FACULTY PROFILE

Name : **Dr.S.Vijayakumar**

Designation : Associate Professor and Head Email ID : vijayakumars.sh@srit.org

Area of Specialization : Physics (Nanotechnology & Nanomedicine)

Total Experience : Academic : 19 Years

Industry: 0

Educational Qualification:

| Degree | Branch / Specialization | College | University | |
|----------|--|-------------------------------------|------------------------------|--|
| Ph.D., | Physics (Nanotechnology &Nanomedicine) | Government College of Technology | Anna University, Chennai. | |
| M.Phil., | Physics (SPL-Electronics) | PSG College of Arts & Science | Bharathiyar University | |
| M.Sc., | Physics (SPL-Electronics) | Government Arts College | Bharathiyar University | |
| B.Sc., | Physics | PSG College of Arts & Science | Bharathiyar University | |



Experience Details:

| S.No | Institution/Industry | Design. | Experience | | Total Years & Months |
|------------------------|---|-----------------------------------|----------------------|------------|----------------------|
| institution, muusti y | | | From | То | |
| 1 | Sri Ramakrishna Institute of Technology | Associate Professor | 01/11/2013 | Current | 2Y 3M |
| 2 | Sri Ramakrishna Institute of Technology | Assistant Professor (SL.Gr) | 01/04/2011 | 31/10/2013 | 2Y 7M |
| 3 | Sri Ramakrishna Institute of Technology | Assistant Professor (SR.Gr) | 01/08/2010 | 31/03/2011 | 0Y 8M |
| 4 | Sri Ramakrishna Institute of Technology | Senior Lecturer | 01/02/2008 | 31/07/2010 | 2Y 6M |
| 5 | Sri Ramakrishna Institute of Technology | Lecturer | 01/02/2003 | 31/01/2008 | 5Y 0M |
| 6 | Sri Ramakrishna Polytechnic College | Lecturer | 03/02/1997 | 30/01/2003 | 6Y 0M |
| Total (as on Feb 2016) | | | 19 Years 0 Months | | |

Funded Projects:

| S. No. | Funding Agency | Topic | Amount Sanctioned in Rs. | Year of Sanction |
|--------|---|---|-----------------------------|---------------------|
| 1 | Tamil nadu State Council for Science and Technology, Government of Tamil nadu | Cancer Targeted Photothermal Therapy Using Gold Nanoparticles | 1,64,400/- | 2012 |

Consultancy Work:

| S. No. | Organization/ Agency | Nature of Work | Amount in Rs. | Year |
|--------|---|---|---------------|------|
| 1 | Salim Ali Centre for Ornithology and Natural History (SACON) | Fault identification and repairing of solar street lights | Free of cost | 2007 |

Publications :

Journals :

- 1. Suresh V, Amirthagadeswaran K, **Vijayakumar S**, Varun B. Emission Characteristics of Diesel Engine using Water-in-Diesel Emulsified Fuel and its CFD Analysis, International Journal of Applied Environmental Sciences, 9 (5), 2014, pp. 2739-2749
- 2. **S. Vijayakumar** & S. Ganesan (2013): Size-dependent in vitro cytotoxicity assay of gold nanoparticles, Toxicological & Environmental Chemistry, OI:10.1080/02772248.2013.770858.
- 3. **Vijayakumar.S**, *In vitro* stability studies on gold nanoparticles with different stabilizing agents, International Journal of Current Science. 11:E, 84-93, 2014
- 4. **Vijayakumar,S** and Paulsi.S. Gold Nanoparticles in Early Detection and Treatment of Cancer: Biodistribution and Toxicities, Int. J. Pharm. Sci. Rev. Res., 20(2), 2013.
- 5. **Vijayakumar, S** and Ganesan, S."Gold Nanoparticles as an HIV Entry Inhibitor", Curr. HIV. Res., Vol.10, No.8, pp.643-646, 2012. [PubMed -22954307]
- 6. **Vijayakumar, S.** and Ganesan, S."In Vitro Cytotoxicity Assay on Gold Nanoparticles with Different Stabilizing Agents", Journal of Nanomaterials, Vol. 2012, pp 1-9, 2012.

- 7. **Vijayakumar, S.** and Ganesan, S., "Preparation and stability of gold nanoparticles", Indian J Phys., Vol.86, No.11, pp 989-995, 2012.
- 8. **Vijayakumar, S.** and Ganesan, S."Preparation and Characterization of Gold Nanoparticles with Different Capping Agents", International Journal of Green Nanotechnology, Vol.3(1), pp.47-55, 2011.
- 9. **Vijayakumar, S.** and Ganesan S. "A study on gold nanoparticles", Nano Digest, Vol.2, pp 42- 46, 2010.

International Conferences:

- 1. Oral presentation of Electronic intelligence in Combat Space in an "International Conference on Systemics, Cybernetics and Informatics" held from 12-02-2004 to 15-02-2004 at Dr.Marri Channa Reddy Human Resource Development Institute, Hyderabad.
- 2. Presented **Biomedical Application of Gold nanoparticles** in an International conference "Nanotechnology in India's Future" held at Bangalore Nano from 11-12-2008 to 13-12-2008

National Conferences:

1. Presented **Bioinformatics Security System** in a National Workshop on "Current Trends in Bioinformatics" on 06-01-2004 at Department of Biotechnology, Govt.College of Technology, Coimbatore

Books Published:

- 1. **S.Vijayakumar,** Engineering Physics II, Wiley India Private Ltd, New Delhi, India (2015). ISSN: 978-81-265-5244-3.
- 2. S.Nirmala, and **S.Vijayakumar**, Engineering Physics I, Wiley India Private Ltd, New Delhi, India (2014). ISSN: 978-81-265-4913-9.
- 3. **S.Vijayakumar**, Gold nanoparticles for Medical Application, Lambert Academic Publishing, Germany (2013). ISSN: 978-3659513749
- 4. **S.Vijayakumar**, Engineering Physics-I, R.K.Publishers, Coimbatore, India (2009)
- 5. **S.Vijayakumar**, Engineering Physics-II, R.K.Publishers, Coimbatore, India (2009)

- 6. **S.Vijayakumar**, Engineering Physics, R.K.Publishers, Coimbatore, India (2009)
- 7. R.Kesavasamy, and **S.Vijayakumar**, Engineering Physics, R.K.Publishers, Coimbatore, India (2008)
- 8. H.Ramakrishnan, K.Uthayarani, S.M.Rajeshwari, and **S.Vijayakumar**, Engineering Physics, R.K.Publishers, Coimbatore, India (2005)

Seminar, Conference, Workshop Organized:

| S.No. | Title | Duration | Level (Intern./ National) |
|-------|---------------------|-----------------|---------------------------------|
| 1 | Engineering Physics | 8 – 18 Dec 2015 | National |
| 2 | First Aid workshop | 27-02-2006 | Institutional |

Seminar, Conference, Workshop Attended:

- 1. Participated 1 week **coordinators workshop on Engineering Physics** from 07 to 11 September 2015 in IIT Bombay, India.
- 2. Participated 2 day workshop on "High Resolution Transmission Electron Microscopy and Scanning Probe Microscopy" 23 & 24 January 2015 at PSG Institute of Advanced Studies
- 3. Attended 2 day workshop on **Bridge course in Physics** on 20 & 21 June 2014 in Anna University, Chennai, India.
- 4. Participated in the workshop on "Measuring Techniques on Nanotechnology" held at PSG Institute of Advanced Studies, Coimbatore organized with Agilent Technologies on 25th June 2013.
- 5. Participated in the workshop on "*Research Methods in Teaching*" held at Sri Ramakrishna Institute of Technology, Coimbatore organized with Indian Institute of Technology Bombay on 9th and 16th January 2013.

- 6. Participated in the workshop on "Engineering Thermodynamics" held at Sri Ramakrishna Institute of Technology, Coimbatore organized with Indian Institute of Technology Bombay on 11th to 21st Dec.2012.
- Participated in the workshop on "Aakash for education" held at Sri Ramakrishna Institute of Technology, Coimbatore organized with Indian Institute of Technology Bombay on 10th and 11st Nov.2012.
- 8. Participated in the Seminar on "Need Based Approach for Effective teaching" held at Sri Ramakrishna Institute of Technology, Coimbatore organized with University Grants Commission on 21st June 2011.
- 9. Participated in the workshop on "Virtual lab" held at Amrita Vishwa Vidyapeetham, Coimbatore organized with IEEE & ICTEE on 5th Jan.2011.
- 10. Participated in the conference on "Advances in Nanoscience and Technology" held at Anna University Chennai, organized with ICTP Italy on $28^{th} 30^{th}$, Oct. 2009.
- 11. Participated in the Seminar on "Emerging Research Trends in Thinfilm and Nanotechnology" held at Government College of Technology, Coimbatore on 3rd Oct. 2011.
- 12. Participated in the workshop on "Dale Carnegie Training High Impact Teaching Skills" held at Sri Krishna Institute of Engineering and Technology, Coimbatore organized with Wipro and Anna University, Chennai on 8th and 9th June 2009.
- 13. Participated in the Seminar on " *The Seventh Framework Programme (FP7)*" held at Taj Corramendal Hotel, Chennai organized with DST and European Commission on Research and Cooperation on 12th July 2008.
- 14. Participated in the Seminar on "Communication, Computation, Control and Automation" held at Sri Ramakrishna Institute of Technology, Coimbatore organized with South Dakota School of Mines and Technology on 25th and 26th April 2008.
- 15. Participated in the faculty development programme on "Inculcating Open Source Software Development & its use in Multi Disciplinary Engg. Domains" held at PSG College of

Technology, Coimbatore organized with All India Council for Technical Education on 26th June to 6th July 2007.

- 16. Participated in the workshop on "Free & Open Source Software in Science" held at Union Christian College, Alwaye, Kerala organized with UGC and IOSSO 4th to 6th Jan. 2007.
- 17. Participated in the workshop on "*First Aid Workshop*" held at Sri Ramakrishna Institute of Technology, Coimbatore organized with NSS on 27th Feb. 2006.
- 18. Participated in the workshop on "*Technologies for Rural Development*" held at Coimbatore Institute of Technology, Coimbatore organized with NSS, Anna University, Chennai on 3rd March 2005.
- 19. Participated in the workshop on *"Instructional Methods"* held at Sri Ramakrishna Polytechnic College, Coimbatore organized with ISTE chapter-SRPTC on 4th Jan. 2003.

Membership in Professional Bodies:

1. Senior member in American Chemical Society

Contributions to the Institution, Department and Society:

- Actively participated during NBA and NAAC expert visits
- Held the office of **Head of the Department** in Physical Sciences Department from 2015.
- Completed one research Project funded by Government of Tamil nadu
- Applied 6 research Proposals to different funding bodies
- Expert member in the Department of Science and Technology in research project evaluation.
- Held the office of Transport officer from 28-10-2002, executing the duties of College transport.
- Held the office of ID Card in-charge from 28-10-2002 to 18-08-2007
- Executing duties as an Internal Examination coordinator from 2004 to 2006
- Setup the **Physics and Chemistry Laboratory** during 2002- 2003 and Physics Laboratory incharge since 01-02-2003.

- NSS programme officer for three years (2003-2006)
- Organized three **community development Camp** for the duration of ten days each
- Community development programme like self employment practice for the village youth & Women.
- Organized awareness programme like AIDS, Small saving, Importance of education, Bad effects
 of liquor, Safe guard the environment etc.

Awards and Recognitions:

| 2014-2015 | Dr.S.Radhakrishnan Award for Academic Excellence by the Alumini Association |
|-----------|--|
| 2014-2015 | Ph.D. supervisor recognition from Anna University, Chennai. |
| 2012-2013 | News paper appreciation for the research fund generated from Tamilnadu State |
| | Council for Science and Technology, Government of Tamilnadu in Hindu, |
| | Education plus on 21st May |
| 2009-2010 | Best Team Award for Mission 10X – Wipro High Impact Teaching Skills |
| 2003-2004 | News paper appreciation about the International conference held at Hyderabad |
| | by Malaimurasu on April 4 th 2004 |
| 1984-1985 | Two Star Award from the Ministry of Education and Culture for participation in |
| | National Physical Fitness Programme |