| Name: Designation: | Photo Assistant Professor | | | | |
|---------------------------------|---|---------------|---------------------|---------------|--|
| Qualification: | M.Sc., Ph.D., Postdoc (IISc) | | | | |
| Area of specialization: | Organic Chemistry, Asymmetric Catalysis and Carbohydrate Chemistry and Sensors | | | | |
| Experience: | Industrial Experience | | Teaching Experience | | |
| | 01 | year | 5.3 years | | |
| Number of workshops | Number of | Workshops | Number of FDPs | | |
| / FDP attended: | 5 | | 2 | | |
| Publications: | Conf | erence | Journal | | |
| | National | International | National | International | |
| | 18 | 4 | - | 12 | |
| Books / Book Chapters | 01 | | | | |
| Patents: | National | | International | | |
| | - | | - | | |
| Professional Body Membership | I-EEE, INSA Member (Indian National Science Academy) and INSc Member | | | | |
| Staff Achievements | National Postdoctoral Fellow (NPDF), DST SERB INSA Visiting Scientist, from Indian National Science Academy, New Delhi. CSIR SRF (Senior Research Fellow), New Delhi. TNSCST student research project award. Young Achiever Award, from INSc Bangalore. Best Poster Award in National Symposium in Chemistry Workshop. | | | | |

Educational Qualifications:

| Category | Name of the Degree | Specialization | Year of Passing | Name of the College | Name of the University | % of Marks / Grades obtained | Class obtained |
|-------------------------------------|------------------------------|----------------------|--------------------|--|---|---------------------------------------|-------------------|
| UG | B.Sc., | Chemistry | 2010 | Jamal Mohamed College | Bharathidasan University | 73 | I |
| PG | M.Sc., | Chemistry | 2012 | Manonmaniam Sundaranar University | Manonmaniam Sundaranar University | 73 | I |
| Ph.D | Ph.D | Chemistry | 2018 | Madurai Kamaraj University | Madurai Kamaraj University | Thesis highly Commended | - |
| National Postdoctor al Fellow | Postdoctor al Research | Organic Chemistry | 2022-2023 | Indian Institute of Science (IISc) | Indian Institute of Science (IISc) | - | - |

Academic and Industrial Experience:

| Name of the Callege | D | Joining | Relieving | Experience | | |
|---|------------------------------------|------------|------------|------------|--------|------|
| Name of the College | Designation | Date | Date | Years | Months | Days |
| Indian Institute of Science (IISc) | National Postdoctoral Fellow | 01.12.2022 | 19.10.2023 | 1 | 0 | 0 |
| Sadakathullah Appa College | Asst. Professor | 19.07.2018 | 30.10.2022 | 4 | 0 | 0 |
| Hindustan Petroleum Green R&D Center | Research Associate | 20.10.2023 | 01.10.2024 | 1 | 0 | 0 |
| Total | | | | 6 | 0 | 0 |

Workshops/Seminars attended: 26

FDP/STTP Attended: 2

Symposium Attended: 8

Conference Attended: 16

Completed / Ongoing Projects: 3

Patent: NIL

Journal Publications: 12

Books / Book Chapters: 01

Awards: National Postdoctoral Fellow (NPDF), DST SERB

INSA Visiting Scientist, from Indian National Science Academy, New Delhi.

CSIR SRF (Senior Research Fellow), New Delhi.

TNSCST student research project award.

Young Achiever Award, from INSc Bangalore.

Best Poster Award in National Symposium in Chemistry Workshop.

Startup: Nil

Webinar: 02 International Webinar

Resource Person:

Resource person on Tips and Tricks to Get More Score in State Board Examinations – Chemistry, organized by Department of Chemistry, Aalim Muhammed Salegh College of Engineering, Chennai on 23rd April 2021.

Resource person on Hands on training programme present the lecture on "Chromatography Techniques" organized by Department of Chemistry, Jamal Mohamed College, Trichy under DBT star college scheme on 8th and 9th March 2022.

Resource person organized by Lead Academy; Chennai presented the lecture topic on "Learning of Organic Chemistry" on 30th Jan 2022 at Lead Academy Chennai.

Resource person on Nurturing of Education organized by TIME Higher Secondary School, Aaraikulam, Tirunelveli presented the topic on "Teaching of Organic Science" at 16th October 2021.

Resource person on "Discussion for attempt to the NEET Examination Easy Way" organized by Lead Academy Chennai on 18th March 22, 2022.

Online Courses: Nil

Journals

- 1. M. Muthu Kathija, S. Muthusamy, **R. Imran Khan**, M. Sheik Muhideen Badhusa, K. Rajalakshmi, V. Rama, Y. Xu. 'Photocatalytic degration of methylene blue dye using biogenic copper oxide nanaparticles and its degration pathway analysis', *Inorganic Chemistry Communications*, **2023**, *161*, 111929, **Impact factor: 3.8.**
- **2.** P. Mohammed Yusuf Ansari, R. M. Muthukrishnan, R. Imran Khan, C. Vedhi, K. Sakthipandi, S. M. Abdul Kader. Green synthesis of copper oxide nanparticels using Amaranthus dubius leaf extract for sensor and photocatalytic applications. *Chemical Physics Impact*, **2023**, *7*, 100374. Impact factor: **2.2.**
- **3.** P. Mohammed Yusuf Ansari, R. M. Muthukrishnan, **R. Imran Khan**, C. Vedhi, S. M. Abdul Kader, Green synthesis of copper oxide nanoparticles using *Amaranthus Caudatus* leaf extract and its non-enzymatic glucose sensor application, *Applied Physics A*, **2023**, *743*, 1-12, **Impact factor: 2.7**.
- **4.** N Mohamed Faizee, C Joel, **R Imran Khan**, MSM Badhusha, Beta vulgaris extract assisted green synthesis of ZnO nanoparticles: antimicrobial and nano priming studies, *Inorganic and Nano-Metal Chemistry*. **2023**, 1-10, **Impact factor: 1.7**.
- **5. R. Imran Khan** and K. Pitchumani, Quinolinium Modified β-Cyclodextrin: An Ionic Ligand towards Sustainable A3-Coupling and Tandem Cyclisation Reactions of Aldheydes, Amines and Alkynes, *Molecular*

Catalysis. 2022, 519, 112151, Impact factor: 5.089.

- **6.** MSM Badhusha, C Joel, **R. Imran Khan**, N Vijayakumar, Green Synthesis and Characterization of Fe Doped ZnO Nanoparticles and their Interaction with Bovine Serum Albumin, Journal of *Indian Chemical Society*. **2021**, *11*, 100197, **Impact factor: 0.284**.
- 7 R. Imran Khan and K. Pitchumani, Water Soluble Palladium Complex bearing Pyridinyl-di-amine Modified β-Cyclodextrin as a Catalyst for Hydrogenation Reaction, *ACS Sustainable Chem. Eng.* **2018**, *6*, 16130–16138, Impact factor: 9.224.
- **8 R. Imran Khan**, A. Ramu and K. Pitchumani, Design and one-pot synthesis of a novel pyrene based fluorescent sensor for selective "turn on" and naked eye detection of Ni₂₊ ions, and live cell imaging, *Sensors and Actuators B: Chemical* **2018**, *266*, 429–437, **Impact factor: 9.221**.
- **9. R. Imran Khan** and K. Pitchumani, Pyridinium Modified β-Cyclodextrin: An Ionic Supramolecular Ligand for Palladium acetate in C-C Coupling Reactions in Water, *Green Chem.*, **2016**, *18*, 5518-5528, **Impact factor: 9.80.**
- **10. R. Imran Khan** and Kasi Pitchumani, β-Cyclodextrin included coumarin derivatives as selective fluorescent sensors for Cu₂₊ ions in HeLa cells, *RSC Adv.*, **2016**, *6*, 20269-20275, **Impact factor: 4.036**.
- 11. SDS Parveen, BS Kumar, SR Kumar, R. Imran Khan, K Pitchumani, Isolation of biochanin A, an isoflavone, and its selective sensing of copper(II) ion, *Sensors and Actuators B, Chemical* 2015, 221, 75, Impact factor: 9.221.
- 12. R. Manoj kumar, M. M. Alanazi, R. Imran Khan, R. B. Ajmal, M. Syed Ali Padusha, Sarkar M. A. Kawsar, J. Masood Khan, A. M. Sajith, Ethylene-Di-Amine Modified β-Cyclodextrin Catalyzed Green Synthesis of Pyrimidones and Its In Silico Study against ESBL E. coli Receptor, 2024, https://doi.org/10.20944/preprints202312.2306.v2.

List of patents: NIL

Academic Positions

- 1. Member of Questions Paper Setter for the Papers "General Chemistry" for B.Sc Chemistry at Sarah Tucker College, Tirunelveli.
- 2. I am appointed as an External Examiner for Semester Practical Examination at POPE'S College, Sawyerpuram, Thoothukudi District, Tamilnadu on 2021.
- 3. I am appointed as an External Examiner for Summative Practical Examinations at Sri Sarada College for Women, Tirunelveli on 2022.
 - 4. HEAD, PG Research Department of Chemistry, Sadakathullah Appa College, Tirunelveli.
 - 5. Board of Study Member, PG Research Department of Chemistry, Sadakathullah Appa College, Tirunelveli.
 - 6. Staff Council Member, Sadakathullah Appa College, Tirunelveli.
 - 7. Member of INSc (Institute of Scholar) at Bangalore, India
 - 8. Member of Criteria III in NAAC at Sadakathullah Appa College, Tirunelveli, Tamilnadu, India.
 - 9. Member of Career Guidance Cell at Sadakathullah Appa College, Tirunelveli, Tamilnadu, India.
 - 10. Member of ARIIA at Sadakathullah Appa College, Tirunelveli, Tamilnadu, India.
 - 11. Member in NIRF committee at Sadakathullah Appa College, Tirunelveli, Tamilnadu, India.

Guest Lecture and Resource Persons

- 1. Resource person on Tips and Tricks to Get More Score in State Board Examinations Chemistry, organized by Department of Chemistry, Aalim Muhammed Salegh College of Engineering, Chennai on 23rd April 2021.
- 2. Resource person on Hands on training programme present the lecture on "Chromatography Techniques" organized by Department of Chemistry, Jamal Mohamed College, Trichy under DBT star college scheme on 8th and 9th March 2022.
- 3. Resource person organized by Lead Academy; Chennai presented the lecture topic on "Learning of Organic Chemistry" on 30th Jan 2022 at Lead Academy Chennai.
- 4. Resource person on Nurturing of Education organized by TIME Higher Secondary School, Aaraikulam, Tirunelveli presented the topic on "Teaching of Organic Science" at 16th October 2021.
- 5. Resource person on "Discussion for attempt to the NEET Examination Easy Way" organized by Lead Academy Chennai on 18th March 22, 2022.

Conferences Presented International and National Level

- 1. Participated as delegate and presented an poster presentation in the "1st International Conference on Life, Chemical, and Health Sciences (ICLCHS)" form 24-26th October 2019, organized by Department of Life Sciences Ramaiah College of Arts, Science College of Arts, Science and Commerce in collaboration with Karnataka Science and Technology Academy, Department of IT, BT, and Science and Technology, Government of Karnataka.
- 2. Presented a paper in 13th Eurasia Conference on Chemical Science, Bangalore, India, held at Indian Institute of Science, Bangalore, at December- 14-18, 2014.
- 3. Poster presented in "Second International conference on Advances Materials Chemistry at The Interfaces of Energy, Environment and Medicine" at Manonmaniam Sundaranar University, Tirunelveli, contribute paper entitled with "Biomimetic Catalysis by Cu(I) complex of Ethylene-di-amine Modified β -Cyclodextrin in Synthesis of Benzoxazole Derivatives via Phenol and benzylamine Coupling.
- 4. Academic and interaction sessions during the 5th Science Conclave/Inspire Internship Program a congregation of Nobel Laureates and Eminent Scientists an MHRD DST initiative at IIITAllahabad, India during December 08-14, 2012.
- 5. Presented the paper in the "YOUNG SCIENTIST CONFERENCE" as a part of "India International Science Festival 2020" held at Biswa Bangala Convention Centre, Kolkata during November 5-8, 2019 and also presented a paper on the theme Frontier areas of Research.
- 6. Presented a poster in "21st CRSI National Symposium in Chemistry" 2017 held at CSIR Indian Institute of Chemical Technology, Hyderabad, India.
- 7. Presented a paper in the *National Symposium on Newer Horizons in Chemistry* held on 09 March 2012 at Manonamaniam Sundaranar University.
- 8. Poster presented in "*National Symposium on Newer Horizons in Chemistry*" at Manonmaniam Sundaranar University, Tirunelveli, contribute paper entitled with "Synthesis, Characterization and Biological Activity of Coumarin Derivatives" (II prize was awarded).

Webinar Conducted

1. International Webinar on "Extraction in Food Industries" organized by Research Department of Chemistry, Sadakathullah Appa College, Tirunelveli on 05th June 2020.

Resource Person: Prof. Mustafa Zafer Ozel,

Green Chemistry Associate Lecture

Green Chemistry Centre of Excellence

Department of Chemistry, University of York, London

2. International Webinar on "Green Organic Chemistry" organized by Research Department of Chemistry, Sadakathullah Appa College, Tirunelveli on 16th June 2021.

Resource Person: Prof. Michael North,

Professor of Green Chemistry

Green Chemistry Centre for Excellence

Department of Chemistry, University of York, York, UK.

National and International Conferences participated

- 1. Participated in ICEE 2016, held at IIT Bombay, Mumbai during December 27-30 2016.
- 2. Participates in 3rd International Conference on Emerging Electronics, held at IIT Bombay on, 2016.
- 3. Participated in the national workshop on *Computational Methods in Small Molecules and Bio Pharmaceutical Drug Discovery*, held at the Vijnana Bhavan, University of Mysore, Manasagangotri, Mysurur, during 7-9 May 2015.
- 4. Participated in the *India International Science Festival 2019*, held at Biswa Bangala Convention Centre, Kolkata during November 5-8, 2019.
- 5. Participated in the *Two Day International Workshop on Innovations in Curriculum Designing (IWICD 2013)* held during 21-22 March 2013 at Manonmaniam Sundaranar University, Tirunelveli 12.
- 6. Participated two days *National Conference on Chemistry of Materials (NCCM-18)* organized by Research Department of Chemistry, Sadakathullah Appa College, Tirunelveli on 10th and 11th October 2018.
- 7. Participated in the *International Seminar on Advance Materials (AM 2019)* organized by Department of Materials Science and Physical Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai on 23th September 2019.
- 8. Participated in the UGC Sponsored *Two-Day National Conference on Materials in Sustainable Chemistry* (NCMSC 19) organized by Research Department of Chemistry, Sadakathullah Appa College, Tirunelveli, on 27 and 28th of September 2019.
- 9. Participated in Two Day State Level Workshop on *Techniques in Chromotography*, organized by Research Department of Chemistry, Sadakathullah Appa College, Tirunelveli, on 12th March 2020.
- 10. Participated in two-day lecture workshop on *Recent Development in Chemistry*, organized by School of Chemistry, Madurai Kamaraj University, Madurai on 27 and 28th Jan 2016.
- 11. Participate two days' Workshop on *High Resolution Transmission Electron Microscopy* conducted by Central Instrumentation Centre sponsored by DST-PURSE, Madurai Kamaraj University, Madurai on 7 and 8th Jan 2016.
- 12. Participated in the three days National Seminar on *Emerging Trends in Chemistry* under the auspicious of Chemical Research Society of India (CRSI) organized by School of Chemistry, Madurai Kamaraj University, Madurai during February, 18 to 20th 2016.
- 13. Participated in the One Day Orientation Training on *Entrepreneurship Development to students of affiliated colleges* under Bharathidasan University Jurisdiction organized by the CACEE, Trichy, held on 24.03.2009.
- 14. Participated Science Academics Lecture Workshop on *Advance in Chemistry*, sponsored by Science Academies (IASc, INSA & NASI) during July 26-27 2013 at School of Chemistry, Madurai Kamaraj University, Madurai.
- 15. Participated *National Conference on Current Trends in Chemistry* (NCCTC 2011) organized by Madurai Kamaraj University, Madurai on 24-25th March 2011.
- 16. Participated one-day National Seminar on Recent Trends in Chemistry, sponsored by Department of Chemistry, Madurai Kamaraj University, Madurai on 11th September 2015.
- 17. Participated in the CRSI-ACS Symposium on 13th July 2017 in Hyderabad, India
- 18. Participated in one-day workshop on "Application of Computational Chemistry" organized by the Royal Society of Chemistry-South India and School of Chemistry, Madurai Kamaraj University, Madurai.