

Faculty- Profile



Name of the Department : **Physics**
Name of the faculty member : Dr. S. Benita Jeba Silviya
Present Designation : **Assistant Professor**
: **Wavoo Wajeetha Women's College of Arts & Science**
Official Address **Tiruchendur Road**
Kayalpatnam
Contact Nos. Landline/Mobile 9486785900
Email : drbenita@wavoowajeethacollege.in
Gender : Female
Community : **BC**
Date of Birth and Age : 10.05.1982 & 41
Date of Joining the present post : **12.6.2023**

Particulars of Educational Qualifications:

| Category | Name of the Degree | Specialization | Year of Passing | Name of the College | Name of the University | % of Marks / Grades secured | Class obtained |
|----------|--------------------|----------------|-----------------|--|--|-----------------------------|----------------|
| UG | B.Sc., | Physics | 2002 | Pope's College, Sawyerpuram. | ManonmaniamSundaranar University, Abishekpatti | 77.5 | First class |
| PG | M.Sc., | Physics | 2004 | Pope's College, Sawyerpuram. | ManonmaniamSundaranar University, Abishekpatti | 65.25 | First class |
| M.Phil., | M.Phil., | Physics | 2005 | ManonmaniamSundaranar University, Abishekpatti | ManonmaniamSundaranar University, Abishekpatti | 64 | First class |
| Ph.D., | Ph.D., | Physics | 2018 | ManonmaniamSundaranar University, Abishekpatti | ManonmaniamSundaranar University, Abishekpatti | Thesis | - |

Title of Ph.D. Thesis : "Investigations on the Growth and Characterization of Some Technologically Important Crystals grown by Solution Growth Technique"

Faculty/Discipline/Subject in which Ph.D. was awarded : **Physics**

Academic Experience:

| Name of the College | Govt/Aided/ S.F. | Designation | Joining Date | Relieving Date | Experience | | |
|---|---------------------|------------------------|-----------------|-------------------|------------|------------|------|
| | | | | | Year s | Mont hs | Days |
| Kamaraj College of Arts and Science. Thoothukudi | S.F | Lecturer | 01/10/2004 | 01/08/2006 | 1 | 10 | - |
| J.A.C.S.I. College of Engineering, Nazareth. | S.F | Lecturer | 02/08/2006 | 21/04/2012 | 5 | 8 | |
| V V College of Engineering, Tisayanvilai. | S.F | Assistant Professor | 02/05/2012 | 29/11/2019 | 7 | 6 | |
| Nazareth Margoschis College at Pillaiyanmanai. | S.F | Assistant Professor | 20/12/2019 | 30/06/2022 | 2 | 6 | |
| Wavoo Wajeetha Women's College of Arts and Science, Kayalpatnam | S.F | Assistant Professor | 12.6.2023 | Till date | | 1 | |
| Total | | | | | 17 | 7 | |

Paper Published in Journals (Referred/Non-Referred)

| S.No | Title of the Paper | Level (National/ International/ State/ Regional) | Journal with Issue No, Page No, Vol.No, ISSN & Impact factor | Date (dd-mm-yyyy) | Citation/ Scopus index/ Web of Science |
|------|--|--|--|-------------------|--|
| 1.1 | Growth And Characterization of Disodium Hydrogen Orthophosphate (DSHP) Single crystals, | International | Materials and Manufacturing Processes, vol. 22, no. 3, pp. 379-383. ISSN: 1042-6914 Impact Factor :4.616 | 22.3.2007 | Scopus index |
| 2.2 | Synthesis, Growth and Spectroscopic Studies of nonlinear Optical mixed borate crystal, | International | Asian Journal of Research In Social Sciences and Humanities, Vol. 6, no. 6, pp. 2401-2407. ISSN 2249-7315. Impact Factor: 5.99 | 2017 | |
| 3.3 | Growth and Physicochemical properties of pure and urea doped Sodium pentaborate dihydrate single crystal' | International | International journal of Chem Tech Research, vol. 10, no. 7, pp. 553-562. ISSN: 0974-4290. Impact Factor: 0.819 | 2017 | |
| 44 | Effect of urea as an impurity on the structural, optical and electrical properties of potassium pentaborate dihydrate single crystals' | International | International Journal of Advanced Engineering Research and Technology, vol. 5, no. 8, pp. 625-636. ISSN: 2348 – 8190. Impact Factor: 2.864 | August 2017 | |
| 5.5 | Urea doped crystals formed with potassium-sodium pentaborate | International | Surfaces and Interfaces, vol. 11, pp. 14-21. ISSN: | 10.02.2018 | Scopus index |

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|-----|---|---------------|--|-----------|-----------------------|
| | (K _{0.5} Na _{0.5} B ₅) | | 2468-0230. (Elsevier) Impact Factor: 4.81 | | |
| 6.6 | A Study on the Anti-microbial Activity and Luminescence Characteristics of Some Novel Cobalt, Nickel, Copper and Zinc Co-ordinated Macrocyclic Schiff Base Complexes, | International | Journal of Emerging Technologies and Innovative Research, Vol. 6, no.6, pp. 268-275, ISSN: 2349-5162. Impact Factor: 7.95 | 2019 | |
| 7.7 | A New Mannich Base and its transition metal(II) complexes - Synthesis, Structural Characterization, DNA Cleavage and Anti-oxidant Studies, | International | Journal of Emerging Technologies and Innovative Research, Vol. 6, no.6, pp. 814-824, ISSN: 2349-5162. Impact Factor: 7.95 | 2019 | |
| 8.8 | Crystal structure and evaluating CeH ^{III} π (aryl/chelate) interactions in bis(2-[(2-hydroxyethyl)imino]-methyl)-4,6-diiodophenolato)-palladium(II) Schiff base complex derived from (E)-2-(((2-hydroxyethyl)imino)methyl)-4,6-diiodophenol'' | International | Inorganica Chimica Acta , 498 (2019) 119118. (Elsevier) Impact Factor: 2.545 | 28.8.2019 | Scopus index |
| 9 | Biocompatible alkyne arms containing Schiff base fluorescence indicator for dual detection of Cd ^{II} and Pb ^{II} at physiological pH and its application to live cell imaging'' | International | Royal Society of Chemistry, Analyst , 2020, 145, 4576–4586. Impact Factor: 4.616 | 5.5.2020 | Web of Science |

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| | | | | | |
| 110 | Antimicrobial activity of transition metal (II) complexes based on a Mannich base ligand, | International | Emerging Materials Research, Vol. 10, no.1, pp. 85-89, ISSN: 2046-0147. Impact Factor: 1.096 | 2021 | |

Paper Published in Books

| S.No | Title of the Book | Publisher Details | Book Name with Issue No, Page No, Vol.No, ISBN | Month & Year |
|------|--|--|---|--------------------|
| | ➤ Engineering Physics -I | Sri Maruthi Publishers, Chennai | ➤ ISBN-978-93-80757-16-2 | August 2010 |
| | ➤ Engineering Physics -II | Sri Maruthi Publishers, Chennai | ➤ ISBN-978-93-80757-45-2 | January 2011 |
| | ➤ Proceedings of the International Conference on Advanced Topics in Interdisciplinary Research in Chemistry and Physics, (under the aegis of UGC Autonomy Grant) | Sri.S.Ramasamy Naidu Memorial College, Sattur. | ➤ X-ray diffraction studies of some diazotised cardanol based resins ➤ ISBN: 978 9353515003. | 12 & 13 March 2019 |
| | ➤ Proceedings of the National Symposium on Recent Advances in Physical science, | Pooja Publications | ➤ Synthesis and characterization of cardanol backbone resins ➤ ISBN: 97893 82592 02 0 | 18 & 19 March 2019 |
| | ➤ Proceedings of the | Kamaraj College, Thoothukudi. | ➤ Theoretical | 22.4.2022 |

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|--|--|---|---|---------------|
| | National Seminar on Role of catalyst in Chemistry | | Exploration of Nickel(II)Complex with Covid 19 Virus:Synthesis,Spectroscopic measurements,DFT and molecular docking approaches. ➤ ISBN: 978-81-951473-3-5. | |
| | ➤ Proceedings of the National Seminar on Self Development, Importance of Soft Skills for Education and Self Development, | Shanlax Publications | ➤ Importance of soft skills for education and self development, ➤ ISBN: 978-93-87871-27-4. | 4.4.2018 |
| | ➤ UGC Sponsored Two day National Conference on Materials in sustainable chemistry, Environmental studies of interpenetrating polymer networks, | Sadakathullah Appa Educational Society,Tirunelveli. | ➤ Environmental studies of interpenetrating polymer networks. ➤ ISBN: 978-81-938054-8-0. | 27& 28.9.2019 |

Papers Presented in Conference/Seminar

| S.No | Title of the Paper | Level (National/ International/ State/ Regional) | Proceedings Name with Issue No ,PageNo,Vol.No ISSN | Date (dd-mm-yyyy) |
|-------------|--|---|--|-------------------------------|
| 1 | XRD, FTIR & Dielectric studies of Pure and Thio-urea Doped Disodium Hydrogen Ortho phosphate (DSHP) crystals.. | National conference | ➤ UGC Sponsored National Conference on Recent Trends In Crystal Growth,Thin Films And NanoStructured Materials | 05.08.2009 - 06.08.2009 |
| 2 | Studies on irrigation suitability of river water in Ammanpuram Tank. | National conference | ➤ Conference on Modern Trends in Science and Communication | 07.05.2014 |
| 3 | Photoluminescence studies of mixed borate crystals. | International conference | ➤ International conference on New Advances In Chemistry and Materials | 05.01.2016 |
| 4 | Second Harmonic Generation properties of mixed borate crystals | National Conference | ➤ National Conference on The Emerging Trends In The Fields of Maths, Physics And Chemistry | 04.03.2016 |
| 5 | NLO Properties of urea doped mixed borate crystals | State level seminar | ➤ State level seminar on Environment And Existence of Mankind And Exhibition | 08.03.2016 - 09.03.2016 |
| 6 | Impedance analysis of urea doped Potassium Penta Borate crystals | International Conference | ➤ International Conference on Functional Materials | 07.09.2016 - 10.09.2016 |
| 7 | NLO Properties of pure and urea doped Potassium Penta Borate (KB5) Single Crystals | National Conference | ➤ National Conference On Recent Trends In Material Science | 15.12.2016 |
| 8 | Second Harmonic Generation properties of pure and urea doped sodium pentaborate crystals | National Conference | ➤ National Conference On Current advancement in physics | 03.02.2017 - 04.02.2017 |
| 9 | Electrical properties of pure and urea doped sodium penta borate crystals. | National Seminar | ➤ UGC Sponsored National Seminar on Recent Developments in Chemistry | 20.02.2017 |
| 10 | Synthesis, Growth and characterization of new NLO mixed borate crystals of the | National Seminar | ➤ UGC Sponsored XXI National Seminar on Crystal growth and | 06.03.2017 - 08.03.2017 |

| | type (Na) _x K _{1-x} B ₅ O ₈ | | applications | |
|----|--|--------------------------|--|-------------------------------|
| 11 | International conference Presented Spectral Characterisation and biological studies of Mannich Base Complexes. | International conference | ➤ International Conference on New Vistas In Material Science | 07.09.2017 |
| 12 | Studies on synthesis and characterizati on of diazotised resins. | State level seminar | ➤ State level seminar on Emerging Trends in Chemistry | 26.02.2018 |
| 13 | Electrical properties of pure and urea doped K _{0.5} Na _{0.5} B ₅ Crystals. | State level seminar | ➤ State level seminar on Emerging Trends in Chemistry | 26.02.2018 |
| 14 | Kinetic studies of some diazotised pnitroaniline cardanolfurfural resins | National Conference | ➤ National Conference on Recent Advances in Applied Chemistry | 22.02.2019 |
| 15 | X-ray diffraction studies of some diazotised cardanol based resins | International conference | ➤ International Conference on Advanced Topics in Interdisciplinary Research in Chemistry and Physics | 12.03.2019 - 13.03.2019 |
| 16 | Environmental studies of interpenetrating polymer networks. | National Conference | ➤ UGC Sponsored Two day National Conference on Materials in sustainable chemistry | 27.09.2019 & 28.09.2019 |