FACULTY - PROFILE

1. Name : Dr. T. KAVITHA

2. Designation : PROFESSOR & HEAD

3. Department : PHYSICS4. Date of Joining : 15.07.2015

5. E-mail : kaviphy16@gmail.com

6. Phone No. : 9442385688

7. Educational Qualification

| Degree | Institute | Specialization | Name of the Degree | Year | Division |
|--------|---|-----------------|--------------------|------|-------------------------|
| UG | Sri Sarada Niketan college of Science for women, Karur. | Physics | B.Sc. | 1994 | I Class |
| PG | Nehru Memorial College,Puthanampatti | Applied Physics | M.Sc. | 1996 | I Class |
| M.Phil | Alagappa University | Crystal growth | M.Phil. | 1997 | I Class |
| Ph.D | Nehru Memorial College,Puthanampatti | Nano Technology | Ph.D | 2017 | Highly Commen ded |

8. Employment Record (from present to past)

| | Р | eriod | |
|---|------------|------------|---------------------|
| Organization | From | То | Designation |
| Pavai women's polytectecnic | 01.09.1998 | 01.06.1999 | Lecturer |
| AMS Engineering college,Namakkal | 28.06.1999 | 10.05.2007 | Assistant Professor |
| King college of Technology,Namakkal | 11.05.2007 | 31.05.2011 | Assistant Professor |
| K.S.R. College of Engineering, Tiruchengode, Namakkal District. | 01.06.2011 | 30.06.2011 | Assistant Professor |
| KSR Institute for Engineering and Technology, Tiruchengode, Namakkal District | 01.07.2011 | 14.07.2015 | Associate Professor |
| K.S.R. College of Engineering, Tiruchengode, Namakkal District | 15.07.2015 | 31.10.2017 | Associate Professor |
| K.S.R. College of Engineering, Tiruchengode, Namakkal District | 01.11.2017 | Till date | Professor |

9. Memberships of Professionals / Learned Bodies / Societies

| S.No. | Name of the Professionals/Learned bodies/Societies | Membership No |
|-------|--|---------------|
| 1. | MISTE | MISTE-LM84509 |



10. Awards / Prizes Received

| Name of the Award | Year | Awards / Prizes received from |
|-------------------|------|-------------------------------|
| - | - | - |

10. R & D Details

a) Research Grants Received

| Year | Project Title | Reference No | Total Amount Received | Sponsoring agencies |
|------|---------------|--------------|-----------------------|---------------------|
| - | - | - | - | - |

b) PhD Registration Details

| Year of Registration | Topic | Name of the Supervisor | Reference No | Name of the University |
|----------------------|-------|---------------------------|--------------|---------------------------|
| - | - | - | - | - |

11 Conference Grants Received

| Title of the Conference | Duration | Sponsoring agencies | Amount received |
|-------------------------|----------|---------------------|-----------------|
| - | - | - | |

12. Publications

i) Publications in Journals

| SI.No | Name of the Author | Title of the Paper | Journal Name | Vol , No & pages | Year of Publicati on |
|-------|--|--|---|------------------------------------|----------------------------|
| 1 | Kavitha, T., Rajendran, A., Durairajan, A. and Kumaraswamidhas, LA. | Heat transfer intensification by Nano Fluids - an Outline" | Journal of Scientific and Industrial Research | Vol. 73, pp. 711- 712 | Novemb er 2014, |
| 2 | T. Kavitha, A. Rajendran & Durairajan | Synthesis and Characterization of TiO2 Nanopowders and TiO2- SiO2 Nanocomposites by Sol-Gel technique | Elixir Nano Composite Materials, | Vol 59 Pp 15919- 15922 | 2013 |
| 3 | KavithaThangavelu, RajendranAnnamalai, DurairajanArulnandhi, | Synthesis And Characterization of Nano sized TiO ₂ Powder derived from a Sol–Gel Process in acidic conditions | International Journal of Engineering Sciences & Emerging Technologies | Vol. 4, No. 2,- 95, | February 2013 |
| 4 | KavithaThangavelu, Rajendran Annamalai and Durairajan Arulnandhi, | Preparation and Characterization of Nanosized Tio ₂ Powder by Sol-Gel Precipitation Route | International Journal of Emerging Technology and Advanced Engineering | Vol. 3, No. 1, 636- 639,. | January 2013 |

| 5 | Kavitha, T. , Rajendran, A. and Durairajan, A. | Synthesis ,Characterization of TiO ₂ Nanopowder and Water based nano fluids using two step method | European Journal of Applied Engineering and Scientific Research | Vol. 1, No. 4, pp. 235- 240, | 2012 |
|----|---|---|--|--|------|
| 6 | Kavitha, T., Rajendran,A., Durairajan,A. and Shanmugam .A, | Heat transfer Enhancement Using Nano Fluids and Innovative Methods – An Overview | International Journal of Mechanical and technology (IJMET) | Vol. 3, No. 2, pp. 769 - 782, | 2012 |
| 7 | Kavitha, T., Rajendran,A., Durairajan,A. and Syedabuthahir, M. | Advanced Heat Transfer Enhancement Using TiO ₂ Water Based Nano Fluids | International Journal of Mechanical and Industrial Engineering | Vol. 2, No. 4, | 2012 |
| 8 | T. Kavitha, A. Rajendran, A. Durairajan & M. Syedabuthahir | Advanced Heat Transfer Enhancement Using TiO2 Water Based Nano Fluids | International Journal of Mechanical and Industrial Engineering (IJMIE) | Vol 2 No.4 | 2012 |
| 9 | T. Kavitha, A. Rajendran, A. Durairajan & Kumaraswamidhas, LA. | Design and manufacturing of nano catalytic converter for pollution control in automobiles for green environment | Indian J.Innovations Dev 1 | Vol 5 Pp no 315-319 | 2012 |
| 10 | Kavitha T , Rajendiran A, Durairajan A | Experimental Investigation and control the toxic emissions in IC engines by nano materials | Discovery Science | Vol 1 Pp no 3 - 9 | 2012 |

ii) Papers Presented in International Conferences / Symposiums

| SI.No | Name of the Author | Title of the Paper | Conference Name | Proceeding pages | Date &Year |
|-------|--------------------|---|---|------------------|---------------------------------------|
| 1. | T.Kavitha | Advanced Heat Transfer Enhancement using Tio2 Water Based Nano Fluids | InterNational conference on Mechanical and Industrial Engineeriing constructions. ICMIE - Goa | | 19th August 2012 |
| 2 | T.Kavitha | Novel properties of TiO ₂ –siO ₂ nano materials | International poster conference on 2 nd Virtual nano technology Budebest Hungary | | 19 th September 2012 |

iii) Papers Presented in National Conferences / Symposiums

| SI.No | Name of the Author | Title of the Paper | Conference Name | Proceeding pages | Date & Year |
|-------|-----------------------|--|---|------------------|---|
| 1. | T.Kavitha | Advanced Heat Transfer Enhancement using Tio2 Water Based Nano Fluids | National Conference on Advances in Materials Science and Nonlinear Systems (AMSNS-16) | - | January 7 & 8 2016 |
| 2. | T.Kavitha | Synthesis, characterization of nano sized Tio2 powder and water based nano fulides using two step method | Second National conference on Technological Advancement Engineering | - | 8 th & 9 th February 2013 |
| 3. | T.Kavitha | Synthesis, and characterization studies of nano Tio2 - Sio2 composites via solgel technique | National conference of Design, Materials and Constructions | - | 23 rd & 24 th August 2012 |

iv) Publication of Books

| SI. No. | Publication | Date of Publication | Name of the Publisher |
|---------|-------------|---------------------|-----------------------|
| - | - | - | - |

13. National/International Conferences & Seminar/Workshops attended

| SI.No | Date | Type of Course(FDP/ Workshop/ Seminar/Conf erence/Symp osium/ any other) | Topic | Organized by | Sponsored by |
|-------|-------------------------------|--|--|--|---|
| 1. | 25.07.2022 -30.07.202 | FDP | Six-Day Online International Faculty Development Program on Recent Trends in Applied Physics | Easwari Engineering College, Tiruchengode | Easwari Engineering College, Tiruchengode |
| 2. | 25.07.2022 - 30.07.2022 | FDP | National Virtual Faculty Development Programme on Emerging Trends in Applied Chemistry | Easwari Engineering College, Tiruchengode | Easwari Engineering College, Tiruchengode |
| 3 | 29.07.2022 | Webinar | Webinar on Nanotechnology in Forestry research | Sri Ramakrishna Engineering College, Coimbatore | Sri Ramakrishna Engineering College, Coimbatore |

| | | | International Conference | Nehru Institute of Technology in | Nehru Institute of Technology |
|----|-------------------------------|-----------------------------|--|--|---|
| 4 | 20.07.2022 | International Conference | on Functional Material and Nanotechnology (ICFMN- 2K22) | collaboration with Indian Association for Crystal Growth, Coimbatore | in collaboration with Indian Association for Crystal Growth, Coimbatore |
| 5 | 05.07.2022 | Webinar | Webinar on Accelerators/Incubation – Opportunities for Students & Faculties – Early Stage Entrepreneurs | K.S.R. College of Arts and Science for Women, Namakkal | K.S.R. College of Arts and Science for Women, Namakkal |
| 6 | 14.05.2022 | Webinar | Webinar on Nano structured Materials for Photoelectrochemical Transformation and Electrochemical Energy storage Applications | Velammal Institute of Technology Chennai | Velammal Institute of Technology Chennai |
| 7 | 20.02.2022 | Webinar | K-12 Webinar entitled What Decides Our Academic Success? | ISHRAE Madurai | ISHRAE Madurai |
| 8 | 11.02.2022 | Webinar | International Webinar on Linking, Science & Technology to Create a Sustainable Environment | K.S.R. Institute for Engineering and Technoligy, Namakkal | K.S.R. Institute for Engineering and Technoligy, Namakkal |
| 9 | 11.10.2021 - 12.10.2021 | Webinar | Two – Day national Webinar on Nanomaterials – Current Trends and Future Applications | Saranathan College of Engineering, Tiruchirapalli | Saranathan College of Engineering, Tiruchirapalli |
| 10 | 07.06.2021 | Webinar | National level webinar on Opto-electronic devices and its applications | Nehru Institute of Technology, Coimbatore | Nehru Institute of Technology, Coimbatore |
| 11 | 31.05.2020 | FDP | Faculty development program on Teachers are National Builders | Arjun College of Technology, Coimbatore | Arjun College of Technology, Coimbatore |
| 12 | 02.11.2020 | Webinar | One Day Webinar on Nonlinear Dynamics: An Evolving Science | Kongu Engineering College, Perundurai, Erode | Kongu Engineering College, Perundurai, Erode |
| 13 | 28.09.2020 - 30.09.2020 | Workshop | Three Day Lecture Workshop on Recent trends in Materials Science | Kongu Engineering College, Perundurai, | Indian Science Academices |
| 14 | 24.09.2020 - 25.09.2020 | Webinar | Webinar on Gender sensitization of Adulthood in Education Campuses | Erode Nehru Institute of Technology, Coimbatore | Nehru Institute of Technology, Coimbatore |
| 15 | 23.09.2020 | Webinar | Webinar on Gender sensitization of Adulthood in Education Campuses – Gender Equity and | Nehru Institute of Technology, Coimbatore | Nehru Institute of Technology, Coimbatore |

| | | | Sensitizationamong | | |
|----|-------------------------------|--------------------------|---|--|---|
| | | | Students | | |
| 16 | 21.09.2020 | Workshop | Five Day National Workshop on Functional Materials, Dye-sensitized | Kongu Engineering College, | Kongu Engineering College, |
| | 25.09.2020 | | solar cells and perovskite solar cells | Perundurai, Erode | Perundurai, Erode |
| 17 | 10.08.2020 - 15.08.2020 | Online Course | One Week Online certificate course on Digital Teaching Techniques | ICT Academy | ICT Academy |
| 18 | 03.08.2020 - 07.08.2020 | FDP | Faculty Development Program on the Role of Materials Science in Engineering-Applications Perspective | Mahatma Gandhi Institute of Technology, Telugana | Mahatma Gandhi Institute of Technology, Telugana |
| 19 | 29.11.2019 | National Seminar | National Cyber Safety and Security Standards | K.S.R. College of Engineering, Tiruchengode | K.S.R. College of Engineering, Tiruchengode |
| 20 | 19.11.2019 - 21.11.2019 | Workshop | Three Days Workshop on Instructional and Assessment Characteristics of OBE frame work and Hands on Practices for Designing and Mapping Outcomes | K.S.R.I.E.T, Tiruchengode | K.S.R.I.E.T, Tiruchengode |
| 21 | 11.06.2020 - 12.06.2020 | FDP | Two Days Faculty Development Program on Game Pedagogy in Outcome Based Education | KC College and Management Studies and Research, Thane | KC College and Management Studies and Research, Thane |
| 22 | 01.06.2020 - 04.06.2020 | Online Lecture Series | Online Lectures in Solid State Physics-Series 1: 'Electrons in Solids' | Department of Theoretical Physics, University of Madras, Chennai | Department of Theoretical Physics, University of Madras, Chennai |
| 23 | 21.05.2020 | National Webinar | National Webinar on How to bring Lasting changes in students | St. Joseph's College for Women, Tirupur | St. Joseph's College for Women, Tirupur |
| 24 | 06.05.2020 - 08.05.2020 | Online COurse | Three Days online course on Genetic Disorder | Sri Kailash Women's College, Salem | Sri Kailash Women's College, Salem |
| 25 | 20.04.2020 - 21.04.2020 | Online Course | Online Course on Household Electrical Devices and Applications | AVS college of Arts and Science, Salem | AVS college of Arts and Science, Salem |
| 26 | 26.08.2019 | Seminar | Seminar on Woman Entrepreneurship & Empowerment Programme | Department of IT K.S.R.College of Engineering, Thiruchengode. | K.S.R.College of Engineering, Thiruchengode |
| 27 | 10.07.2019 | Workshop | Workshop on J Gate an – Electronic gateway for research. | Department of Library K.S.R.College of Engineering, Thiruchengode. | K.S.R.College of Engineering, Thiruchengode. |
| 28 | Jan- April2019 | NPTEL | Semiconductors opto electronics | Indian Institute of Technology (IIT), Kharagpur, India | KSRCE Tiruchengode |
| 29 | Jul-oct- | NPTEL | Introduction to Non-Linear | Indian Institute of | KSRCE |

| | 2018 | | Optics and its Applications | Technology (IIT), Kharagpur, India | Tiruchengode |
|----|---|--|---|--|-----------------------------|
| 30 | 25 th june ,2018 to July 1 st | Induction/Refe rsher progammer | Teaching and Research with Technology | IRTT-Erode | AISTE-ISTE |
| 31 | Jan-Apr 2018 | NPTEL | Atomic and Molecular Physics | Indian Institute of Technology (IIT), Kharagpur, India | KSRCE Tiruchengode |
| 32 | July-oct 2017 | NPTEL | Solid state physics | Indian Institute of Technology (IIT), Kharagpur, India | KSRCE Tiruchengode |
| 33 | Dec-8 to 18,2015 | ISTE short deram traning Programme | Engineering Physics | Indian Institute of Technology (IIT),Bombay | KSRCT Tiruchengode |
| 34 | 04.07.2018 | IEEE xplore Digital Library Training | - | Department of Library, KSRCE Tiruchengode | - |
| 35 | 03.07.2018 | TwoDays National Level Seminar | IMPACT OF GREEN COMPUTING FOR MINIMIZING E – WASTE ON HUMAN HEALTH | Department of Computer Science and Engineering, KSRCE Tiruchengode | ICMR |
| 36 | 29 th & 30 th July 2012 | International conference | International conference on "ACCMS-Theme meeting on 2D Nano structures Grapheneand beyond". Budebest Hungary | IISC, Bangalore | Defence R&D Organization |
| 37 | 12 th Aug 2011 | One day national level Seminar | Recent Development in Advanced Materials and its applications | Mahendra Engineering College | - |
| 38 | 1 st March 2009 | One day Workshop | Faculty Development Programme | King College of Technology | - |
| 39 | 7 – 8 Feb 2007 | National Conferance | Emerging Opportunities in the field of Physics & Electronics | P.G.P College of Arts and Science, Namakkal | - |
| 40 | 14 th & 15 th Feb 2007 | Workshop | Advanced Engineering Materials | Government College of Engineering, Salem | TEQIP |
| 41 | 7 – 9 Dec 2005 | Three day Faculty Development Program | Effective Teaching – Learning management and student Personnel management | Annai Mathammal Sheela Engineering College, Erumapatty | - |
| 42 | 30 th August 2004 | One day Seminar | Aerosols and Environmental Pollution | Sona college of Technology, Salem | - |

14. Lecture Delivered : Nil

15. Conference/Seminar Organized : Nil

16. Patent:

| S.N o. | Author | Title of the Invention | Status |
|-----------|---|--|---------|
| 1 | Mr.P.Saravanan, Dr.P.Senthil kumar, Dr.T.Kavitha, Mr.K.Perumal, Mr.M.Anbalakan, Mr.K.Venkateshwaran | DISPOSAL OF SLUDGE WASTE IN WATER TANK USING DIAPHRAGM OPERATED BY PISTON AND CYLINDER | Applied |
| 2 | Dr.M.Bhuvaneshwaran, Dr.P.Senthil Kumar, Dr.T.Kavitha, Dr.T.Sureshkumar, Mr.P.Saravanan, Mr.M.Prithivraj,Mr.C.Prakash Mr.ML.Praveen, Mr.S.Vigneshkumar. | MECHANICAL PROPERTIES OF NATURAL FIBER COMPOSITES INFLUENCED BY SURFACE TREATMENT | Applied |
| 3 | Mr.J.Venkatesh, Dr.P.Senthil Kumar, Dr.T.Kavitha , Mr.G.Nandakumar, Mr.P.Parthiban, Mr.R.Prabu, Mr.P.Sabarishwaran | DESIGN AND FABRICATION OF ATMOSPHERIC WATER GENERATOR | Applied |
| 4 | Dr.T.Kavitha, Dr T. Sureshkumar, Mr.R.ragul,Mr.R.Rajavignes h,Mr.P.Sabari,Mr.S.Praveen kumar | Intelligent Braking System Using Ultrasonic Sensor | Applied |

17. Reviewer In : Nil

Name & Signature (Dr. T. KAVITHA)