

## Faculty profile



**Name** : **Dr. N. Rathna**  
**Designation** : **Assistant Professor**  
Department of Physics  
A.P.C. Mahalaxmi College for Women  
Thoothukudi  
**Date of Birth** : 01.04.1981  
**Date of joining** : 01.06.2019  
**Education Qualification** : M.Sc., B.Ed., M.Phil., Ph.D.,  
**Specialization** : Crystal Physics  
**Email** : [rathmut@gmail.com](mailto:rathmut@gmail.com)  
**Contact No** : 9944410820  
**Teaching Experience** : 10 years

### Education & Credentials

Degree	College/University	Specialization	Year	Grade/Merit
<b>B.Sc</b>	Arignar Anna College, Aralvoimozhi. M.S.University,Tirunelveli	Physics	1999-2002	<b>I</b> <b>(University 7 rank)</b>
<b>M.Sc</b>	Sarah Tucker College , Tirunelveli M.S.University,Tirunelveli	Physics	2002-2004	<b>I</b> <b>(University 3 rank)</b>
<b>B.Ed</b>	V.O.C College of Education,Tuticorin M.S.University,Tirunelveli	Physics	2005-2006	<b>I</b>
<b>M.Phil</b>	Annamalai University,Chidambaram	Physics	2007-2008	<b>II</b>
<b>Ph.D</b>	Manonmaniam Sundaranar University	Physics	2019	-

**Project :**

Title of PG Project	:	Global Tele Programming Control
Title of M.Phil., Project	:	FTIR and Mechanical Studies on floor tiles of Tripalur, Kerala .
Title of Ph.D., Thesis	:	Synthesis and Characterization of NLO Crystals by solution method.

**Research - Published Journals:**

- Published a paper entitled, “Growth and Characterization of Pure and Sodium Sulphate doped crystals of Glycine Potassium Sulphate”, International Journal of Current Research and Modern Education, vol. 03, no. 01, pp. 284-290, 2018. ISSN: 2455-5428.IF- 6.925
- Published a paper entitled,“ Growth, spectral, NLO and impedance studies of potassium ammonium sulphate crystals grown by aqueous solution technique”, International Journal of Applied and Advanced Scientific Research, vol. 02, no. 02, pp. 304-311, 2017.ISSN: 2456-3080.IF- 5.655
- Published a paper entitled, “Characteristics of Glycine Ammonium Sulphate Crystals Grown by Slow evaporation Technique, IOSR Journal of Applied Physics , vol. 02,pp. 69-73, 2017. e- ISSN: 2278-4861.
- Published a paper entitled,“ Growth, NLO, Z Scan, and impedance studies of Glycine Potassium Sulphate Crystals grown by aqueous solution technique”, International Journal of Chemical and Pharmaceutical Research, vol.08, no.05, pp.177-185, 2016.
- Published a paper entitled, “Studies on Growth and Characterization of Glycine Ammonium Sulphate Crystals”, International Journal of Recent Scientific Research, vol. 07, no.11, pp. 14379-14383, 2016.
- Published a paper entitled, “Crystallisation Studies on Fe-Cr-B Amorphous Alloys”, Quarterly International Journal Metro Journal of modern science, vol. 01, no.01, pp. 54-58, 2014.

### **Papers Presented in Conferences/Seminars:**

- Presented a paper entitled, “Smart materials on application of Ultrasonics” in the State level seminar on Innovations insights in ultrasonic methods (IIUM) held at Kamaraj College, Thoothukudi on 28<sup>th</sup> February, 2019.
- Presented a paper entitled, “Structural, optical, mechanical and NLO properties of potassium ammonium sulphate crystals synthesized by solution growth” in the International Conference on Recent Trends in Multi-Disciplinary Research held at V.O.Chidambaram College, Thoothukudi on 19<sup>th</sup> & 20<sup>th</sup> April, 2018.
- Presented a paper entitled, “Studies on structural and optical properties of potassium magnesium sulphate single crystal” in the International Conference on Recent Innovations in Applied Science, Engineering & Technology, Scad College of Engineering & Technology, Cheranmahadevi, Tirunelveli on 13<sup>th</sup> April, 2018.
- Presented a paper entitled, “Growth and characterization of pure and sodium sulphate doped crystals of Glycine Potassium sulphate” in the National Conference on Recent developments in effective materials, Sarah Tucker College, Tirunelveli on 19<sup>th</sup> February 2018.
- Presented a paper entitled, “Investigations on various properties of Glycine Ammonium Sulphate crystals grown by aqueous solution technique” in the National Seminar on Recent trends in Materials Science, Aditanar College of Arts and Science, Virapandianpatnam, Tiruchendur on 16<sup>th</sup> February, 2018.
- Presented a paper entitled, “Studies on Growth and Characteristics of Potassium Ammonium Sulphate mixed crystals” in the National Conference on Recent developments in effective materials, Sarah Tucker College, Tirunelveli on 10<sup>th</sup> February 2017.
- Presented a paper entitled, “Characteristics of Glycine Ammonium Sulphate Crystals Grown by slow evaporation” in two days National Conference on Current Advancements in Physics organized by St.John’s College on 3<sup>rd</sup>, 4<sup>th</sup> February 2017.
- Presented a paper entitled “Spectral, NLO, Mechanical and Dielectric studies of Glycine Potassium Sulphate Crystals in the National Conference on Spectro Physics 2015 organised by the Department of Physics, S.T.Hindu College, Nagercoil on 30 & 31 January 2015.

- Presented a paper entitled “ Crystallisation Studies on Fe-Cr-B Amorphous Alloys” in 3<sup>rd</sup> International Conference on Competency Building Strategies in Business and Technology for Sustainable Development organized by Sri Ganesh School of Business Management, Salem on 25<sup>th</sup> February 2014.
- Presented a paper entitled “Quality in Education” in the one day National Seminar on Teacher Education in 21<sup>st</sup> Century Prospects and Challenges organized by Chandy College of Education, Muthiahpuram on December 2011.
- Presented a paper entitled “Importance of empowering teachers with spoken english” in the two days National Seminar on Empowering prospective teachers with soft skills organized by V.O.Chidambaram College of Education, Thoothukudi on 3<sup>rd</sup> & 4<sup>th</sup> April 2009.

#### **Seminars, FDP,Camps & Workshops Attended :**

- Participated in the International Conference on Recent Trends in Materials organized by the Department of Physics, Devanga Arts College, Aruppukottai on 22 and 23 December 2014.
- Participated in the Bridge Course on Physics organized by Centre for Faculty Development, Anna University, Chennai on 25&26 June 2014.
- Participated in One day Workshop on “Engineering Teaching and Learning Methodologies” organized by Chandy College of Engineering,Tuticorin on November 2013.
- Attended One day Faculty Development Programme, “The Role of Teachers for Excellence” organized by the Department of Mathematics, Chandy College of Engineering, Tuticorin on March 2013.
- Attended One day Faculty Development Programme, “The Role of a Modern Teacher” organized by CAHS, Chandy College of Engineering, Tuticorin on February 2013.
- Attended One day Faculty Development Programme, “InterPersonal Relationship” organized by the Depttment of Mathematics, Chandy College of Engineering,Tuticorin on October 2012.
- Attended One day Faculty Development Programme organized by Chandy College of Engineering,Tuticorin on June 2012.

- Participated in the National Seminar on Advances in Material Sciences -2012, organized by Department of Physics, Manonmaniam Sundaranar University on January 2012.
- Participated in the National Seminar on Smart Device Materials 2011 organised by Department of Physics ,VV College of Engineering,Tisaiyanvilai on March 2011.
- Participated in Workshop on “Quality Assessment” organized by Sarah Tucker College, Tirunelveli on January 2003.
- Attended Ten days Camp “Youth for Healthy Society”,Ramapuram,Kanyakumari District from 9th to 18<sup>th</sup> February 2001.

### **Published Book:**

Engineering Physics-II,  
CBA Publishers, Chennai  
(ISBN: 978-93-80430-01-0)

### **Achievements and Awards**

- \*University **III rank** in PG degree
- \*University **VII rank** in UG degree
- \***Won II Prize in Paper presentation** in the  
National Conference on REDEEMS'18