytics with Tableau” course from 30-01-2023 to 03-02-2023 conducted by The Tamil Nadu Skill Development Corporation,



Government of Tamil Nadu, through the Naan Mudhalvan Program held at Manonmaniam Sundaranar University.

29. Participated in the One day State level Workshop on “” GAUSSIAN 16 W – Potential Tool For Materials Scientist” organized by the Department of Physics, St.Xavier’s College, Palayamkottai held on 08.12.2023.

### **Extra Curricular Activities**

1. NSS Programme Officer – February 2008 to May 2011
2. Audio Visual Education Coordinator – June 2009 to May 2018
3. IQAC Sub Committee Member – Department of Physics
4. In-charge – Vingana pookal - Department of Physics – June 2013 to May 2016
5. Discipline committee member - From June 2018 -

### **Other Activities**

- A special invited talk on “History of Science” at All India Radio, Tuticorin - 2011
- Training Teacher – P.G Teachers in Physics of Tirunelveli District Government Schools – 2013