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

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

Scopus id: <https://www.scopus.com/authid/detail.uri?authorId=47561511000>

University website link:

<http://www.aubit.edu.in/departments/Chemistry/profile/Dr.K.Jothivenkatachalam.pdf>

Qualification:

- **Ph.D. (Chemistry)-2003** - University of Madras, Chennai.
- **M.Phil. (Chemistry)-1998** - University of Madras, Chennai.
- **M.Sc. (Chemistry) 1993-1995** - Annamalai University.
- **B.Sc. (Chemistry) 1990-1993**- University of Madras, Chennai.

TEACHING AND RESEARCH EXPERIENCES – 24 years 03 months.

(As on 09/10/2026)

- **Professor** - Anna University, UCE - BIT Campus, Trichy – 11 years 01 months.
- **Associate Professor** - Anna University, UCE - BIT Campus, Trichy – 2 years 11 months.
- **Assistant Professor** - Anna University, BIT Campus, Trichy – 2 years 11 months.
- **Senior Lecturer** - Anna University of Technology, Tiruchirappalli – 1 years 11 months.
- **Lecturer** - Sri Krishna College of Engineering and Technology, Coimbatore – 4 years 4 months.

ADMINISTRATIVE & LEADERSHIP EXPERIENCE

PRESENT POSITION

- ★ **Professor & Head**, Department of Chemistry –UCE-BIT Campus, Anna University.

PREVIOUS RESPONSIBILITIES

- ★ **Selection Committee & Board of Studies Member** – Multiple Universities & Institutions
- ★ **Member of Planning Board** – Alagappa University, Karaikudi.
- ★ **Executive Committee Member** - in Swadeshi Science Movement of India, Vigyan Bharati, Delhi.
- ★ **Executive Committee Member** - in Society of Environmental Chemistry and Allied Sciences (SECAS).

- ★ **Editorial Board Member** - Borneo Science Journal, publisher: Universiti Malaysia Sabah, Journal Environmental Nanotechnology, Publisher: Environ, Nano Scale Reports, Publisher: Eleyon.

RESEARCH CONTRIBUTIONS

- ❖ **Research Funding:** ₹≈1.50 Crore (5 Projects completed, 1 Ongoing)
- ❖ **Total Publications:** 103 (97 International, 6 National)
- ❖ **No. of citations:** 3286
- ❖ **No. of h – index:** 31
- ❖ **No. of i10 index:** 66
- ❖ **Ph.D. Guidance:** 8 completed, 4 ongoing & **Post – Doctoral guidance :** 01
- ❖ **Ph.D. Thesis as Evaluator and Viva-Voce Examiner:** 72
- ❖ **Patents:** 04 (Certified)
- ❖ **Books Edited:** 10 & **Book Chapters:** 07
- ❖ **Invited Talks:** 47 (National & International)
- ❖ **Conference:** 125 (National & International)
- ❖ **M.Phil, M. Tech & M.Sc guidance :** 16
- ❖ **International Collaborations:** Taiwan, Malaysia and Japan.
- ❖ **Overseas Visited:**
 - **Vietnam** – HUTECH University
 - **Bulgaria**– University of Sofia
 - **Taiwan** – National Dong Hwa University (NDHU) Hualien County, Taiwan.

RECOGNITION

- ❖ **SciRank Global – World's Top 5% Scientists (2025)** :Verification ID: A5067038674
Recognized and independently verified among the **World's Top 5% Scientists in the 2025 SciRank**
- ❖ **Global Registry** based on rigorous bibliometric analysis of research publications and scholarly impact. Global Rank: #1,127,972.
- ❖ **Best Science Faculty Award – Madras Journal Series**
- ❖ **C.N.R. Rao Best Scientist Award – Bose Science Society**
- ❖ **DST-Young Scientist Recipient Award – DST-SERC, Govt. of India**
- ❖ **International Travel Grants – DST & CICS**

PROFESSIONAL AFFILIATIONS

- ✚ **Fellow** – Royal Society of Chemistry (London) ,
- ✚ **Fellow-** The Academy of Sciences, Chennai.
- ✚ **Fellow-** International Congress of Chemistry and Environment.
- ✚ **Member** – International Zeolite Association (IZA) - France).
- ✚ **Life Member** – CRSI, IASCAS, SAEST, ISCA, SECAS, AICTE, ISTE.

PROJECTS:**FUNDED PROJECT –06** [Completed – 05] [ongoing - 01]

[Total cost of Project funded by funding agency: Rs. 1,49,20690/-]

[Rupees One crore forty nine lakhs twenty thousand six hundred and ninety only]

S. No	Title of the Project	Funding Agency	Budget Amount (Rs. In lakhs)	Status
1.	In-situ spectroelectrochemical investigation of metal complexes	DST SR/FTP/CSA-019/2002	17.0	Offered (2002-2005)
2.	Photo-Redox Chemistry of Cobalt(III)ammine Complexes Coordinated to Unsaturated Carboxylic Acids and Macrocycles: Studies on Product Analysis and Photochemical Pathways	Department of Science and Technology (DST-SERC), New Delhi, Ref.No: SR/FT/CS-042/2008	21.14	Completed (2009-2013)
3.	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	Completed (2017- 2020)
4.	“Photocatalytic and Photoelectrocatalytic studies on nanohybrid materials”	Tamil Nadu 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	3.00	Completed (2019-2021)
5.	High-End Workshops on entitled“Advanced Composite Materials For Energy Conversion And Storage Applications” (ACESA - 2023)	Science & Engineering Research Board (SERB) – Accelerate Vigyan New Delhi, “KARYASHALA” Ref. No: AV/KAR/2022/0613 dated: 14-11-2022	5.00	Completed (2022 – 2023)
6.	Green Hydrogen Production from Seawater using Transition Metal Nitride Photocathode: A Pilot Scale Approach	Anusandhan National Research Foundation(ANRF) – Core Research Grant (CRG), New Delhi Ref.No: CRG/2023/002650 dt: 04.03.2024	35.24	Ongoing
7.	“Green Solutions for Energy, Environment and Sustainability (GSEES 2025)”	AICTE-VAANI scheme, New Delhi Ref.No: F.No. AICTE/VAANL/2025-26/159/2092027187	2.00	Completed (2025-2026)
	Total Budget		149.2	
(Rupees One crore forty nine lakhs twenty thousand six hundred and ninety only)				

Papers Published - Total Publication: 102 [International Journals – 98 and National Journals – 04].

1. Kabir Hussain Badagoppam Haroon; Sathish Rajendran; Veerappan Kavinkumar; A.R. Pavithra; Vijay Sithaiyan; Nandhakumar Eswaramoorthy; Kandasamy Jothivenkatachalam “Unveiling the 2D/2D hybrid of MXene anchored on g-C₃N₅ nanosheets for enhanced photo Fenton-like removal of tetracycline and electrocatalytic water splitting performance” **Environmental Science: Nano**, 2026, 13 (6), 2774–2794 . <https://doi.org/10.1039/d6en00119j> (IF: 5.6)
2. M Sriramkumar, V Kavinkumar, RM Gnanamuthu and **K. Jothivenkatachalam** “A multifunctional Ag-embedded ZnO nanocomposite for the maximization of photocatalytic, electrochemical water splitting, and supercapacitor performance” **Journal of Material Science: Materials and Electronics**, 2025, 36:2087. [10.1007/s10854-025-16010-4](https://doi.org/10.1007/s10854-025-16010-4) (IF: 3.2).
3. RM. Gnanamuthu, M. Sriramkumar, Saravanan Gengan, A. Kavitha, S.K. Jesudoss, M. Thamaraiselvi, B. Rajeswari, D. Srinivasan, P. Rajkumar, **K. Jothivenkatachalam**, Chang Woo Lee "High performing nano-crystalline ternary Sn–Ni–Ag alloy electroplated material for development of high-power density supercapacitor" **Journal of the Indian Chemical Society**, 2025, 102, (8) 101893 [10.1016/j.jics.2025.101893](https://doi.org/10.1016/j.jics.2025.101893) (IF: 3.4).
4. V Kavinkumar, A Verma, **K. Jothivenkatachalam**, & Fu, Y. P. A multifunctional PANI-wrapped Bi₂WO₆ 2D-nanoplates with in-situ grown BiOCl nanocomposite for electrochemical seawater splitting, supercapacitor, and photocatalytic applications. **Applied Surface Science**, 2025, 162979. [10.1016/j.apsusc.2025.162979](https://doi.org/10.1016/j.apsusc.2025.162979) (IF: 6.6).
5. Manikandan Kandasamy, Amreetha Seetharaman, Seetha Lakshmy, Nithya Arjunan, Karnan Manickavasakam, Manjunath Shetty, S. Kanchana, Jiaqian Qin, **K. Jothivenkatachalam**, Brahmananda Chakraborty “Defect engineered N-S codoped TiO₂ nanoparticles for photocatalytic and optical limiting applications: Experimental and DFT insights” **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, 2024, 310 (173), 123846 <https://doi.org/10.1016/j.saa.2024.123846>. (IF: 4.8).
6. Kavinkumar V, Atul Verma, **K. Jothivenkatachalam**, Yen-Pei Fu “Dual-Functional CuO-Decorated Bi_{3.84}W_{0.16}O_{6.24}/Bi₂WO₆ Nanohybrids for Enhanced Electrochemical Hydrogen Evolution Reaction and Photocatalytic Cr(VI) Reduction Performance" **ACS Applied Nano Materials**, 2023 6,4, 2985-2994. [http://dx.doi.org/10.1021/acsanm.2c05358](https://doi.org/10.1021/acsanm.2c05358). (IF: 5.8).
- 7) Moscow S , Kavinkumar V, Sriramkumar M, **K. Jothivenkatachalam**, Panchamoorthy Saravanan, Natarajan Rajamohan, Yasser Vasseghian, Manivasagan Rajasimman “Maximization of Photocatalytic degradation and Photoelectrochemical Water-Splitting Activity over the Er and Y metal-doped monoclinic-tetragonal BiVO₄ nanocatalyst” **Chemosphere**, 2022, 299, 134343. [http://dx.doi.org/10.1016/j.chemosphere.2022.134343](https://doi.org/10.1016/j.chemosphere.2022.134343). (IF: 8.1).
- 8) Manikandan K, Amreetha S, Inbamani Manohara Babu, J Johnson William, Gopalan Muralidharan, Dhannuskodi Sivasubramanian, **K. Jothivenkatachalam**, Muhammad Imran, Brahmananda Chakraborty “Experimental and theoretical investigations of a multiwalled carbon nanotubes/SnO₂/polyaniline ternary nanohybrid electrode for energy storage” **Surface and Interfaces**, 2022, 30, 101978. <https://doi.org/10.1016/j.surfin.2022.101978>. (IF: 6.0).
- 9) Veerappan Kavinkumar, Atul Verma, Kasimayan Uma, Subramanian Moscow, **K. Jothivenkatachalam**, Yen-Pei Fu” Plasmonic Metallic Silver Induced Bi₂WO₆/TiO₂ Ternary Junction towards the Photocatalytic, Electrochemical OER/HER, Antibacterial and Sensing Applications” **Applied Surface Science**, 2021, 150918 <https://doi.org/10.1016/j.apsusc.2021.150918>. (IF: 6.6).

- 10) C. Murugan, K.B. Bhojanaa, Wee-Jun Ong, **K. Jothivenkatachalam**, A. Pandikumar, “Improving Hole Mobility with the Heterojunction of Graphitic Carbon Nitride and Titanium Dioxide via Soft Template Process in Photoelectro catalytic Water Splitting” **International Journal of Hydrogen Energy**, **2019**, 44 (59). (<https://doi.org/10.1016/j.ijhydene.2019.09.114>) (IF: 9.2).
- 11) Kavinkumar Veerappan, Atul Verma, SriramkumarMasilamani, Sanath Kumar, **K. Jothivenkatachalam**, Yen-Pei Fu, “Investigation of structural, optical and crystallographic properties over Bi₂WO₆/Ag plasmonic hybrids and its photocatalytic performance” **Dalton Transactions**, **2019**, 48, 10235 – 10250. (<https://doi.org/10.1039/C9DT01807G>). (IF: 3.3).
- 12) Kavinkumar Veerappan, Atul Verma, Yen-Pei Fu, **K. Jothivenkatachalam**, “Influence of Cobalt substitution on the crystal structure, band edges and photocatalytic property of hierarchical Bi₂WO₆ microsphere.” **New Journal of Chemistry**, **2019**, 43, 9170 – 9182. (<https://doi.org/10.1039/c9nj00170k>) (IF: 2.6).
- 13) P. Senthilkumar, D ArockiyaJency, T Kavinkumar, D Dhayanithi, S. Dhanuskodi, M Umadevi, S Manivanna, Giridharan, NambiVenkatesan, ThiagarajanViruthachalam, M Sriramkumar, **K. Jothivenkatachalam**,” Built-in Electric Field Assisted Photocatalytic Dye Degradation and Photoelectrochemical Water Splitting of Ferroelectric CeDoped BaTiO₃Nanoassemblies” **ACS Sustainable Chemistry & Engineering**, **2019**, 7, 12032–12043. (<https://doi.org/10.1021/acssuschemeng.9b00679>) (IF: 7.6).
- 14) Manikandan Kandasamy, Amreetha Seetharaman, Dhanuskodi Sivasubramanian, Arjunan Nithya, **K. Jothivenkatachalam**, Nallappan Maheswari, Muralidharan Gopalan, Sastikumar Dillibabu and Ali Eftekhari “Ni-Doped SnO₂ Nanoparticles for Sensing and Photocatalysis” in **ACS Applied Nano Materials**, **2018**, 1, (10) 5823-5836. (<https://doi.org/10.1021/acsanm.8b01473>). (IF:5.8).
- 15) P. Karunakaran, S. Chandra Mohan, **K. Jothivenkatachalam**, C. Selvaraju, “Anion Halogen Bonding Effect on Solvatochromism and Excited State Dynamics of Hemicyanine Dye in Chlorinated Solvents” **Journal of luminescence**, **2018**, 202, 253-262. (<https://doi.org/10.1016/j.jlumin.2018.05.055>). (IF: 3.8).

BOOKS & BOOK CHAPTERS PUBLISHED AND EDITED – 17

Some important publications

- ❖ **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, 2021, ISBN: 978-981-4877-38-1.
- ❖ A. Pandikumar and **K. Jothivenkatachalam**, Photocatalytic Functional Materials for environmental remediation, John Wiley & Sons, Inc., Hoboken, NJ, USA. 2019, 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)
- ❖ **K. Jothivenkatachalam**, V. Kavinkumar and S. Moscow, Metal-Metal oxide based nanocomposites for the photovoltaic applications, Encyclopedia of Renewable Energy, Sustainability and the Environment 2024 (Elsevier Publication), Vol 2, 775-788.

- ❖ S. Moscow and **K. Jothivenkatachalam** “Bismuth Vanadate based Nanostructured and Nanocomposite 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.

CONFERENCE, FDP, SEMINAR and WORKSHOP ORGANIZED – 12

LAB FACILITIES ESTABLISHED

Established Materials Research Lab for Energy Conversion and Environmental Remediation with advanced instrumentation.

- UV-VIS DRS spectrophotometer (UV - 2450)
- Gas Chromatography (GC – 2014)
- Electrochemical Workstation [Cyclic Voltameter (CV) and spectrophotometer - photoelectrochemical water splitting setup] (CHI660E Series)
- Gas Sensor setup, Xenon Light Source / Photocatalytic reactor
- Centrifuge, Muffle furnace, Microwave oven, Auto Clave
- Refrigerated circulating bath , Sonicator, Weighing Balance
- Double Distillation Setup

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