# CURRICULUM VITAE

**Dr. K. JOTHIVENKATACHALAM,** M.Sc., M.Phil., Ph.D., FICCE, MRSC
***Professor& Head***
*Department of Chemistry*
*Bharathidasan Institute of Technology (UCE- BIT Campus)*
*Anna University,*
*Tiruchirappalli 620 024*
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**Research Gate: https://www.researchgate.net/profile/Kandhasamy_Jothivnkatachalam**

**Google scholar: https://scholar.google.co.in/citations?user=SKtLwzQAAAAJ&hl=en**

**Vidwan id: https://vidwan.inflibnet.ac.in/profile/423368**

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## ➢ Research Area:

- Photocatalysis and Photo-electrochemistry for Energy conversion & Environmental Remediation.
- Materials Synthesis for Energy Conversion and Environmental applications.
- Photochemistry of coordination compounds.

## ➢ Educational Qualifications:

| Qualification | College/University | Year of completion | Percentage | Class |
|---|---|---|---|---|
| Ph.D. (specialization) | University of Madras, Chennai | 2003 | - | Highly Commented |
| M.Phil. | University of Madras, Chennai | 1998 | 59.12% | Second Class |
| Master of Science(M.Sc.) | Annamalai University, Chidambaram | 1993-1995 | 65.81% | First Class |
| Bachelor of Science (B.Sc.) | KKC, Namakkal, University of Madras, Chennai | 1990 - 1993 | 67.55% | First Class |

**Experience:**

| Name of Company / Institutions | Designation of Post | From | To | Experience in Year |
|---|---|---|---|---|
| Anna University, UCE - BIT Campus, Tiruchirappalli | Professor | 15-09-2015 | Till Date | 7 years 11 months |
| Anna University, UCE - BIT Campus, Tiruchirappalli | Associate Professor | 15-09-2012 | 14-09-2015 | 3 Year |
| Anna University, BIT Campus, Tiruchirappalli | Assistant Professor | 15-09-2009 | 14-09-2012 | 3 Year |
| Anna University of Technology, Tiruchirappalli | Senior Lecturer | 09-10-2007 | 14-09-2009 | 1 year 11 months |
| Sri Krishna College of Engineering and Technology, Coimbatore | Lecturer | 05-05-2003 | 04-10-2007 | 4 years 4 months |

- **Awards / Honours Received:**

| Sl.No. | Recognition / Awarded | Year | Agency |
|---|---|---|---|
| 1 | C.N.R. RAO Best Scientist Award | 2022 | Bose Science Society |
| 2 | Outstanding Scientist Award | 2021 | VDGOOD Technology, India |
| 3 | DST - Young Scientist Award | 2009 | DST- SERC, Ministry of Science and Technology, Fast Track Scheme |
| 5 | 1st prize in Presentation in International Conference on Renewable Energy Science and Technology | 2017 | Alagappa University, Karaikudi |
| 6 | 1st prize in Presentation in Second International Conference on Advanced Oxidation Process (AOP 2012) | 2012 | Mahatma Gandhi University, Kottayam |

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|---|---|---|---|
| 7 | 1st prize in Presentation in National Seminar on New Vistas in Catalysis and Surface Science (NVCSS – 2012) | 2012 | Annamalai University, Annamalainagar |

## ➢ Additional / Academic Responsibilities at University:

- ***Professor & Head*** , Department of Chemistry, University College of Engineering, Bharathidasan Institute of Technology (BIT Campus), Anna University, Tiruchirappalli.
- ***Academic Coordinator*** - University College of Engineering, Bharathidasan Institute of Technology (BIT Campus), Anna University, Tiruchirappalli.
- ***Core Committee Member*** - University College of Engineering, Bharathidasan Institute of Technology (BIT Campus), Anna University, Tiruchirappalli.
- ***Deputy Director***- **Centre for Affiliations of Institution** (**CAI**)of Anna University Chennai, Regional office, Tiruchirappalli -620024 from 02nd August 2013 to 16th June 2015.
- ***University Coordinator*** - **National Service Scheme (NSS**) - 52 colleges having 80 NSS units of Anna University, Regional office, Tiruchirappalli from 22nd July 2011 to 03rd December 2013.
- ***University Coordinator*** - **Red Ribbon Club (RRC)** Anna University of Technology, Tiruchirappalli from 22nd July 2011 to 03rd December 2013.
- ***University Coordinator*** - **Youth Red Cross (YRC)** Anna University of Technology, Tiruchirappalli from 22nd July 2011 to 03rd December 2013.
- ***Health Coordinator*** - BIT-Campus, Anna University, Tiruchirappalli from 13th September 2012 to 19th September 2013.
- ***Library Coordinator*** - BIT-Campus, Anna University, Tiruchirappalli from 11th September 2012 to 19th September 2013.
- ***Board of Study member***

1. Holly Cross College, Tiruchirappalli.
2. V. S. B. Engineering college, Karur.
3. Department of Energy Science, Alagappa University, Karaikudi.
4. Vivekananda College of engineering for women, Tiruchengode.
5. School of chemistry, BharathidasanUniversity,Trichy.
6. Department of Applied Science, PSG College of Technology, Coimbatore.
7. KPR Institute of Engineering and Technology, Coimbatore.
8. Dhanalakshmi Srinivasan Engineering College, Perambalur.
9. Nehru Institute of Technology, Coimbatore.

- ***Governing Council Member*** - Kongunadu College of Engineering,Thottiyam,Nammakal, Tamilnadu.

- **STEERING Committee and Executive committee Member** in Swadeshi Science Movement of India, Vigyan Bharati, Delhi.

- **Selection Committee Member** – Bharathidhasan University, Tiruchirappalli.
- **Member of Planning Board** – Alagappa University, Karaikudi
- **Member**in Ph.D candidate selection panel, Anna University of Technology, Tiruchirappalli.

- **Committee Member** for Evaluation of project proposal from constituent colleges by college-level committee for funding under young faculty scheme.

- **Member** -Anna University Affiliating Inspection Committee.

- **Member**- Malpractice Enquiry Committee.

- **Chairman, Chief Examiner, Examiner, Squad Memberand AUR -** for Anna University Examinations.

- ***Editorial Board Member***- for the Journal Environmental Nanotechnology, Publisher: Environ.

- **Reviewer -** for the Refereed Journals of ACS, RSC, Elsevier, Springer publications.

- **External Examiner-** For Ph.D viva-voce and thesis evaluation Examiner for Various universities and autonomous colleges

- ***Question Paper Setter and External Examiner***for Theory and Practical Examinations of Various universities and autonomous colleges of Engineering and Arts and Science like Annamalai University – Chidambaram, Alagappa University – Karaikudi, Pondicherry Engineering College – Puducherry, SonaCollege of Engineering and Technology (Autonomous) –Salem, KSR College of Engineering and Technology (Autonomous) – Tiruchengode, Paavai Engineering College (Autonomous) – Namakkal, Pondicherry University – Puducherry, etc.

- ***Doctoral Committee Member***- for Ph. D scholars of National Institute of Technology (NIT-T), Tiruchirappalli, Anna University – Chennai, Bharathidasan University – Tiruchirappalli, Alagappa University – Karaikudi, Periyar University – Salem, Bharathiyar University – Coimbatore, Periyarmaniammai university – Tanjore, ManonmaniamSundaranar University – Tirunelveli.

- ***Expert Member-Oral examination*** (Viva-voce) at Govt. Arts and Science colleges (Musiri, Thiruvarur), Bharathidasan university affiliated autonomous Colleges, (St. Joseph College, Bishop Heber College, National College, Jamal Mohamed College – Tiruchirappalli, etc.,), CSIR- NEERI – Nagpur, Manonmaniam Sundaranar University Alagappa University – Karaikudi, Bharathiyar University – Coimbatore , Madurai Kamaraj University – Madurai & Vellore Institute of Technology (VIT) – Vellore, Periyar Maniammai Institute of Science and Technology, Thanjavur. TN. Osmania University,

Hyderabad and NEHU, Shillong.

- ***External Examiner***- for M. Sc / M. Phil/ Ph.D/Practical/ Project viva-voce/ M. Tech thesis evaluation Examinations for Various universities and autonomous colleges.
- **Organizer-** Organizing secretary/ Convener/ Coordinator/Treasurer/ Organizing Committee member/ Advisory Committee member/ Invited speaker/ Chairperson/ Judge of the various national and international seminar /workshop /FDP /conference /symposium at various universities and colleges.
- ***Executive Committee (EC) Member*** - Elected for the period of 2020-2022, Swadeshi Science Movement of India,VigyanBharati, Delhi.
- ***Coordinator*** -Internal Exam cell, Anna University of Technology, Tiruchirappalli, Tiruchirappalli.

➢ **Membership of Scientific and Professional Societies:**

| Sl. No | Name of the Professional Body / Organization | Number of Years | Level | Place |
|---|---|---|---|---|
| 1 | The Academy of Sciences, Chennai, Tamil Nadu | 2022 | Fellow | Chennai |
| 2 | Bose Science Society (FBSS) | 2022 | Fellow | Pudukkottai, T.N |
| 3 | All India Council for Technical Skill Development, (AICTSD) | 2021 | Member | New Delhi |
| 4 | Royal Society of Chemistry (MRSC) | 2017 – Till Now | Member | London, U.K |
| 5 | Society of Environmental Chemistry and Allied Sciences (SECAS) | 2013 – Till Now | Fellow and Life Member | India. |
| 6 | Indian Association of Solid-State Chemists and Allied Scientists (IASCAS) | 2008 – Till Now | Life Member | Jammu. |
| 7 | Society for Advancement of Electrochemical Science and Technology (SAEST) | 2008 – Till Now | Life Member | Karaikudi |
| 8 | The Indian Science Congress Association (ISCA) | 2008 – Till Now | Life Member | Kolkata |
| 9 | International Zeolite Association (IZA) | 2008 – Till Now | Member | France |
| 10 | Chemical Research Society of | 2005 – Till Now | Life Member | IISc, Bangalore |

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|---|---|---|---|---|
| | India (CRSI) | | | |
| 11 | International Congress of Chemistry and Environment (FICCE) | | Fellow | India. |
| 12 | Indian Society for Technical Society Education (ISTE) | 2003 – Till Now | Life Member | New Delhi. |

- **Fellowships and Grants received:**

| Sl. no. | Fellowship | Year | Agency |
|---|---|---|---|
| 1 | International Travel Grant | 2015 | DST (Department of Science and Technology) |
| 2 | Travel Fellowship | 2015 | Centre for International Co-operation in Science (CICS) Chennai, TN |
| 3 | Senior Research Fellowship | 2001 – 2003 | CSIR (Council of Scientific and Industrial Research) |
| 4 | Research Fellowship | 1998 – 2000 | TNSCST (Tamil Nadu State Council for Science and Technology) |
| 5 | University Research Fellowship | 1997 | University of Madras, Chennai, Tamil Nadu. |

- **Completed PG/UG Projects:**

a. Number of PG Projects Completed: 08

b. Number of UG Project Completed:

- **Research Guidance (M.S/Ph.D.) (Completed):**

| Sl. No | Name | Title of the Thesis | Degree Awarded | Viva – Voce Dated |
|---|---|---|---|---|
| 1 | Dr.Shanthi. P | Film And Pore Diffusion Modeling For Adsorption Of Dyes By Activated Carbon Prepared From StercuilaQuadrifida Seed Shell Waste. | November 2015 | 29-10-2015 |
| 2 | Dr.Anitha. K | Mechanistic Study of Adsorbtion of Dyes Using Activated Carbon Prepared From Albizia Amara Pod Shell Waste. | March 2016 | 19-02-2016 |

| | | | | |
|---|---|---|---|---|
| 3 | Dr.Babu Rajendran. A | Kinetic, Equilibrium and Thermodynamic Studies On the Removal of Dyes Using Nanoporous Activated Carbon Prepared From LeucaenaLeucocephala Seed Shell. | April 2016 | 15-04-2016 |
| 4 | Dr.Kalaiselvan. S | Structure and Morphological Studies of Multiwalled Carbon Nanotubes Synthesized From Methyl Esters of Plant Derived Oils by Spray Pyrolysis. | December 2016 | 23-12-2016 |
| 5 | Dr. Moscow. S | Development of Visible Light Driven Metal Doped Bismuth Vanadate (M-$BiVO_4$) Heterostructures Nano Catalyst For Photocatalytic And Photoelectrochemical Application. | December 2017 | 22-12-2017 |
| 6 | Dr.Nithya. A | Chitosan Based Metal And Metal Oxide Nanocomposites And Their Role In Environmental, Antimicrobial And Anticancer Application. | January 2018 | 29-01-2018 |
| 7 | Dr. Chandra Mohan. S | Encapsulation of Nickel(II) Complexes, Organic Chromophores And ZnO nanoparticles In Nanoporous Silicate Materials For The Energy And Environmental Applications | July 2018 | 24-07-2018 |

- **Research Guidance (M.S/Ph.D.) (Ongoing):**

| Sl. No | Name | Year of Joining | Status |
|---|---|---|---|
| 1 | V. Kavinkumar (Reg.No: 18137591174) | Jan 2018 | Synopsis submitted |
| 2 | M. Sriramkumar (Reg.No: 18147591175) | Jan 2018 | Confirmation |
| 3 | J. Jasmine (Reg.No: 23241591159) | Jan 2023 | Course work |

- **Research Guidance (Dr. D. S. Kothari Fellowship under guidance) (Ongoing):**

| Sl.No | Name | Year of Joining |
|---|---|---|
| 1 | A. Nancy Anasthasiya (Reg.No: No.F.4-2/2006(BSR)/PH/20-21/0154) | September 2021 |

- **Publications:**
  - **a. BOOKS & BOOK CHAPTERS. Published: 16**

**Edited Books: 09**

- **K.Jothivenkatachalam** , A.Pandikumar and S. Moscow, Heterojunction Photocatalytic Materials – Advances and Application in Energy and Environment, Routledge - Taylor & Francis Group, 2022, ISBN: 9789814968027.
- A.Pandikumar, Ramesh Mohan and **K.Jothivenkatachalam,** Counter Electrode for Dye – Sensitized Solar Cells, Jenny Stanford, 2020, ISBN: 978-981-4877-38-1.
- A.Pandikumar and **K.Jothivenkatachalam,** Photocatalytic Functional Materials for environmental remediation,John Wiley & Sons, Inc., Hoboken, NJ, USA. 2018,ISBN, 9781119529842.
- A.Pandikumar, K.B.Bhojanaa and **K.Jothivenkatachalam**, Interfacial engineering in functional materials for dye-sensitized solar cells, John Wiley & Sons, Inc., Hoboken, NJ, USA. 2018 ISBN: 978-1-119-55733-3. (In Press, December 2019)
- **Editor,** Proceedings of Advanced Oxidation processes, 2017, ISBN: 978-93-87360-05-1, Jazym Publication.
- **Editor,** Proceedings of International Conference on Chemistry and Materials, Jazym Publication (National), ISBN: 978-93-81521-49-6.
- **Editor,** Engineering Chemistry-I & II, Gem Publications (National).
- Practical Chemistry, Gem Publications.
- Principles of Environmental Science and Engineering, VRB publications.

**Book Chapters: 07**

- **K. Jothivenkatachalam**, V. Kavinkumar and S. Moscow, Metal-Metal oxide based nanocomposites for the photovoltaic applications, Encyclopedia of Renewable Energy, Sustainability and the Environment, Encyclopedia of Renewable Energy, Sustainability and the Environment.
- S. Moscow and **K. Jothivenkatachalam** "Bismuth Vanadate based Nanostructured and Nanocomposte Photocatalyst Materials for Water Splitting Application Advances in Nano structured Composites (CRC Press Book, July 2019), Chapter: 18, 376 – 391, ISBN: 9780367076313.
- G.T.S.How**, K.Jothivenkatachalam**, A. Pandikumar, N.M. Huang,Metal Nanoparticles Decorated ZnO Nanostructures Based Dye-Sensitized Solar Cells, in *Rational Design of Solar Cells for Efficient Solar Energy Conversion* (Eds. A. Pandikumar, and R. Ramaraj), John Wiley & Sons, Inc., Hoboken, NJ, USA. 2018, Chapter 1, 1-14, ISBN: 978-1-119-43740-6.
- 'Titanium Dioxide Nanoparticles: Characterizations, Properties and Synthesis' Nova publisher Series: *Nanotechnology Science and Technology*, 2017. ISBN: 978-1-53611-073-9- one chapter
  1. Chapter No: 05, "Green Synthesis of Titanium Dioxide Photocatalyst", 2017, 129 – 162.
- Potential Developments in Dye-sensitized solar cells for renewable energy, *Trans Tech Publications (International),*Materials Science Forum, ISBN: 978-3-03785-909-4 - One chapter
  1. Chapter No: 1 "Dye Sensitized Solar Cell: A Summary", 2014, 1 – 24.
- Multi-functional Nanomaterialsand their Emerging Applications, *Trans Tech*

*Publications (International),*Materials Science Forum, ISBN: 978-3-03835-067-5 – Two Chapters

1. Chapter No: 6 "Synthesis, Surface acidity and Photocatalytic Activity of $WO_3/Tio_2$ Nanocomposites- an Overview", 2014, 63 – 78.

Chapter No: 7 "Chitosan Based Nanocomposite Materials as Photocatalyst" – A Review, 2014, 79 - 94.

**b. International & National Journals:**

**International Publication: 86 & National Publication: 04**

**Total Publication: 90**

1) Perumalsamy, S. V., Saravanan, P., Kandasamy, J., & Kulandaivel, J. (2023). Dye Excitation and Surface Defects Mediated Photocatalytic Behavior of Vertically Aligned ZnO Nanorods. *International Journal of Nanoscience and Nanotechnology*, *19*(2), 109-119.

2) Senthilkumar, P., Raja, S., Babu, R. R., Kavinkumar, V., Jothivenkatachalam, K., & Vasuki, G. (2023). Optoelectronic, photocurrent sensitivity and photocatalytic dye degradation behaviour of spray deposited Cr doped SnO2 thin films. *Materials Chemistry and Physics*, *305*, 127988.https://doi.org/10.1016/j.matchemphys.2023.127988 .
**(impact factor: 4.778)**

3) Kavinkumar, V., Verma, A., Jothivenkatachalam, K., & Fu, Y. P. (2023). Dual-Functional CuO-Decorated Bi3. 84W0. 16O6. 24/Bi2WO6 Nanohybrids for Enhanced Electrochemical Hydrogen Evolution Reaction and Photocatalytic Cr (VI) Reduction Performance. *ACS Applied Nano Materials*, *6*(4), 2985-2994.http://dx.doi.org/10.1021/acsanm.2c05358. **(impact factor: 5.097)**

4) Kandasamy, M., Seetharaman, A., Babu, I. M., William, J. J., Muralidharan, G., Sivasubramanian, D., ... & Chakraborty, B. (2022). Experimental and theoretical investigations of a multiwalled carbon nanotubes/SnO2/polyaniline ternary nanohybrid electrode for energy storage. *Surfaces and Interfaces*, *30*, 101978. https://doi.org/10.1016/j.surfin.2022.101978. **(impact factor: 6.137)**

5) Moscow, S., Kavinkumar, V., Sriramkumar, M., Jothivenkatachalam, K., Saravanan, P., Rajamohan, N., ... & Rajasimman, M. (2022). Impact of Erbium (Er) and Yttrium (Y) doping on BiVO4 crystal structure towards the enhancement of photoelectrochemical water splitting and photocatalytic performance. *Chemosphere*, *299*, 134343. http://dx.doi.org/10.1016/j.chemosphere.2022.134343. **(impact factor: 7.086)**

6) Moscow, S., Kavinkumar, V., Sriramkumar, M., Kalaikathir, S. P. R., Jothivenkatachalam, K., Fu, Y. P., & Anandan, S. (2022). Synthesis of Sn and Zr-Doped BiVO4 Nanocatalyst with Enhanced Photocatalytic and Photoelectrochemical Activity. *ChemistrySelect*, *7*(17), e202104000. https://doi.org/10.1002/slct202104000
**(impact factor: 2.109).**

7) Durai Murugan, k., Jothivenkatachalam, K., Sekar, C., & Magda H. A. (2022). Ultrafast dynamics of proflavine bound to poly (methacrylic acid) in aqueous solution" *Journal of*

*Molecular Structure*, https://doi.org/10.1016/j.molstruc.2022.132676, 132676.
**(impact factor: 3.19).**

8) Pandiaraj, A., Ibrahim, M. M., Jothivenkatachalam, K., & Kavinkumar, V. (2023). Photoelectrochemical Water Splitting Over Decahedron Shaped BiVO4 Photoanode by Tuning the Experimental Parameters. *Journal of Cluster Science*, *34*(1), 557-564. https://doi.org/10.1007/s10876-022-02236-3. **(impact factor: 3.061).**

9) Dhas, C. R., Monica, S. E. S., Jothivenkatachalam, K., Nathanael, A. J., Kavinkumar, V., Venkatesh, R., & Arivukarasan, D. (2021). Direct-grown nebulizer-sprayed nickel-copper mixed metal oxide nanocomposite films as bifunctional electrocatalyst for water splitting. *Ionics*, 1-14. https://doi.org/10.1007/s11581-021-04285-6,
**(impact factor: 2.817).**

10) Kavinkumar, V., Verma, A., Uma, K., Moscow, S., Jothivenkatachalam, K., & Fu, Y. P. (2021). Plasmonic metallic silver induced Bi2WO6/TiO2 ternary junction towards the photocatalytic, electrochemical OER/HER, antibacterial and sensing applications. *Applied Surface Science*, *569*, 150918. https://doi.org/10.1016/j.apsusc.2021.150918 **(impact factor: 6.70).**

11) Uma, K., Singaravelu, C. M., Kavinkumar, V., Jothivenkatachalam, K., & Lin, J. H. (2021). Ultrasonically modified P25-TiO2/In2O3 heterostructured nanoparticles: An efficient dual-responsive photocatalyst for solution and gas phase reactions. *Journal of the Taiwan Institute of Chemical Engineers*, *125*, 257-266. https://doi.org/10.1016/j.jtice.2021.06.040 **(impact factor: 5.87).**

12) Seetharaman, A., Kandasamy, M., Manivannan, S., Jothivenkatachalam, K., Subramani, K., Pandikumar, A. & Chakraborty, B. (2021). TiO2/Carbon allotrope nanohybrids for supercapacitor application with theoretical insights from density functional theory. *Applied Surface Science*, *563*, 150259. 10.1016/j.apsusc.2021.150259
**(impact factor: 6.70).**

13) Mark, J. A. M., Venkatachalam, A., Pramothkumar, A., Senthilkumar, N., Jothivenkatachalam, K., & prince Jesuraj, J. (2021). Investigation on structural, optical and photocatalytic activity of CoMn2O4 nanoparticles prepared via simple co-precipitation method. *Physica B: Condensed Matter*, *601*, 412349. https://doi.org/10.1016/j.physb.2020.412349 **(impact factor: 2.43).**

14) Kandasamy, M., Seetharaman, A., Chakraborty, B., Babu, I. M., William, J. J., Muralidharan, G., Jothivenkatachalam, K & Sivasubramanian, D. (2020). Experimental and Theoretical Investigation of the Energy-Storage Behavior of a Polyaniline-Linked Reduced-Graphene-Oxide–Sn O 2 Ternary Nanohybrid Electrode. *Physical Review Applied*, *14*(2), 024067. (https://doi.org/10.1103/PhysRevApplied.14.024067)
**(impact factor: 2.52).**

15) John Abel, M., Pramothkumar, A., Archana, V., Senthilkumar, N., Jothivenkatachalam, K., & Joseph Prince, J. (2020). Facile synthesis of solar light active spinel nickel manganite (NiMn 2 O 4) by co-precipitation route for photocatalytic application. *Research*

*on Chemical Intermediates*, *46*, 3509-3525. (https:// DOI: 10.1007/s11164-020-04159-y) **(impact factor: 2.91).**

16) Kasimayan, U., Nadarajan, A., Singaravelu, C. M., Pan, G. T., Kandasamy, Jothivenkatachalam., Yang, T. C. K., & Lin, J. H. (2020). In-situ DRIFT investigation of photocatalytic reduction and oxidation properties of SiO2@ α-Fe2O3 core-shell decorated RGO nanocomposite. *Scientific reports*, *10*(1), 2128. (https://doi.org/10.1038/s41598-020-59037-9 ) **(impact factor: 4.37).**

17) Uma, K., Chong, S., Mohan, S. C., Jothivenkatachalam, K., Yang, T. C. K., & Lin, J. H. (2020). Multi-functional RGO-supported α-Fe 2 O 3 nanocomposites for high-performance pseudocapacitors and visible light–driven photocatalytic applications. *Ionics*, *26*, 3491-3500. (https://doi.org/10.1007/s11581-019-03400-y ) **(impact factor: 2.817).**

18) Mary Rajaitha, P., Shamsa, K., Murugan, C., Bhojanaa, K. B., Ravichandran, S., Jothivenkatachalam, K., & Pandikumar, A. (2020). Graphitic carbon nitride nanoplatelets incorporated titania based type-II heterostructure and its enhanced performance in photoelectrocatalytic water splitting. *SN Applied Sciences*, *2*, 1-14. (https://doi.org/10.1007/s42452-020-2190-9 ).

19) Murugan, C., Bhojanaa, K. B., Ong, W. J., Jothivenkatachalam, K., & Pandikumar, A. (2019). Improving hole mobility with the heterojunction of graphitic carbon nitride and titanium dioxide via soft template process in photoelectrocatalytic water splitting. *International Journal of Hydrogen Energy*, *44*(59), 30885-30898. (https://doi.org/10.1016/j.ijhydene.2019.09.114) **(impact factor: 5.81).**

20) Kavinkumar, V., Verma, A., Masilamani, S., Kumar, S., Jothivenkatachalam, K., & Fu, Y. P. (2019). Investigation of the structural, optical and crystallographic properties of Bi 2 WO 6/Ag plasmonic hybrids and their photocatalytic and electron transfer characteristics. *Dalton Transactions*, *48*(27), 10235-10250.(https://doi.org/10.1039/C9DT01807G) **(impact factor: 4.39).**

21) Kavinkumar, V., Jaihindh, D. P., Verma, A., Jothivenkatachalam, K., & Fu, Y. P. (2019). Influence of cobalt substitution on the crystal structure, band edges and photocatalytic properties of hierarchical Bi 2 WO 6 microspheres. *New Journal of Chemistry*, *43*(23), 9170-9182. (10.1039/C9NJ00170K) **(impact factor: 3.59).**

22) Senthilkumar, P., Jency, D. A., Kavinkumar, T., Dhayanithi, D., Dhanuskodi, S., Umadevi, M.,& Jothivenkatachalam, K. (2019). Built-in electric field assisted photocatalytic dye degradation and photoelectrochemical water splitting of ferroelectric Ce doped BaTiO3 nanoassemblies. *ACS Sustainable Chemistry & Engineering*, *7*(14), 12032-12043.(https://doi.org/10.1021/acssuschemeng.9b00679)**(impact factor: 8.19).**

23) Pramothkumar, A., Senthilkumar, N., & Jothivenkatachalam, K. (2019). Flake-like CuMn2O4 nanoparticles synthesized via co-precipitation method for photocatalytic activity. *Physica B: Condensed Matter*, *572*, 117-124. **(impact factor: 2.43).**

24) Raja, S., Babu, R. R., Mohan, S. C., Jothivenkatachalam, K., & Ramamurthi, K. (2019). Visible light driven photocatalytic activity of palladium nanoparticles assisted potassium niobate microrods. *Applied Surface Science*, *497*, 143737. (https://doi.org/10.1016/j.apsusc.2019.143737) **(impact factor: 6.70).**

25) Kalpana, K., Ravichandran, K., Sindhuja, E., Seelan, K. S., Jothivenkatachalam, K., Sriram, S., & Dhanraj, C. (2018). Enhancement of photocatalytic dye degradation efficiency of ZnO/Ag film deposited on flexible stainless steel meshes through g-C3N4 addition. *Materials Research Express*, *6*(1), 016422. (10.1088/2053-1591/aae81d) **(impact factor: 1.60).**

26) Kandasamy, M., Seetharaman, A., Sivasubramanian, D., Nithya, A., Jothivenkatachalam, K., Maheswari, N.,& Eftekhari, A. (2018). Ni-doped SnO2 nanoparticles for sensing and photocatalysis. *ACS Applied Nano Materials*, *1*(10), 5823-5836. (10.1021/acsanm.8b01473) **(impact factor: 5.09).**

27) Rajeswari, P., Dhanuskodi, S., & Jothi Venkatachalam, K. (2018). Impact of microwave-assisted synthesis on the morphology and rhodamine B oxidation properties of ZnO nanocomposites. *Applied Nanoscience*, *8*, 645-654.(https://doi.org/10.1007/s13204-018-0769-x) **(impact factor: 3.67)**

28) Ponnusamy, K., Chellappan, S., Singaravelu, C. M., & Kandasamy, J. (2018). Anion halogen bonding effect on solvatochromism and excited state dynamics of hemicyanine dye in chlorinated solvents. *Journal of Luminescence*, *202*, 253-262. (https://doi.org/10.1016/j.jlumin.2018.05.055) **(impact factor: 3.59)**

29) Rokesh, K., Mohan, S. C., Karuppuchamy, S., & Jothivenkatachalam, K. (2018). Photo-assisted advanced oxidation processes for Rhodamine B degradation using ZnO–Ag nanocomposite materials. *Journal of environmental chemical engineering*, *6*(3), 3610-3620.(https://doi.org/10.1016/j.jece.2017.01.023) **(impact factor: 5.90)**

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31) Mohan, S. C., Solomon, R. V., Venuvanalingam, P., & Jothivenkatachalam, K. (2017). Encapsulation of a hexaaza macrocyclic nickel (II) complex in zeolite Y: an experimental and theoretical investigation. *New Journal of Chemistry*, *41*(17), 9505-9512. (DOI:10.1039/C7NJ01279A) **(impact factor: 3.599)**

32) Akila, A., Mohan, S. C., Karuppusamy, S., & Jothivenkatachalam, K. (2017). Encapsulation of CdS/ZnO Hybrid Nanoparticles in Zeolite Y and its Photocatalytic Studies. *Nano Hybrids and Composites*, *17*, 246-255. (DOI: 10.4028/www.scientific.net/NHC.17.246) **(impact factor: 2.836)**

33) Karthikeyan, K. T., Nithya, A., & Jothivenkatachalam, K. (2017). Photocatalytic and antimicrobial activities of chitosan-TiO2 nanocomposite. *International journal of biological macromolecules*, *104*, 1762-1773. (doi:org/10.1016/j.ijbiomac.2017.03.121) **(impact factor: 6.25)**

34) Arjunan, N., Singaravelu, C. M., Kulanthaivel, J., & Kandasamy, J. (2017). A potential photocatalytic, antimicrobial and anticancer activity of chitosan-copper nanocomposite. *International journal of biological macromolecules*, *104*, 1774-1782. (doi:org/10.1016/j.ijbiomac.2017.03.006) **(impact factor: 6.25)**

35) Parameshwari, R., Jothivenkatachalam, K., Banks, C. E., & Jeganathan, K. (2017). Acid-free co-operative self-assembly of graphene-ZnO nanocomposites and its defect mediated visible light photocatalytic activities. *Physica B: Condensed Matter*, *506*, 32-41..(doi:org/10.1016/j.physb.2016.10.039) **(impact factor: 1.874)**

36) Parameshwari, R., Jothivenkatachalam, K., Banks, C. E., & Jeganathan, K. (2017). Acid-free co-operative self-assembly of graphene-ZnO nanocomposites and its defect mediated visible light photocatalytic activities. *Physica B: Condensed Matter*, *506*, 32-41.(DOI 10.17586f1/2220-8054) **(impact factor: 1.874).**

37) Rokesh, K., Nithya, A., Jeganathan, K., & Jothivenkatachalam, K. (2016). A facile solid state synthesis of cone-like ZnO microstructure an efficient solar-light driven photocatalyst for rhodamine B degradation. *Materials Today: Proceedings*, *3*(10), 4163-4172..(do:.org/10.1016/j.matpr.2016.11.091) **(impact factor: 0.694)**

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39) Mohan, S. C., Bhattacharjee, D., Deka, R. C., & Jothivenkatachalam, K. (2016). Combined experimental and theoretical investigations on the encapsulation of nickel (II) tet-a complex in zeolite Y and its photocatalytic activity. *RSC advances*, *6*(75), 71214-71222. (DOI:10.1039/C6RA15179E) **(impact factor: 3.29)**

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Structured Carbon Materials. *e-Journal of Surface Science and Nanotechnology*, *14*, 165-174.

43) Karthikeyan, K. T., Hebsuba, K. M., & Jothivenkatachalam, K. (2016). Comparison of Various Characteristics Activated Carbon Prepared from Turmeric Industrial Waste through Different Activation Processes. *J. Environ. Nanotechnol*, *5*(1), 17-25. (doi:10.13074/jent.2016.03.161182) **(impact factor: 1.874).**

44) Kalaiselvan, S., Jothivenkatachallam, K., & Karthikeyan, S. (2016). The Effect of Catalyst composition on the Growth of Multi-walled Carbon nanotubes from Methyl esters of Oryza sativa oil. *J. Environ. Nanotechnol*, *5*(1), 33-38**.** **(**DOI:10.13074/jent.2016.03.161181**).** **(impact factor: 1.874).**

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performances. *J. Environ. Nanotechnol*, *4*(4), 31-35. (DOI:10.13074/jent.2015.12.154169) **(impact factor: 1.874).**

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*Organometallic Chemistry*, *749*, 61-68. (DOI: 10.1016/j.jorganchem.2013.09.010)
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**(impact factor: 2.96).**

74) Jothivenkatachalam, K., & Chandra Mohan, S. (2014). Synthesis and Characterisation of New Symmetrical Binucleating Ligands and Their Binuclear Copper (II) Complexes. *Journal of Inorganic Chemistry*, *2014*. (DOI: org/10.1155/2014/461546)
**(impact factor: 4.70).**

75) Mohan, R., Ravichandran, K., Nithya, A., Jothivenkatachalam, K., Ravidhas, C., & Sakthivel, B. (2014). Influence of spray flux density on the photocatalytic activity and certain physical properties of ZnO thin films. *Journal of Materials Science: Materials in Electronics*, *25*, 2546-2553. (DOI: 10.1007/S10854-014-1908-0) **(impact factor: 2.47).**

76) Jothivenkatachalam, K., Prabhu, S., Nithya, A., Chandra Mohan, S., & Jeganathan, K. (2015). Solar, visible and UV light photocatalytic activity of CoWO4 for the decolourization of methyl orange. *Desalination and Water Treatment*, *54*(11), 3134-3145. (DOI: org/10.1080/19443994.2014.906324) **(impact factor: 1.25).**

77) Karthikeyan, K. T., Karthikeyan, S., & Jothivenkatachalam, K. (2004). Removal of reactive blue 2 dye from aqueous solution using turmeric industrial waste activated carbon. *Journal of Chemical and Pharmaceutical Sciences ISSN*, *974*, 2115.

78) Jothivenkatachalam, K., & Jaganathan, K. (2012). Facile fabrication, Characterization of Bismuth vanadate nanoparticles via hydrothermal method and its photocatalytic properties. **(impact factor: 1.14).**

79) Nithya, A., Rokesh, K., & Jothivenkatachalam, K. (2013). Biosynthesis, characterization and application of titanium dioxide nanoparticles. *Nano Vis*, *3*(3), 169-174.
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80) Prabhua, S., Udhayakumara, R., Jeganathanb, K., & Jothivenkatachalama, K. Synthesis, Characterization of Cu0. 5Co0. 5WO4 and its application on Cr (VI) removal in aqueous medium. *STRUCTURAL AND OPTICAL STUDY OF TITANIUM DIOXIDE THIN FILMS PREPARED BY SOL–GEL TECHNIQUE*, 48. **(impact factor: 1.14).**

81) Kandasamy, Jothivenkatachalam., & Moscow, S. (2013). Validated method for estimation of curcumin from different varieties of curcuma longa. *Int J Pharm Biosci*, *4*, 1004-10.

82) Jothivenkatachalam, K., Chandra Mohan, S., & Natarajan, P. (2013). Cobalt (III) complexes of unsaturated carboxylic acids: synthesis, characterization, and photochemical studies in aqueous medium. *Research on Chemical Intermediates*, *39*, 3371-3386. (DOI: 10.1007/s11164-012-0850-0) **(impact factor: 2.91).**

83) Mohan, S. C., Jenniefer, S. J., Muthiah, P. T., & Jothivenkatachalam, K. (2013). Tetraammine (carbonato-κ2O, O′) cobalt (III) perchlorate. *Acta Crystallographica Section E: Structure Reports Online*, *69*(8), i45-i46. (DOI: 10.1107/S1600536813018187) **(impact factor: 0.347).**

84) Moscow, S., & Jothivenkatachalam, K. (2012). Study on mineral content of some Ayurvedic Indian medicinal plants. *Int J Pharm Sci Res*, *3*, 294. **(impact factor: 6.073).**

85) Surendra Dilip, C., Jothivenkatachalam, K, Paul Raj, A., & Ramachandramoorthy, T., (2011). Microwave Assisted synthesis and structural characterization of nicotinic acid and nitrito – KO mixed ligand complexes. *International Journal of Life Science and Pharma Research*, 1 (1), L 80 – 88.

86) Jothivenkatachalam, Kandasamy., & Nithya, A. (2011). Assessment of ground water quality index around namakkal district, Tamilnadu, India. *Pollution. Research*, *30*(1), 37-43. **(impact factor: 0.52).**

87) Moscow, S., Jothivenkatachalam, K., & Subramani, P. (2011). Agricultural activities impact on groundwater of Cauvery River belt in Papanasam taluk, Tamilnadu, India. *Der Chemica Sinica*, *2*(2), 199-206. **(impact factor: 0.67).**

88) Jothivenkatachalam, K., Nithya, A., & Mohan, S. C. (2010). Correlation analysis of drinking water quality in and around Perur block of Coimbatore District, Tamil Nadu, India. *Rasayan Journal of Chemistry*, *3*(4), 649-654. **(impact factor: 1.23).**

89) Jothivenkatachalam, K., & Suresh, K., (2008). Status of Ground Water Quality and Public Health around Thiruchengode Taluk, Tamil Nadu, India, *Nature, Environment and Pollution Technology,* 7:2; 283. **(impact factor: 0.42)**

90) Palaniappan, S., Jothivenkatachalam, K., & Natarajan, P., (2001). Novel Photochemical Reactions of Itaconatopetaamminecobalt(III)ion to produce a Room temperature Luminescent compound, *Inorganic Chemistry Communications*, 2001, 4:12; 738.(DOI: org/10.1016/S1387-7003(01)00323-9) **(impact factor: 2.49).**

- **Patents: NIL**

- **Sponsored Research Projects:**

| Sl. No | Name of the project | Funding agency | Project value (Rs. In Lakhs) | Duration | Status |
|---|---|---|---|---|---|
| **1** | Photo-Redox Chemistry of Cobalt (III)ammine Complexes Coordinated to Unsaturated Carboxylic Acids and Macrocycles: Studies | Department of Science and Technology (DST-SERC), New Delhi, Ref.No: SR/FT/CS-042/2008 | **21.14** | (2009-2013) | Completed |

| | | | | | |
|---|---|---|---|---|---|
| | on Product Analysis and Photochemical Pathways. | | | | |
| **2** | Synthesis of visible light driven metal doped bismuth-based oxides for Photocatalytic and photoelectrochemical applications | Science and Engineering Research Board (SERB), New Delhi Ref.No: EMR/2016/003074 | **65. 81** | (2017- 2020) | completed |
| **3** | "Photocatalytic and Photoelectrocatalytic studies on nanohybrid materials" | Tamilnadu State Council for Science and Technology(TNSCST) –Bridge the Gap in Research Funding for Research Scholars in Colleges (RFRS) Ref.No:TNSCST/RFRS/VR/04/2019-20 [ Student Project ] | **3.00** | (2019-2021) | completed |
| **4** | High-End Workshops on entitled"Advanced Composite Materials For Energy Conversion And Storage Applications" (ACESA - 2023) | Science & Engineering Research Board (SERB) – Accelerate Vigyaa n New Delhi, "KARYASHALA" Ref. No: AV/KAR/2022/0613 dated: 14-11-2022 | **5.00** | (2022 – 2023) | Completed |

- **Consultancy Activities:**

| Sl.No | Name of the work | Role (PI/Co PI) | Agency | Amount | Duration |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

- **List of Seminar / Short Term Course /FDP/ Workshop organized:**

| Sl. No | Title | Role | Date(s) | Sponsor | Place | Level |
|---|---|---|---|---|---|---|
| 1 | High End workshop for one week entitled **"Advanced** | Coordinator | February 16th – 22nd 2023 | Accelerate Vigyaan Scheme - "KARYASHALA" - | Department of Chemistry, Anna | National |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Composite Materials for Energy Conversion and Storage Applications" (ACESA'2023)** | | | Science & Engineering Research Board (SERB)- New Delhi | University, BIT campus, Tiruchirappalli | |
| 2 | Online **Faculty development program (FDP)** on Sustainable Engineering | Organizing Secretary | July 19th – 23rd July 2021 | AICTE Training and Learning (ATAL) Academy | Department of Chemistry, Anna University, BIT campus, Tiruchirappalli | National |
| 3 | One weeks **Faculty development program (FDP)** on Interdisciplinary Approaches On Chemical & Physical Sciences (IACPS -20) | Convener & Coordinator | July 28th - August 1st 2020 | Self (Online Programme) | Department of Chemistry, Anna University, BIT campus, Tiruchirappalli | National |
| 4 | Seminar on National Education Policy – Draft – 2019 (NEP -2019) | Organizing Secretary | 25th August 2019 | Desiya Chinthanai Kazhagam, Tamilnadu unit of PrajnaPravah | Saranathan College of Engineering, Trichy | National |
| 5 | 3rd National Seminar on **Advanced Oxidation Processes (AOP 2017)** | Organizing secretary | December 17th – 19th 2017 | Science and Engineering Research Board (SERB), Tamil Nadu State Council for Science and Technology (TNSCST)&University Grand Commission (UGC) | Anna University, BIT Campus, Tiruchirappalli | National |
| 6 | Two weeks **Faculty development program (FDP)** on Frontiers Research in Applied Sciences (FRAS -15) | Coordinator | June 3rd - 16th 2015 | Technical Educational Quality Improvement Programme (TEQIP II) | Anna University, BIT campus, Tiruchirappalli | National |
| 7 | International conference on Chemistry and | Convener | November 14-15, 2014 | Technical Educational Quality | Anna University, BIT campus, | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Materials(ICCM '14) | | | Improvement Programme(TEQIP II) | Tiruchirappalli | |
| 8 | Two-Day Lecture Workshop on**"Recent Advances in Materials Chemistry" (RAMC'14)** | Coordinator | March 7 & 8, 2014 | Science Academies –Indian Academy of Science (IAS), Bangalore, Indian National Science Academy(INSA), New Delhi & The National Academy of Science(NAS), Allahabad | Department of Chemistry, Anna University, BIT campus, Tiruchirappalli | National |
| 9 | Workshop On **"Photocatalysis for Sustainability: Fundamentals and Applications" (PHOCATS-2013)** | Convener | October 9, 2013 | Royal Society of Chemistry (RSC), London | Department of Chemistry, Anna University, BIT campus, Tiruchirappalli | National |
| 10 | **Member of organizing committee in several conferences organized by other Universities** | | | | | |

## ➢ List of Seminar / Short Term Course /FDP/ Workshop attended:

1) Participated in the **GYANOTSAV – 2020** jointly organized by **Shiksha Sanskriti Utthan Nyas (SSUN), Tamil Nadu** and **National College(Autonomous), Tiruchirappalli** during 19th & 20th February, 2020.
2) Presented in the **Swadeshi Science Movement of India** "**Workshop on the Interface of Science and Society"**during 14th December 2019 at **Vigyan Bharati, Delhi**.
3) Participated in the **UK-India Newton Researchers Link Workshop** on "**Rational Designing of Catalysts for the Sustainable Production of Fuels and Chemicals**" during 1-4 November 2016 at **IIT-Madras**
4) Participated in Two weeks Faculty development program on **Multi – disciplinary approaches in chemical sciences (MACS'16),** Department of Chemistry, **Anna University, BIT campus**, Tiruchirappalli, 18th -31st July 2016.
5) Participated in Two weeks Faculty development program on **Advanced Technologies for societal Applications (ATSA'16), Anna University**, **BIT campus**, Tiruchirappalli, 06th - 19th June 2016.
6) Participated in TEQIP II sponsored course on **Faculty development programme** in association with **Confederation of Indian Industry (CII)** held at **Anna University, BIT campus**, Tiruchirappalli, March 1st, 2016.
7) Participated in TEQIP II sponsored Short term course on **Recent Initiatives on Energy and Environmental Research** held at **National Institute of Technology (NIT-T), Tiruchirappalli**, February 16th, 2016.

8) Participated in **International Movement of Tamil Culture,** Puducherry, January 16 & 17.

9) Participated in the Faculty development program on **Achieving Academic excellence** during November 16-21, 2015, **Indian Institute of Management (IIMR), Raipur**.

10) Participated in Two weeks Faculty development program on **Advance Research in materials for Engineering and Technological applications (ARMETA -2015), Anna University, BIT campus**, Tiruchirappalli, 17th -30th July 2015.

11) Participated in Two weeks Faculty development program on **Nanotechnology applications in Engineering and Technology (NAET 15),** Anna University, BIT campus, Tiruchirappalli, 06th -19th May 2015.

12) Workshop (2014) on **YRC Programme Officer** Organized by **Indian Red Cross Society, Trichy** District Branch, during 26.08.2014. (01 day)

13) Participated in **Indian Society for Technical Education - Working Professionals Learning Project**, **Bengaluru (ISTE-WPLP) National Workshop on Accreditation and Autonomy** held at Hotel Singaar International, Kanyakumari, January 6-8, 2014.

14) Participated in Workshop on **Recent Trends in Chemistry** held at **National Institute of Technology, Tiruchirappalli (NIT-T)**, December 4, 2013.

15) Participated in **"Workshop on Modern Analytical Techniques",** held at **National College**, Tiruchirappalli, February 18-20, 2013.

16) Participated in Science Academies lecture workshop on **Challenges in Environmental Restoration** held at **Bharathidasan University**, Tiruchirappalli, March 5 & 6, 2012.

17) Participated in **Academies Sponsored**, Indian Academy of Science (IAS- Banglore), Indian National Science Academy (INSA-New Delhi), The National Academy of Sciences, India (NSAI-Allahabad) lecture **workshop on Emerging Trends in Chemistry, Queen Mary's College**, Chennai, on December 2-4, 2011.

18) Attended an **Orientation Course for NSS Programme Officers** at **Empanelled Training Institution, Madras School of Social Work, Chennai**, September 26 - October 01, 2011.

19) Participated in the seminar on **"Recent developments in chemistry"** conducted by school of Chemistry and Prof. Ramasubbu Jeyaraman science foundation at school of chemistry, **Bharathidasan University**, Tiruchirappalli, August 29th, 2011.

20) Participated in the seminar on **"Prospects in Chemistry"** conducted by Department of Chemistry and Prof.Ramasubbu Jeyaraman science foundation, held at **National College**, Tiruchirappalli, March 11, 2011.

21) Participated in the UGC sponsored State Level Seminar **on "NMR Applications and Energy Materials"** held at Department of Chemistry, Rajah Serfoji Government College (Autonomous), Thanjavur, February 21, 2011.

22) Participated 76th Annual Meeting of **The Indian Academy of Science (IAS)** at **National Institute of Oceanography (NIO), Goa** from November 11-14, 2010.

23) Participated in the **Workshop on Frontiers in Catalysis Research** held at **National College**, Tiruchirappalli, October 01, 2010.

**24)** Participated in the Lecture **workshop on Frontiers in Bioinorganic Chemistry** sponsored by Indian Academy of Science (IAS- Bangalore), Indian National Science Academy (INSA-New Delhi), The National Academy of Sciences, India (NSAI-Allahabad) held at Centre for Bioinorganic Chemistry, School of Chemistry, **Bharathidasan University**, Tiruchirappalli, February 25-27, 2010.

**25)** Participated in the Academies Sponsored {Indian Academy of Science (IAS- Bangalore), Indian National Science Academy (INSA-New Delhi), The National Academy of Sciences, India (NSAI-Allahabad)} lecture **workshop on Frontiers in Chemistry**, **National College**, Tiruchirappalli, March 13 & 14, 2009.

**26)** Participated in the Indian Society for **Technical Education (ISTE – CON 2008)** held at Sudharsan Engineering College, Pudukottai, August 13 & 14, 2008.

**27)** Participated in the MHRD Sponsored Advanced Technology Program (ATP) on **"Current Trends in Nanotechnology",** Conducted by **National Institute of Technology, Warangal(NIT-W)**, June 30 - July 12, 2008.

**28)** Participated in the **"Workshop on Catalysts in Environmental Applications",** at **National Institute of Technology, Tiruchirapalli (NIT-T)**, December 2 & 3, 2007.

**29)** Participated in the **"National workshop on Nanomaterials: Properties and Applications",** at **National Institute of Technology, Tiruchirapalli (NIT-T)**, December 2 & 3, 2006.

**30)** Participated in the Faculty Development Programme on **Environmental Science and Engineering**, **Bannari Amman Institute of Technology**, January 27-29, 2005.

**31)** Participated in the **Foundation for Capacity Building in Science Lecture Series in Chemistry**, **Mercy College, Palakkad** on October 26th, 2004.

**32)** Participated in the Quality Improvement Programme on **"Instructional Design and Delivery",** organized by **Technical Teachers Training Institute, Chennai**, held at Sri Krishna college of Engineering and Technology, 31st May – 5th June 2004.

**33)** Participated in the One-Day National Workshop (Sponsored by AICTE, New Delhi) on **"Environment and Pollution Awareness",** at P.R. Engineering College, Thanjavur, April 12th, 2004.

**34)** Participated in the Indo – **German Workshop on Research Perspectives on Environmental Protection Watershed Management,** Civil Engineering and Landscape Design of Cauvery River Basin jointly organized by **PMCTW and RWTH Aachen University, Germany**, February 16-18, 2004.

**35)** Participated in the National Seminar on **Chemistry in the New Millenium** conducted by **National Institute of Technology, Calicut (NIT-C)**, July 24 & 25, 2003.

**36)** Participated in the Short term Training Programme on **Treatment of Water and Waste Water,** Department of Chemistry, Periyar Maniammai College of Technology for Women, Thanjavur on July 7-18, 2003.

**37)** Participated in the National Seminar on **"Biotechnological and Immunological Strategies for Research"** held at **University of Madras, Chennai**, March 15 & 16, 2001.

**38)** Participated in the **"National Conference on Solar Energy Conversion Processes"** held at **University of Madras, Chennai**, March 1 & 2, 2001.

**39)** Participated in the Seminar on **"Trends in Molecular Biology and Biotechnology"** held at **University of Madras, Chennai**, and August 20, 1999.

Participated in the Seminar on **"Ultrafast Processes in Biology, Chemistry and Physics"** held at **University of Madras, Chennai**, and March 11-13, 1999.

## ➢ National / International Conferences organized / Participated:

| Sl. No | Title | Role | Date(s) | Sponsor | Place | Level |
|---|---|---|---|---|---|---|
| 1 | Online **Faculty development program (FDP)** on Sustainable Engineering | Organizing Secretary | July 19th – 23rd July 2021 | AICTE Training and Learning (ATAL) Academy | Department of Chemistry, Anna University, BIT campus, Tiruchirappalli | National |
| 2 | One weeks **Faculty development program (FDP)** on Interdisciplinary Approaches On Chemical & Physical Sciences (IACPS -20) | Convener & Coordinator | July 28th - August 1st 2020 | Self (Online Programme) | Department of Chemistry, Anna University, BIT campus, Tiruchirappalli | National |
| 3 | Two weeks **Faculty development program (FDP)** on Frontiers Research in Applied Sciences (FRAS -15) | Coordinator | June 3rd - 16th 2015 | Technical Educational Quality Improvement Programme (TEQIP II) | Anna University, BIT campus, Tiruchirappalli | National |

### (A) Chairperson for conferences / Seminar / Technical symposia / Guest lectures delivered:

1) **Resource person** for the UGC-Human Resource Development Centre, **Bharathidasan University**, Tiruchirappalli on 08.08.2023.

2) **Resource person** for FDP on " Innovations in Materials for Optical and Energy Storage / Conversion Applications" conducted by **Nehru Institute of Technology**, Coimbatore.

3) **Invited Talk** – International Conference on Water: From Pollution to Purification,

February 10th 2023 at School of Environmental Sciences, **Mahatma Gandhi University, Kottayam, Kerala.**

4) **Resource person – TANSCHE** sponsored National Level Conference on 'Green Chemistry' on 29th & 30th march 2022 at **Arignar Anna Govt Arts College, Musiri.**
5) **Lecture –** National Seminar on Renewable Energy Science and Technology (NSREST – 2022) on 22nd march 2022 at **Alagappa University, Karaikudi.**
6) **Invited Talk –** 11th National Conference on Natural Sciences Organised by Bose Science Society on 19th march 2022 at **Pushkaram College of Agriculture Sciences, Pudukkottai.**
7) **Invited Talk** for Webinar on Co-polymer based metal catalyst application for Environment Protection on 12th October 2021 at Department of Chemistry, **Kumaraguru college of Technology, Coimbatore**.
8) **Invited Talk** for Orientation Program for First year B. Tech – 2021-2022 on 06th October 2021 at **Bharath Institute of Higher Education and Research (BIHER),Bharath University, Chennai**
9) **Lecture** through online AICTS-ISTE approved one-week Orientaion / Refresher programme entitled, Refresher course in chemistry on 08th March 2021 at **A.V.C. College of Engineering, Mayiladuthurai.**
10) **Lecture** through online AICTS-ISTE approved one-week Orientaion / Refresher programme entitled, Refresher course in chemistry on 22th Feburary 2021 at **A.V.C. College of Engineering, Mayiladuthurai.**
11) **Lecture** through online AICTS-ISTE approved one-week Orientaion / Refresher programme entitled, Refresher course in chemistry on 08th Feburary 2021 at **A.V.C. College of Engineering, Mayiladuthurai.**
12) **Resource person** for the Refresher course on 19th December 2020 at **Bharathiyar University, Coimbatore.**
13) **Invited Talk** – International Conference on Water: From Pollution to Purification, December 13th 2020 at School of Environmental Sciences, **Mahatma Gandhi University, Kottayam, Kerala.**
14) **Resource person** for the UGC sponsored Refresher course in nanoscience on 5th December 2020 at **Bharathidasan University,** Tiruchirappalli.
15) **Chair person –** Two Days International Virtual Conference On Renewable Energy Science and Technology (ICREST - 2020) at Department of Energy Science, **Alagappa University, Karaikudi** during 28th – 29th September 2020.
16) **Chair Person** – Virtual International Conference On Surface Chemistry (SUCH-2020), August 27th & 28th 2020 at **Annamalai University, Annamalai Nagar**, India.
17) **Invited Speech**– on " Mental Strebgth Improvement for Quality Education and

Personal Development" at **Ramsun's Matric Higher Secondary School** , Meyyampatty, Natham on 31.01.2020.

18) **Invited Talk** – Workshop on the Interface of Science and Society, December 14th 2018 at **National Physical Laboratory (NPL), Swadeshi Science Movement of India, VigyanBharati**, Delhi.

19) **Invited Talk** – International Conference on Water: From Pollution to Purification, December 7 – 10, 2018 at School of Environmental Sciences, **Mahatma Gandhi University, Kottayam**and Kerala.

20) **Chairperson –** International Conference on Sustainable Energy Technologies, June 27th and 28th 2018 at Schoolof Physics,**Bharathidasan University,** Tiruchirappalli.

21) **Special Invited Talk**- Department of Chemical Engineering and Biotechnology, June 14th, 2018 at **National Taipei University of Technology, Taipei, Taiwan**.

22) **Invited Talk**- International Conference on Applied Sciences, June 10-14, 2018 at **National Dong Hwa University**. **Taiwan**.

23) **Special Invited Talk** - Department of Laboratory Medicine and Biotechnology, June 9th, 2018 at **Tzu-chi University, Hualien, Taiwan**.

24) **Invited Talk** – Second International Conference on Recent Trends in Analytical Chemistry, March 15 -17, 2018 at **University of Madras**, Chennai.

25) **Resource person** for the Summer school in materials science, on 12th March 2018 at **Bharathidasan University**, Tiruchirappalli – 600 023

26) **Invited lecture** – 3rd National Conference on Recent Trends in Nano Materials and Thin Films Research, February 9-11, 2018 at **A.V.V.M Sri Pushpam College**, Poondi.

27) **Invited lecture** – second International conference on materials and technology-synthesis, processing and applications, February 20 and 21, 2018 at **Sri S Ramasamynaidu memorial college**, Sattur.

28) **Invited lecture** – International conference on frontier materials and their applications, 9th January 2018 **at Bishop Heber College**, Tiruchirappalli.

29) **Resource person** for the UGC sponsored Refresher course in nanoscience on 8th January 2018 at **Bharathidasan University,** Tiruchirappalli.

30) **Invited lecture International conference on water**: from pollution to purification, December 12-15, 2016 at **Mahatma Gandhi University, Kottayam**, Kerala.

31) **Invited Lecture** Nanocomposites for photocatalytic applications in the **UK-India Newton Researchers Link Workshop** on "Rational Designing ofCatalysts for the Sustainable Production ofFuels and Chemicals" during 1-4 November 2016 held at **Indian Institute of Technology (IIT-Madras),** Chennai.

32) **Invited lecture** at 11th **Asia Pacific Chitin and Chitosan Symposium** & 5th Indian Chitin and Chitosan Society Symposium 2016 (28th -30th September 2016) at **Kochi, Kerala,** India.

33) **Resource person** for the Faculty development programme, Department of Nano science and Nanotechnology, **Bharathidasan University**, Khajamalai Campus (City Campus), Tiruchirappalli.

34) **Resource person** for the Faculty development programme on recent trends and applications of mathematics in computing held on 21st June 2016 at **Anna University** , BIT campus, Tiruchhirappalli-620024.

35) **Keynote speaker** at**Alagappa University**, Karaikudi, for the Energy Day, 2015.

36) **Resource Person** for the Summer Research Training Programme (SRTP-2015), May 2011-18 (2015) at **Bishop Heber College**, Trichy-17.

37) **Keynote speaker** to **Second International conference on Science, Engineering and Management** /ICSEM`14 at Srinivasan Engineering College**,** Perambaluron March 28th and 29th, 2014.

38) **Resource Person**forthe Refresher Course entitled on "Frontiers in Chemistry - 2014" for the University/College teachers UGC – **Academic Staff College**, **Bharathidasan University**, Tiruchirappalli held on 15th Feb. 2014.

39) A **Lecture** on Revolution on Modern Science to the science forum held at the Department of Humanities and Science, **Muthayammal Engineering College**, Rasipuram, Oct 29, 2013.

40) As a **Resource person** on **INSPIRE Internship Science Camp** held at**Kongunadu College of Engineering and Technology**, Thottiyam, Trichy on Dec 29, 2012.

41) **Keynote Speaker** for **NSS Day Celebration** held at **M.A.M. College of Engineering**, Tiruchirappalli on October 10th 2011.

42) **Guest lecture** for FDP for ME degree program through MBCBS (Modular Base credit Base System) Thermal Engineering" Environmental Engineering and Pollution Control" at **Anna University of Technology, Tiruchirappalli**, on 28-02-2010.

43) **Invited Lecture** at Workshop on Frontiers in Catalysis Research on October 01st, 2010, Department of Chemistry, **National College**, Trichy.

## DECLARATION:

I certify that the information furnished above is correct and true to the best of my knowledge and belief.

**Signature of the staff member**

**Head of the Department** **Dean**