Mrs.A.JOSEPHINEPRABHA

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Qualification

| Degree | Branch | Institution / University | Year of Passing |
|---------------|---------|---------------------------|-----------------|
| Ph.D. | Physics | Bharathidasan | 2016 |
| M.Phil | Physics | Bharathidasan | 2003 |
| M.Sc. | Physics | lit, <mark>Madr</mark> as | 2001 |
| B.Sc. Physics | Physics | Holy Cross College | 1999 |

Ph.D. Details

Title of Thesis

Materials Science - Phase transformations in alloys Calorimetric Characterization of Phase transformations in Ti-Nb alloys and Lattice softening in Pure Titanium

Research Centre Research Supervisor

Dr. I. Johsnon, SJC & Dr. M. Vijayalal Indira Gandhi Centre for Atomic Research

IGCAR, Kalpakkam

Area of Specialization

Year of Award

March 2016

Cleared NET / SET: **Year of Passing** NISI DOMI

Additional Qualification

| Name of Course | Place of Study | Date | Duration |
|----------------|-----------------------------|----------|----------|
| PGDCSA | St Joseph s College, Trichy | May 2002 | one vear |

Work Experience

| Name of Institution | Address of Institution | Designation | From | То |
|---------------------------|---------------------------------------|---------------------|------------|------------|
| Cauvery College for Women | Annamalai Nagar, Trichy - 620 018. | Assistant Professor | 01-07-2002 | 31-08-2006 |
| Bishop Heber College | Puthur, Trichy - 620 017 | Assistant Professor | 01-09-2006 | till date |

Teaching / Research Experience

U.G.: 19 years **P.G.**: 18 years 7 m **M.Phil**. 16 years 7 n **Ph.D**. 3

Research Guidance

U.G.: P.G.: 15 M.Phil.: 7 Ph.D.:

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|---------------|--|-----|
| 1. | Conferences / workshops / Seminars Attended | 33 |
| 2. | Research Papers Presented | 9 |
| 3. | Publication in Journals | 7 |
| 4. | Publication in Books | 0 |
| 5. | Books Published / Edited | 0 |
| 6. | Conferences / Worksho <mark>ps / Seminars Organised</mark> | 1 |
| 7. | Research Projects | 0 |
| 8. | Resource Person | 4 |
| 9. | Consultancy | 0 |
| 10. | Awards Recieved | 5 |
| 11. | Patent | 0 |
| 12. | Extension Activities Undertaken | 0 |
| 13. | Professional Membership | 2 |
| 14. | M.Phil. / Ph.D. Produced | 0/1 |

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- Regional level Seminar on "One day seminar on women empowerment" sponsored by NSS, Bishop Heber College, Trichy organized by NSS, Bishop Heber College, Trichy at Trichy during 23/02/2018 to 01/01/1900.
- International level Conference on "International Conference on Advances in Materials Science (ICAMS 2017)" sponsored by UGC organized by Holy Cross College, Trichy at Trichy during 06/01/2017 to 07/01/2017.
- 3. College level Workshop on "Workshop on Curriculum Design and Evaluation Techniques" sponsored by Bishop Heber College, Trichy. organized by Bishop Heber College, Trichy. at Trichy during 21/11/2016 to 22/11/2016.
- 4. National level Workshop on "Workshop on Statistical Physics and Materials Science" sponsored by Dept of Physics, National Institute of Technology, Trichy. organized by Dept of Physics, National Institute of Technology, Trichy. at NIT. Trichy during 21/07/2016 to 23/07/2016.
- 5. College level Workshop on "Workshop on R Programming" sponsored by PG and Research Department of Mathematics and IQAC, Bishop Heber College, Trichy. organized by PG and Research Department of Mathematics and IQAC, Bishop Heber College, Trichy. at Trichy during 02/04/2016 to 02/04/2016.
- College level Seminar on "Faculty Development Programme" sponsored by IQAC, Bishop Heber College, Trichy. organized by IQAC, Bishop Heber College, Trichy. at Trichy during 10/10/2015 to 10/10/2015.
- 7. University level Workshop on "Workshop on Free Legal Aid An Opportunity to Serve the Society" sponsored by Govt. Law College, Trichy and NSS Cell of Bharathidasan University organized by Govt. Law College, Trichy and NSS Cell of Bharathidasan University at Trichy during 15/09/2015 to 15/09/2015.
- 8. College level Workshop on "Workshop on Optimizing Research Tools and Techniques" sponsored by Bishop Heber College, Trichy. organized by Bishop Heber College, Trichy. at Trichy during 22/08/2015 to 22/08/2015.
- International level Conference on "International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering (ISRS 2012)" sponsored by Dept of Metallurgical and Materials Engineering, IIT, Chennai organized by Dept of Metallurgical and Materials Engineering, IIT, Chennai during 13/12/2012 to 15/12/2012.
- 10. National level Seminar on "Theme meeting on challenges and issues in surface modification, thin films and coatings. (Structure and Thermodynamics of Emerging Materials STEM 2012)" sponsored by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. organized by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. at Anupuram during 05/11/2012 to 06/11/2012.
- State level Workshop on "79th BRNS IANCAS National Workshop on Radiochemistry and Applications of Radioisotopes" sponsored by Indian Association of Nuclear Chemists and Allied Scientists and Selvamm Arts and Science College, Namakkal organized by Indian Association of Nuclear Chemists and Allied Scientists and Selvamm Arts and Science College, Namakkal at Namakkal during 26/03/2012 to 31/03/2012.
- National level Seminar on "Theme meeting on Diffusion, Mass Transfer and its Consequences in Materials (Structure and Thermodynamics of Emerging Materials - STEM 2011)" sponsored by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. organized by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. at Anupuram during 24/11/2011 to 26/11/2011.
- 13. International level Conference on "19th European Conference on Thermophysical Properties" sponsored by Laboratory of Thermophysical Properties & Environmental Processes, Chemical Engineering Department, Aristotle University, Thessaloniki, Greece organized by Laboratory of Thermophysical Properties & Environmental Processes, Chemical Engineering Department, Aristotle University, Thessaloniki, Greece at Thessaloniki, GREECE during 28/08/2011 to 01/09/2011.

- 14. International level Conference on "Indo-US workshop on Nanosonics and Ultrasonics (IUWONU) and International Conference on Nano and Ultrasound Technology (ICNUT)" sponsored by St. Joseph's College, Trichy. organized by St. Joseph's College, Trichy. at Trichy during 12/01/2011 to 14/01/2011.
- 15. International level Conference on "International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering (ISRS 2010)" sponsored by Dept of Metallurgical and Materials Engineering, IIT, Chennai organized by Dept of Metallurgical and Materials Engineering, IIT, Chennai at IIT, Chennai during 20/12/2010 to 22/12/2010.
- National level Workshop on "Workshop on Advanced methods in Characterization of Texture and Microtexture of Materials. (Structure and Thermodynamics of Emerging Materials STEM 2010)" sponsored by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. organized by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. at Anupuram during 25/11/2010 to 26/11/2010.
- 17. National level Seminar on "Seminar on Recent Advances in Spectroscopic Techniques" sponsored by Bishop Heber College, Trichy. organized by Bishop Heber College, Trichy. at Trichy during 07/09/2010 to 07/09/2010.
- National level Conference on "17th DAE BRNS National Symposium on Thermal Analysis (THERMANS - 2010)" sponsored by Kurukshetra University, Haryana. organized by Kurukshetra University, Haryana. at Haryana during 09/03/2010 to 11/03/2010.
- National level Workshop on "Workshop on Thermodynamic and Kinetic Modeling of Phase and Microstructural Stability of Alloys (Structure and Thermodynamics of Emerging Materials-STEM 2009)" sponsored by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. organized by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. at Anupuram during 24/09/2009 to 25/09/2009.
- 20. National level Workshop on "Workshop on Electron Microscopy" sponsored by Central Electrochemical Research Institute, Karaikudi. organized by Central Electrochemical Research Institute, Karaikudi. at Karaikudi during 31/07/2009 to 01/08/2009.
- 21. International level Conference on "International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering (ISRS 2008)" sponsored by Dept of Metallurgical and Materials Engineering, IIT, Chennai organized by Dept of Metallurgical and Materials Engineering, IIT, Chennai during 10/12/2008 to 12/12/2008.
- National level Seminar on "Theme meeting in Structure and Thermodynamics of Emerging Materials" sponsored by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. organized by Indira Gandhi Centre for Atomic Research and Indian Institute of metals, Kalpakkam chapter. at Anupuram during 17/04/2008 to 18/04/2008.
- 23. State level Workshop on "Applications of Radiation and Radio Isotopes" sponsored by IANCAS, Kalpakkam and Dept of Physics, St. Joseph s College, Trichy. organized by IANCAS, Kalpakkam and Dept of Physics, St. Joseph s College, Trichy during 16/02/2008 to 16/02/2008.
- 24. National level Seminar on "National Seminar on recent advances in Material Science" sponsored by Cauvery College for Women, Trichy organized by Cauvery College for Women, Trichy at Trichy during 15/02/2008 to 15/02/2008.
- 25. State level Workshop on "Lecture Workshop on Frontier Topics in Physics" sponsored by Dept of Physics, Bishop Heber College, Trichy. organized by Dept of Physics, Bishop Heber College, Trichy. at Trichy during 03/02/2008 to 04/02/2008.
- ^{26.} College level Workshop on "*Power Point Presentation and Internet Usage*" sponsored by Bishop Heber College, Trichy. organized by Bishop Heber College, Trichy. at Trichy during 23/08/2007 to 24/08/2007.
- 27. International level Workshop on "International Workshop for Educators on Mobile Learning" sponsored by Dept of Computer Science and applications, Bishop Heber College, Trichy organized by Dept of Computer Science and applications, Bishop Heber College, Trichy at Trichy during 17/07/2007 to 18/07/2007.

- National level Seminar on "Emerging Trends in corrosion control and surface engineering" sponsored by Dept of Metallurgical and Materials Engineering, NIT, Trichy. organized by Dept of Metallurgical and Materials Engineering, NIT, Trichy at NIT. Trichy during 09/02/2007 to 10/02/2007.
- 29. National level Workshop on "Instrumental methods of Thermal Analysis and data interpretation" sponsored by Centre for Energy and Environmental Science and Technology NIT, Trichy organized by Centre for Energy and Environmental Science and Technology NIT, Trichy at NIT. Trichy during 25/11/2006 to 25/11/2006.
- 30. National level Workshop on "One day workshop on Ultrasonics" sponsored by Acoustical Society of India, Trichy and Dept of Physics, St. Joseph s College, Trichy organized by Acoustical Society of India, Trichy and Dept of Physics, St. Joseph s College, Trichy at Trichy during 29/10/2004 to 29/10/2004.
- 31. National level Workshop on "National Workshop on Advances in Non¬destructive Evaluation" sponsored by Dept of Physics, National Institute of Technology, Trichy. organized by Dept of Physics, National Institute of Technology, Trichy. at NIT. Trichy during 29/07/2004 to 31/07/2004.
- 32. State level Workshop on "Workshop on Advanced Physics Experiments" sponsored by St. Joseph's College, Trichy organized by St. Joseph's College, Trichy at Trichy during 21/07/2004 to 24/07/2004.
- 33. National level Seminar on "*One day workshop on LATEX*" sponsored by St. Joseph s College, Trichy organized by St. Joseph s College, Trichy at Trichy during 27/01/2003 to 27/01/2003.



- "Calorimetric Characterization of Ti-Nb alloys" in the International conference on Women Scientists and Entrepreneurs Conclave, India International Science Festival 2017 sponsored by Ministry of science and technology, Ministry of Earth Sciences, Government of Tamil Nadu, National institute of Ocean Technology etc., organized by Central Government at Anna University, Chennai during 13/10/2017 to 16/10/2017.
- 2. "Updating the curriculum of Physics to the recent trends" in the State conference on Curriculum Updation sponsored by, organized by State Council of Educational Research and Training, Tamil Nadu at Anna University, Chennai during 20/07/2017 to 22/07/2017.
- 3. "Theoretical Analysis of Light Harvesting Efficiency (LHE) on Some Indigo Derivatives for the Application of Dye Sensitized Solar Cells" in the International conference on International Conference on Advances in Materials Science (ICAMS 2017) sponsored by UGC, organized by Dept of Physics, Holy Cross College, Trichy at Trichy during 06/01/2017 to 07/01/2017.
- 4. **"Kinetics of thermally activated lattice softening in Titanium: a dynamic calorimetric study"** in the International conference on *International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering (ISRS 2012)* sponsored by , organized by IIT, Chennai at IIT, Chennai during 13/12/2012 to 15/12/2012.
- 5. "Thermodynamic Characterization of Ti-15at.%Nb alloy by drop calorrimetry" in the International conference on 19th European Conference on Thermophysical Properties (19 ECTP) sponsored by , organized by at Thessalonikki, GREECE during 28/08/2011 to 01/09/2011.
- 6. "Drop Calorimetry Characterization of a Ti-32.7 mass%Nb alloy having a significant amount of non-equilibrium? at room temperature" in the International conference on International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering (ISRS 2010) sponsored by , organized by IIT, Chennai at IIT, Chennai during 20/12/2010 to 22/12/2010.
- 7. "Enthalpy Measurements on Ti-15at.%Nb alloy by drop calorimetry" in the National conference on Seventeenth National Symposium on Thermal Analysis, THERMANS 2010 sponsored by , organized by at Kurukshetra University, Haryana during 09/03/2010 to 11/03/2009.
- 8. "Drop Calorimetry Studies on Ti 15at.% Nb alloy" in the National conference on *Structure and Thermodynamics of emerging materials (STEM 2009)* sponsored by , organized by PMG, IGCAR, Kalpakkam at Annupuram during 24/09/2009 to 25/09/2009.
- 9. "Kinetics of hcp? bcc phase change in pure titanium: effect of controlled heating and cooling rates on the kinetic quantities and the nature of transformation asymmetry between forward and reverse direction" in the International conference on *International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering* sponsored by, organized by IIT, Chennai at Chennai during 10/12/2008 to 12/12/2008.

Publication in Journals

- 1. "Vibrational, electronic absorption, thermal and mechanical analyses of organic nonlinear optical material guanidinium phthalate" published in Journal of Molecular Structure (PEER REVIEW) Vol. 1130, Issue No., October 2016 ISSN: 0022-2860.
- 2. "Vibrational, electronic absorption, thermal and mechanical analyses of organic nonlinear optical material guanidinium phthalate" published in Journal of Molecular Structure (PEER REVIEW) Vol. 1130, Issue No., October 2016 ISSN: 0022-2860.
- 3. **"Kinetics of thermally activated lattice softening in Titanium: a dynamic calorimetry study"** published in Transactions of Indian Institute of metals (PEER REVIEW) Vol. 66, Issue No. 4, May 2013 ISSN: 0975-1645.
- 4. "Thermodynamics of a² ®ß phase transformation and heat capacity measurements in Ti 15 at. % Nb alloy" published in Physica B (PEER REVIEW) Vol. 406, Issue No., August 2011 ISSN: 0921-4526.
- 5. "Drop Calorimetry Characterization of a Ti-32.7 mass%Nb alloy having a significant amount of non-equilibrium? at room temperature" published in Proceedings of the International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering, (ISRS- 2010) (CONFERENCE PROCEEDING) Vol., Issue No., December 2010 ISSN: ---.
- 6. "Enthalpy Measurements on Ti-15at.%Nb alloy by drop calorimetry" published in Proceedings of the Seventeenth National Symposium on Thermal Analysis, (THERMANS 2010) (CONFERENCE PROCEEDING) Vol., Issue No., March 2010 ISSN: ---.
- 7. "Synthesis, Crystal Structure and Vibrational Spectral Analysis of Guanidinium Hydrogen
 L-aspartate Single Crystal" published in Journal of Physical Science (E-JOURNAL) Vol., Issue
 No., January 1900 ISSN:---

Impact factor, Scopus Index, h - index 26, Citation index

Conferences / Workshops / Seminars Organised

 Local level Workshop Entitled "Workshop on Robotics" at Bishop Heber College, Trichy, sponsored by , during 08/09/2015 to 09/09/2015.

Awards Recieved - 5

| Award Name | Presented by | Year | Level | Instituted by / Place | amount |
|---|--------------|------------|----------|------------------------------------|--------|
| Best Oral Presentation Award | | 01/03/2010 | NATIONAL | Indian Thermal Analysis Society | |
| Merit Scholarship Award for 3 semesters | IIT, Chennai | 01/05/2001 | NATIONAL | IIT, Chennai | |
| Gold Medal in B.Sc. Physics | | 01/05/1999 | COLLEGE | Holy Cross College, Trichy | |
| Gold Medal in French | | 01/05/1999 | COLLEGE | Holy Cross College, Trichy | |
| Best NSS Volunteer Award | | 01/03/1999 | COLLEGE | Holy Cross College, Trichy | |

PROFESSIONAL MEMBERSHIP - 2

- * Associate Member of Indian Institute of Metals during 01/01/1900 -
- * Life Member of Materials Research Society of India during 01/01/1900 -

TRAINING PROGRAMME

- 4
- # NATIONAL level REFRESHER on "Refresher Course in Physics" Sponsored by UGC, Organized by Academic Staff College, BARD at BARD, Trichy during 01/01/2016 01/01/2016.
- # NATIONAL level REFRESHER on "Refresher Course in Physics" Sponsored by UGC, Organized by Academic Staff College, BARD at BARD, Trichy during 20/11/2012 10/12/2012.
- # STATE level ORIENTATION on "Orientation Course" Sponsored by UGC, Organized by Academic Staff College, BARD at Trichy during 03/11/2009 30/11/2009.
- # NATIONAL level on "COMSOL Multi Physics" Sponsored by , Organized by at Chennai during 11/03/2009 12/03/2009.

RESOURCE PERSON



- **1.** College level Invited Lectures on "Digital Photography" at Cauvery College for Women, Trichy, 16/12/2016.
- 2. College level Invited Lectures on "Phase Transformations and Phase Diagrams" at Holy Cross College, Trichy, 25/07/2016.