

Curriculum Vitae

Karthik Arumugam

CV

Dr. Karthik Arumugam, MSc, M.Tech, PhD.
Department of Nanoscience and Technology
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Personal Details

Date of Birth : 15, May 1985
Nationality : Indian
Sex/Marital Status : Male/Married
Languages : English, Tamil
Permanent & Mailing Address : 519, Chinnor North Street, Parangipettai (PO),
Chidambaram (TK), Cuddalore (DT). PIN- 608502, Tamil Nadu, India

Research area

- Mass production of metal oxides nano composites
- Nanostructured engineering coating
- Electrochemical corrosion
- Photocatalyst for effluent waste water treatment
- Supercapacitor & Lithium-ion battery

Research Interests

- Triboelectric and Piezoelectric nanogenerator (TPNG)
- Ceramic membrane water purification

Instruments Handling

Spray pyrolyser	Autolab
Particle Size Analysis-DLS	Nano indentation
Surface area analyzer-BET	Thermal Analysis TG/DTA
Fourier transforms infrared Spectroscopy-FTIR	UV and PL Analysis
Atomic Force Microscope-AFM	Eletrospinning
Spin coating technique	Contact Angle
X-ray Fluorescence spectroscopy-XRF	On-line Ultrasonic-Chatraterisation
Four Probe method	Ball Milling
Sonochemical reactor	Hydrothermal

Education

- 2011-2016 Ph.D. in Technology**, Anna University, Chennai, India "**Al₂O₃-ZrO₂ metal oxide nanocomposites for surface protective coating applications**" thesis entitle.
- 2009-2011 M. Tech, in Nanoscience and Technology**, Centre for Nanoscience and Technology, K. S. Rangasamy College of Technology affiliated to Anna University, Chennai, India. First class with distinction – **86%**
- 2006-2008 M.Sc. in Physics**, Department of Physics, Annamali University, Chidambaram, India. First class - **64%**
- 2003-2006 B.Sc. in Physics**, Periyar Arts College affiliated to Thiruvalluvar university, Villupuram, India. First class – **68 %**

Teaching and Research Experience

- August 02, 2021- Till date** Associate Professor, Centre for Nanoscience and Technology, K. S. Rangasamy College of Technology, Tiruchengode-637215, Namakkal, Tamil Nadu, India
- March,2019 – August 01, 2021** Assistant Professor, Centre for Nanoscience and Technology, K. S. Rangasamy College of Technology, Tiruchengode-637215, Namakkal, Tamil Nadu, India
- July,2017-May,2018** Assistant Professor (On Contract), Department of Physics, Central University of Tamil Nadu, Thiruvavur-610 101, India
- Aug,2016-May,2017** Guest Faculty, Department of Physics, Pondicherry University (A Central University), Puducherry-605014, India
- May,2011-June,2016** Researcher and CSIR-SRF, Centre for Nanoscience and Technology, K. S. Rangasamy College of Technology, Tiruchengode-637215, Namakkal, Tamil Nadu, India
- Monitoring research projects
 - Guiding, teaching to B.Tech and M.Tech student

Awards and Honors

- **April, 2013-2016, March** Direct- CSIR-SRF (Senior Research Fellow), New Delhi, India
- **Best poster award (Silver Prize)** International Conference on Nanomaterials and Nanotechnology, Tiruchengode, Indian, December 13-16, 2010. "Synthesis and Characterisation of Al₂O₃-ZrO₂ Binary Nanoparticle"**A. Karthik**, S. Arunmetha, M. Rajkumar, P. Manivasakan and V. Rajendiran

2012- 2016 (Ph.D.) Graduated
Research Group of Prof. Venkatachalam Rajendran
Centre for Nanoscience and Technology
K.S.Rangasamy College of Technology, Anna University, Tamil Nadu, India

Academic role and responsibilities in Department

- R&D Coordinator
- Board of Studies Coordinator
- NAAC Coordinator
- Institution Innovation Council (IIC) Coordinator

Research and Development Activities

S.No.	Particulars	Nos.
1	Peer reviewed International Publications	36
	Publication in under Review	05
	Citations: 501 , h-index: 15 , i10 index: 21 , Cumulative IF: 115.0 , AVG. IF: 3.59	
	Journals in SCI: 32 , Scopus/Web of Sci.: 04 , List of Q1 Journals: 33	
2	Publications in International Conference Proceedings	2
3	Papers, Posters, and Abstracts Presented in National and International Conference	11
4	Invited Talk in National Workshop and conference	6
5	Student Projects Completed (B.Tech & M.Tech.,)	16
6	PhD student guiding	01
7	Pattern Published	01
8	TNSCST student project completed	02
Research profile ID		
	<ul style="list-style-type: none"> • https://scholar.google.com/citations?user=9UPZ6zwAAAAJ • Web of Science Researcher ID: AAU-8724-2020 • https://orcid.org/0000-0002-8835-0528 	

Funding Research Proposal

Project Received

S.No	Title	Investigator	Funding Agency	Cost (INR)
1	Orderly arranged bismuth oxide nanosheet/graphitic carbon nitrate ($\text{Bi}_2\text{O}_3/\text{gC}_3\text{N}_4$) composite as electrode material for supercapacitor applications	PI	TNSCST, Student Projects Scheme.	7500/-
2	Fabrication of graphene oxide blended $\text{MnO}_2/\text{Fe}_2\text{O}_3$ nanostructured anode materials in lithium ions battery for energy density and life cycle improvement	PI	TNSCST, Student Projects Scheme.	7500/-

Patent -Published

1	Nanocomposite polymeric film to adsorption the CO and Hydrocarbons from the vehicles exhaust smoke	Application No: 202341030064 A/ 26/04/2023
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Reviewer for International Journals

S.No	Name of the Journals	Impact factor	No. of articles reviewed
1	Journal of Materials Science: Materials in Electronics	2.779	7
2	International Journal of Polymeric Materials and Polymeric Biomaterials	3.221	1

List of Publications in Peer Reviewed International Journals-36 & Under Review-05

1. M. Karthick, S. Surendhiran, K.S.G. Jagan, S. Savitha, T M Naren Vidaarth, KS Balu M, Jaganathan, **Karthik A***, B. Kalpana, (2023) Synthesis and characterization of Araucaria *columnaris* leaf-mediated NiO nanoparticles for removal of pharmaceutical pollutants in municipal water bodies, *Applied Physics A* <https://doi.org/10.1007/s00339-023-06876-8> **IF: 2.7.**
2. V.S. Sangeetha, P. Nithyadharseni, **A. Karthik**, V. Rajendran, (2023) One pot green synthesis of few-layer graphene (FLG) by simple sonication of graphite and Azadirachta Indica resin in water for high-capacity and excellent cyclic behavior of rechargeable lithium-ion battery, *Diamond & Related Materials*, <https://doi.org/10.1016/j.diamond.2023.110203>. **IF: 4.1.**
3. K. Narthana, **A. Karthik**, G. Murugadoss, V. Rajendran, (2023) Hydrothermally distributed heterostructure Ni-Mo-S/rGO nanocomposite for supercapacitor application, *Inorganic Chemistry Communications*, <https://doi.org/10.1016/j.inoche.2023.111013>. **IF: 3.8.**
4. K.S. Balu, **A. Karthik***, S. Surendhiran, S. Sruthi and S. Savitha, S, (2023) A structural and phase influences the physico-chemical, in vitro bioactivity of alumina-zirconia nanoparticles loaded chitosan-sodium alginate scaffold for biomedical applications, *Polymers for Advanced Technologies* , <https://doi.org/10.1002/pat.6078>. **IF: 3.348**
5. K.S.G. Jagan, S. Surendhiran, S. Savitha, K.S. Balu, M. Karthick, T.M. Naren Vidaarth, **A. Karthik***, B. Kalpana, R. Senthilmurugan, (2023) Influence of different alkaline actuators in synthesis of NiO NPs: A comparative green approach on photocatalytic and in vitro biological activity. *Inorganic Chemistry Communications*, <https://doi.org/10.1016/j.inoche.2023.110618>. **IF: 3.8.**
6. S. Savitha, S. Surendhiran, K.S.G. Jagan, **A. Karthik***, B. Kalpana, R. Senthilmurugan, (2022) Evaluation of physicochemical characteristics and photocatalytic activity of cobalt oxide nanoparticles derived from Moringa seed extract, *Journal of Materials Science: Materials in Electronic*, doi.org/10.1007/s10854-022-09506-w. **IF:2.8**
7. Balu, KS, Nidhusha R, **Karthik A**, Suriyaprabha R, Karthik, Surendhiran S, Lenin N, Wilhelm K A & Rajendran V, (2022) Curcumin loaded gold nanoparticles–chitosan/sodium alginate nanocomposite for nanotheranostic applications, *Journal of Biomaterials Science, Polymer Edition*, doi.org/10.1080/09205063.2022.2151819, **IF: 3.682**
8. Balu, KS, Suriyaprabha, R, Karthik, S, Surendhiran, S, Narthana, K, **Karthik A**, Manojkumar P, Wilhelm K. Aicher & Rajendran, V, (2022) Biomimetic development of chitosan and sodium alginate based nanocomposites contains zirconia for tissue engineering applications, *Journal of Biomedical Materials Research: Part B - Applied Biomaterials*, DOI 10.1002/jbm.b.35052. **IF:3.405**
9. Balu, KS, Vinoth M, **Karthik A**, Suriyaprabha, R, Karthik, S, Surendhiran, S, , Narthana, K, Wilhelm K. Aicher & ; Rajendran, (2022) Silica incorporated chitosan-sodium alginate nanocomposite scaffolds for tissue engineering applications, *International Journal of Polymeric Materials and Polymeric Biomaterials*, doi.org/10.1080/00914037.2022.2032703. **IF:3.221**
10. N. Lenin, **A. Karthik**, S.R. Srither, M. Sridharpanday, S. Surendhiran, M. Balsubramanian, (2021) Synthesis, structural and microwave absorption properties of Cr-doped zinc lanthanum nanoferrites Zn_{1-x}Cr_xLa_{0.1}Fe_{1.9}O₄ (x=0.09, 0.18, 0.27 and 0.36), *Ceramic International*, DOI 10.1016/j.ceramint.2021.09.030. **IF: 5.2**
11. S. Kandasamy, P. Rathinasamy, N.Nagarajan, **A.Karthik**, R. Rathanasamy, G. V. Kaliyannan, (2020) Corrosion behavioral studies on AA7075 surface hybrid composites tailored through friction stir processing, *Anti-Corrosion Methods and Materials*, Vol. 67 (4). **IF: 1.11**
12. **A. Karthik**, S. R. Srither, N. R. Dhineshbabu, N.Lenin, S. Arunmetha, P. Manivasakan, V. Rajendran*, (2020) Stabilization of tetragonal zirconia in alumina-zirconia and alumina-yttria stabilized zirconia nanocomposites: A comparative structural analysis, *Materials Characterization*, DOI: 10.1016/j.matchar.2019.109964. **IF: 4.7**
13. S. Arunmetha, M. Vinoth, S.R. Srither, **A. Karthik**, M. Sridharpanday, R. Suriyaprabha, P. Manivasakan, And V. Rajendran, (2018) Study on Production of Silicon Nanoparticles from Quartz Sand for Hybrid Solar Cell Applications, *Journal of Electronic Materials*, 47, (1), DOI: 10.1007/s11664-017-5794-0 **IF: 2.1**
14. L. Arunraja, P. Thirumoorthy, **A. Karthik**, R. Subramanian & V. Rajendran, (2017) Investigation and characterization of ZnO/CdS nanocomposites using chemical precipitation method for gas sensing applications, *Journal of Materials Science: Materials in Electronic*, DOI 10.1007/s10854-017-7756-y. **IF: 2.8**
15. S. Arunmetha, V. Rajendran, M. Vinoth, **A. Karthik**, S. R. Srither, M. Srither Panday, N. Nithyavathy, P. Manivasakan and M. Maaza, (2017) An efficient photoanode for dye sensitized solar cells using naturally derived S/TiO₂ nanoparticles, *Materials Research Express*, 4, 035016. **IF: 2.3**
16. L. Arunraja, P. Thirumoorthy, **A. Karthik**, R.Subramania, and V. Rajendran, (2017) Effect of EDTA on cadmium sulfide thin films for oxygen gas sensor applications, *Journal of Alloys and Compounds*, 706, 470–477. **IF: 6.2**
17. S. Praveenkumar K. Sakthipandi Kathiresan, M. Sridharpanday, M. Selvam, **A. Karthik**, S. Surendhiran, N. Palanivelu, V. Rajendran and G. Rajkumar, (2017) Structural and phase transition of Mg-doped on Mn-site in La_{0.7}Sr_{0.3}MnO₃ bulk/nanostructured perovskite characterised through online ultrasonic technique, *South African Journal of*

18. S.R. Srither, **A. Karthik**, S. Arunmetha, D. Murugesan, V. Rajendran. (2016) Electrochemical supercapacitor studies of porous MnO₂ nanoparticles in neutral electrolytes, *Materials Chemistry and Physics*, 183, 375–382. **IF: 4.6.**
19. **A. Karthik**, S. Arunmetha, S. R. Srither, P. Manivasakan and V. Rajendran. (2016) High temperature corrosion resistance of silicate based nanostructured thermal barrier coatings using Al₂O₃–(Y₂O₃) ZrO₂/SiO₂ nanocomposite, *Surface coating and Technology*, 292, 110–120. **IF: 5.2**
20. M Kruthika, K Ramesh, S Shankar, V Suresh Kumar, **A Karthik**, PK Sasikumar, (2016) Comparison of dentin hardness between conventional drill and chemomechanical methods in primary and permanent dentition using nanoindenter, *Journal of Indian Association of Public Health Dentistry*, 14(1):88, DOI: 10.4103/ 2319-5932.178725.
21. L. Arunraja, P. Thirumoorthy, **A. Karthik**, L. Edwinpaul, and V. Rajendran, (2016) EDTA Decorated Nanostructured ZnO/CdS Thin Films for Oxygen Gas Sensing Applications, *Journal of Electronic Materials*, 45, 8, pp 4100–4107. **IF:2.1**
22. Sridhar panday, N. Priya Dharishni, M. Vinoth, **A. Karthik**, S. Arunmetha, P. Paramasivam and V. Rajendran. (2016) Effect of temperature on the electrical properties of nanocrystalline Ca Ti_{1-x}FexO₃ perovskite, *Journal of Materials Science: Materials in Electronics*, 27, 1, 620-630. **IF: 2.8**
23. M. Vinoth, R. Surya Prabha, S. Arunmetha, **A. Karthik**, S. Karthik, P. Paramasivam, P. Prabu, P. Manivasakan, K. Saminathan and V. Rajendran. (2015) Synthesis of Notapodytes nimmoniana leaf nanoparticles for antireflective and self-cleaning applications, *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, DOI: 10.1080/15533174.2015.1040164. **IF: 1.514**
24. L. Arunraja, P. Thirumoorthy, **A. Karthik**, L. Edwinpaul, and V. Rajendran, (2015) Structural, optical, morphology and electrical properties of cadmium sulfide nanoparticles: a simple chemical route, *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, DOI: 10.1080/15533174.2015.1137037. **IF: 1.514**
25. N. Lenin, **A. Karthik**, M. Sridharpanday, M. Selvam, S.R. Srither, S. Arunmetha, P. Paramasivam and V. Rajendran. (2015) Electrical and magnetic behavior of iron doped nickel titanate (Fe³⁺/NiTiO₃) magnetic nanoparticles, *Journal of magnetism and magnetic materials*, 397, 281–286. **IF: 2.7**
26. S.R. Srither, **A. Karthik**, D. Murugesan, S. Arunmetha, M. Selvam, V. Rajendran (2015), Electrochemical capacitor study of spherical MnO₂ nanoparticles utilizing neutral electrolytes. *Frontiers in Nanoscience and Nanotechnology*, 1 (1), 13-20. **IF: 1.20**
27. S. Arunmetha, **A. Karthik**, S. R. Srither, M. Vinoth, R. Suriyaprabha, P. Manivasakan and Rajendran. (2015) Size-dependent physicochemical properties of mesoporous nanosilica produced from natural quartz sand using three different methods, *RSC Advances*, 5, 47390-47397. **IF: 4.036**
28. V. Rajendran*, **A. Karthik**, S.R. Srither, S. Arunmetha, P. Manivasakan. (2015) Effect of high temperature on the surface morphology and mechanical properties of nanostructured Al₂O₃-ZrO₂/SiO₂ thermal barrier coatings, *Surface and Coating Technology*, 262, 154–165. **IF: 5.2**
29. S. Praveen Kumar, K. Sakthipandi, R. Gayathiri, M. SridharPanday, **A. Karthik** and V. Rajendran. (2015) Ferromagnetic–paramagnetic transition temperature in bulk and nanostructured La_{0.7}Sr_xCa_{0.3-x}MnO₃ (x = 0.10, 0.15, and 0.20) manganite materials, *Rare Metals*, DOI:10.1007/s12598-015-0516-3. **IF: 8.8**
30. **Karthik**, S. Arunmetha, S.R. Srither, P. Manivasakan, V. Rajendran. (2015) Nano alumina- zirconia blended epoxy polymeric composites for anticorrosive applications, *Journal of sol-gel science and technology*, 74 (2), 460-471. **IF: 2.5**
31. S.R. Srither, **A. Karthik**, M. Selvam, K. Saminathan, V. Rajendran and Karan V. I. S. Kaler. (2014) Nano-sized MnO₂ particles produced by spray pyrolysis for a Zn/MnO₂ primary cell: comparative discharge performance studies with their bulk counterparts, *RSC Advances*, 4, 42129-42136. **IF: 4.036**
32. N. R. Dhineshbabu, P. Manivasakan, **A. Karthik** and V. Rajendran. (2014) Hydrophobicity, flame retardancy and antibacterial properties of cotton fabrics functionalised with MgO/methyl silicate nanocomposites, *RSC Advances*, 4, 32161-32173. **IF: 4.036**
33. O.K. Simya, M. Selvam, **A. Karthik** and V. Rajendran, (2014) Dye-sensitized solar cells based on visible-light-active TiO₂ heterojunction nanoparticles. *Synthetic metals*. 188, 124–129. **IF: 4.4**
34. S. Arunmetha, P. Manivasakan, **A. Karthik**, N. R. Dhinesh Babu, S.R. Srither and V. Rajendran. (2013) Effect of processing methods of physicochemical properties of titania nanoparticles from rutile sand. *Advanced Powder Technology*. 24, 972-979. **IF: 5.2**
35. P. Manivasakan, **A. Karthik** and V. Rajendran. (2013) Mass production of Al₂O₃ and ZrO₂ nanoparticles by hot-air spray pyrolysis. *Powder Technology*. 234, 84-90. **IF: 5.2**
36. **A. Karthik**, P. Manivasakan, S. Arunmetha, R. Yuvakkumar, V. Rajendran. (2013) Production of Al₂O₃-Stabilized Tetragonal ZrO₂ Nanoparticles for Thermal Barrier Coating. *International Journal of Applied Ceramic Technology*. 10, 887-899. **IF: 2.3**

Conference Proceedings

1. **A. Karthik**, S. Arunmetha, P. Manivasakan, R. Yuvakumar and V. Rajendran. Alumina–zirconia nanoparticles for corrosion protection of mild steel (EN3) specimen, Proceedings of the International Conference: MAM-12, 2012 November 21-25, 2012 at Le Meridian, K. S. Rangasamy College of Technology, Tiruchengode, Tamil Nadu, India.
2. S. Arunmetha, **A. Karthik**, S.R. Srither, P. Manivasakan and V. Rajendran. Natural rutile–derived titania nanoparticles for photocatalytic applications, Proceedings of the International Conference: MAM-12, 2012 November 21-25, 2012 at Le Meridian, K. S. Rangasamy College of Technology, Tiruchengode, Tamil Nadu, India.

Book Chapter

S.No.	Title	Publisher	Year
1.	Co-editor Souvenir: International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-2012)	Sun Printer Publishing Pvt. limited	2012
2.	Co-editor Souvenir: International conference on nanomaterials and nanotechnology (NANO-2015)	Bloomsbury Publishing India Pvt. Limited	2015

Conference Workshop and Academics Program Participation

1. Participated Faculty Development programme on Advanced materials for Energy conservation and storage: Fundamentals to Device fabrications, organized by CSIR-Central Electrochemical Research, Karaikudi during the December 19-21, 2022.
2. Participation on SERB Sponsored workshop on Electroanalytical Techniques and their applications, organized by PSGR, Krishnammal College for Women, Coimbatore during Nov 18-18, 2022.
3. **FDP** on Blended/Hybrid "NOVEL MATERIALS & APPLICATIONS" from 2022-09-12-2022-09-17 to 2022-09-19-2022-09-23 at Institute Of Aeronautical Engineering, AICTE Training And Learning (ATAL) Academy, New Delhi.
4. **Participation on one week online workshop** on Materials Technology Advancement in current scenario-MTACS202, organized by Sathyabama Institute of Technology, Chennai. July 04-10,2020.
5. **Participation** on One week Research meet on Patent to All, Organized by Research Brain Academic Lab, 29.06.2020 – 04.07.2020.
6. **Participation** on Science and Adacadamies's Science leadership workshop, Indian First science leadership Programme, organized by Central University of Punjab, June 22-28, 2020.
7. Attended an Online FDP on "Advanced Materials for Energy Harvesting, Conversion and Storage" organized by Department of Science and Humanities, MLR Institute of Technology, Hyderabad during 19th – 23rd June, 2020.
8. **Participation** on Instructional and assessment characteristics of **OBE frame work** and hands on practices for designing and mapping out comes organized by K S R College of Engineering, Thiruchengode, and November 19-21, 2019.
9. **Participation-** on Short term training Programme on **NBA Accreditation**, organized by National Institute of Technical Teachers Training and Research, April 22-26, 2019.
10. **Participation-Workshop** on J gate – An electronic Gate way for research organized by Central Library, K S R College of Engineering, Thiruchengode, July 10, 2019.
11. **Participation -Workshop** On Quantum Information Science (WOQIS-2017) organized by Department of Physics, Pondicherry University, Pondicherry, India , February 17-18, 2017.
12. **Poster- A. Karthik**, N. Ravivarman, S.R. Srither, S. Arunmetha and V. Rajendran. Electrochemical corrosion behavior of nano Al₂O₃-ZrO₂ filled silica sol coating on SS 316L specimens in different electrolytes, International Conference on Nanomaterials and Nanotechnology (NANO-2015) at Tiruchengode, Indian, December 07-10, 2015.
13. **Oral-V. Rajendran**, S.R. Srither, P. Manivasakan, **A. Karthik** and M. Selvam, Mass Production of MnO₂ Nanoparticles for High Performance Zinc Primary Batteries, International Conference on materials for Nano Energy Convergence (ICMENC-2013), July 04-07, 2013, Hindustan University, Coimbatore, Tamil Nadu, India.
14. **Oral- N.R. Dhineshbabu**, **A. Karthik**, P. Manivasakan, P. Prabu, V. Rajendran, Zirconia embedded on Silica sol coated on non-woven cotton fabric. International conference on Advanced Materials (ICAM 2012), Chennai, India, January 5-7, 2012.
15. **Poster-** Synthesis and characterization of ZrSiO₄ for replacing gate oxide applications. A.M. Vishali, M. Selvam, **A. Karthik**, P. Manivasakan, P. Prabu, V. Rajendran. 6th International Symposium on Macro- and Supramolecular

Architectures and Materials (MAM – 12): NANO SYSTEM AND APPLICATIONS, Coimbatore India, Sep, 21-25, 2012.

16. **Poster-** National Workshop on Nanotechnology for Defence Applications (NWNDA-2011). Solid State Research Laboratory (SSPL), Defence Research Development Organisation, New Delhi, India, November 16-17, 2011.
17. Science Academies Lecture Workshop on “Selected Topics of Pure and Applied Physics” Sponsored by Indian Academy of Sciences (IASc), Indian National Science Academy (INSA) and National Academy of Sciences (NAS) venue at K. S. Rangasamy college of Technology, Tiruchengode. February, 06-08, 2015.
18. National Conference on “Nano Meet”-2010 at Anna University, Chennai.

Conference/DST Inspire Organized

1. **Organizing Secretary:** Virtual National Conference on Innovation in Science and Technology for Industrial Applications, Venue at K. S. Rangasamy college of Technology, Tiruchengode, Indian, June 01-03, 2022.
2. **Secretarial Assistance:** International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-2012) venue at K. S. Rangasamy college of Technology, Tiruchengode. November 21-25, 2012.
3. **Organising Committee:** International Conference on Nanomaterials and Nanotechnology (NANO-2015) venue at Tiruchengode, Indian, December 07-10, 2015.
4. To popularize science and to inspire and motivate school children, i have been actively involved to organizing **DST-INSPIRE program** (29 INSPIRE camps since 2010 with a total of 12185 students across Tamil Nadu), which includes participation of Nobel laureates (Dr. Richard R. Ernst, Dr. Hartmut Michel, Dr. Ivar Giaever, and Dr. Robert Huber).

Invited Talk in National Workshop and Conference

1. **Resource Person** in Workshop “Dhakshaa 2022”, entitled on “Electrochemical Techniques: Organized by K. S. Rangasamy College of Technology, Tiruchengode, May 27-28, 2022.
2. **Resource person** in Webinar entitled on Metal oxide nanocomposites and its Environmental barrier coating, Organized by Department of Civil Engineering, Achariya College of Engineering and Technology, Puducherry on 24.01.2022.
3. **Resource person** in Webinar entitled In Fundamentals of Nanoscience and Technology: Industrial applications, Organized by Department of Physics, Nehru Institute of Technology, Coimbatore on 16.07.2021.
4. **Invited talk** in the topic “Material Characterization Tools” on 22.08.2020 at NOVUS 2020, an online webinar series organised by Arrkay Engg Works, Pvt Ltd, Chennai.
5. **Invited talk** on Faculty development lecture series under the title of Techniques in Writing Research Proposal at Arjun College of Technology, Coimbatore during May 12, 2021