

## **Dr. R. Kanmani**

Assistant Professor (SS)  
PG & Research Department of Chemistry  
Holy Cross College (Autonomous), Tiruchirappalli - 2  
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### **1. Professional Summary:**

I am working as an Assistant Professor of Chemistry for the past 12 years. My teaching methodology is simple and effective. I have thorough knowledge of the subject and have great practical knowledge. I have guided more than 50 UG and PG students. Actively participate in continued learning through conference, research and extracurricular activities.

### **2. Qualification:** M.Sc., Ph.D.

### **3. Date of Joining:** 18.06.2012 (Mgt), 18.06.2015 (Aided)

### **4. Experience:**

UG – 12 years,  
PG - 12 years  
M.Phil- 6 years

### **5. Education:**

2014

#### **Ph.D**

St.Joseph's College (Autonomous), Trichy

2006

#### **M.Sc Chemistry**

Urumu Dhanalakshmi College (Autonomous), Trichy

Percentage of Marks: **74%**

2004

#### **B.Sc Chemistry**

Govt. Arts College, Trichy.

Percentage of Marks: **74%**

### **6. Subject of Expertise:** Organic Chemistry, Physical Chemistry and Natural Products Chemistry

### **7. Core Competencies:**

- RESCAPES Core Committee member
- Extension Core Committee member in the NAAC parameter of our college

### **8. Leadership profile:**

NSS Programme Officer (2023 -2016)

YRC Co-ordinator (2020 – Till Date)

### **8. Awards Received**

- INSC – Young Researcher Award – 2022
- INSC – Research Excellence Award – 2023
- ARAI - A P J Abdul Kalam Award 2024 for Outstanding Researchers

### **9. Key Achievements:**

- **Resource person** in the National Workshop on “ Green Techniques in Chemistry Laboratory Technoques (GTCLE- 2013)” organized by Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli 620 002.
- **Resource Person** in the Training Programme for Post Graduate Teachers on “ Microscale Experiments with Green Techniques” organized by Holy Cross College, Trichy.
- **Convener** in the workshop on Safety and Handling of chemicals in the chemistry laboratory” organized by Holy Cross College, Trichy.

- **Resource Person in the Workshop on “Basic Laboratory Skills”** organized by Holy Cross College, Trichy.
- **Resource Person** for the two days workshop on “Techniques in Phytochemical Analysis” organized under UGC – CPE scheme on 31<sup>st</sup> January – 1<sup>st</sup> February 2019.
- **Resource Person** in the Training Programme on Phytochemical Analysis” organized by Holy Cross College, Trichy on 10<sup>th</sup> and 11<sup>th</sup> August 2023.
- **Resource Person** for the two days workshop on “Journey into Science - Exploration of Wonders” organized by P G & Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli 620 002, on 30<sup>th</sup> and 31<sup>st</sup> May 2024.
- **Resource Person** for the workshop on “Preparation of Chemical reagents and Laboratory safety measures for newly recruited staff and nonteaching staff” organized by Holy Cross College, Trichy on 28<sup>th</sup> June 2024.

#### 10. Orientation / Refresher / Other Courses attended

Name of the Course	Academic Staff College, University	Duration in Days	From – To (Mention Date here)
Ninth Online Faculty Induction Programme	UGC – HRDC, Bharathidasan University	30 Days	01.06.2022 – 30.06.2022
Refresher Course in Chemistry	UGC – HRDC, Madurai Kamaraj University	14 Days	07.10.2022 – 20.10.2022
Refresher Course (Interdisciplinary Science)	UGC – MMTTC/GAD-MMTTC, SGTB Khalsa College, University of Delhi in collaboration with University of Delhi (Department of Anthropology and Skills Enhancement Committee), Acharya Narendra Dev College, DU and Forensic Unit	14 Days	06.04.2024 – 30.04.2024

#### 11. Publication:

##### List of Papers published in National/ International Journals :

1. Isolation of a Chalcone from The Medicinal Plant *Boccopa monnieri*  
M. Suresh, X. Queen Rosary sheela, **R. Kanmani**, C. Mani, Lalitha Easwaran, A. Leo Stanley, and V. Alex Ramani, *Asian Journal of Chemistry*, Vol. 22( 2), 965, 2010.
2. Phytochemical and Antibacterial Activity Studies of the Leaf Extracts of *Clematis gouriana*  
**R. Kanmani**, X. Queen Rosary Sheela, S. Suresh, C. Mani and V. Alex Ramani., *Journal of Tropical Medicinal Plants*, Vol. 12(1), 2011.
3. EIS and Polarization Studies to evaluate the inhibition effect of *Clematis gouriana* on mild steel corrosion in acid medium  
M. Gopiraman, P. Sagunthala, **R. Kanmani**, V. Alex Ramani and N. Sulochana, *Ionics*, 2011.
4. Phytochemical Analysis of *Spilanthes calva*  
**R. Kanmani**, M. Joesph, C. Mani, P. Jayaraj, R. Govindarajan and V. Alex Ramani, *RETELL*, Vol. 10 and Vol. 11, 2010 (ISSN 0973-404X).
5. Quantitative Estimation of Primary and Secondary Metabolites Present in Leaves of *Clematis gouriana*  
**R. Kanmani**, X. Queen Rosary Sheela and V. Alex Ramani, *RETELL*, Vol. 10 and Vol.

11, 2010 (ISSN 0973-404X).

6. Root and Stem Anatomy of *Naragamia alata* Wight & Arn.

X. Queen Rosary Sheela, P. Arockiasamy, **R. Kanmani**, A. Charles, V. Alex Ramani, *International Journal of Pharmacognosy and Phytochemical Research*, 2011.

7. Isolation and Characterization of flavonone Compounds from the leaf Extract of *Polygonum barbatum*

X. Queen Rosary Sheela, P. Arockiasamy, **R. Kanmani**, A. Charles, V. Alex Ramani, *Journal of Chemical and Pharmaceutical Research*, Vol. 3(2), 2011.

8. Biosynthesis and Characterization of Silver Nanoparticles from Vicia Faba and Their Antimicrobial Studies

**R. Kanmani** and M. Aarthi, *International Journal of Scientific & Engineering Research*, Volume 7, Issue 8, August-2016.

9. Synthesis and antimicrobial studies of copper nanoparticles from *costus pictus*: Green method

**Kanmani R**, Kalaiselvi B, Felicita Florence J and Amala Infant Joice J, *Journal of Pharmacognosy and Phytochemistry*, Vol 8 (3), 2019.

10. Nanocrystalline Nickel Electrodeposition on Carbon Steel Using Eco- Friendly Aqueous Ananas comosus Juice,

J. Felicita Florence, M. Lavanya, J. Amala Infant Joice, H. Asia Thabassoom and **R. Kanmani** *Asian Journal of Chemistry*; Vol. 31, No. 11, (2019), 2425-242

11. Studies on Extraction and Extraction of Biodiesel parameters in six cyanobacteria strains B. Kalaiselvi, J. Amala Infant Joice, J. Felicita Florence and **R. Kanmani**, *International Journal of Research Ayurveda and Pharmacy*, 11(3), May – June 2020, ISSN Online:2229-3566.

12. Antioxidant and Antidiabetic Activities of Biologically Synthesized Silver Nanoparticles using *Linum usitatissimum* Extract

**Kanmani R** and Irudaya Irin Scleeva P, *Oriental Journal of Chemistry*, Vol. 37, No.(5), 2021.

13. Synthesis, characterization and photocatalytic activity of potassium Titanate nanocatalyst

J. Amala Infant Joice, G. Ramya, J. Felicita Florence, **R. Kanmani**, A. Motcha Rakkini, L. Arul Mary Rosaline, Amany Salah Khalifa, Ashraf Elfasakhany, Kathirvel Brindhadev, *Applied Nanoscience*, 2021

14. Biogenic Synthesis of Copper oxide and Zinc oxide Nanoparticles using *Catharanthus roseus* L. flower extract and Evaluation of Its Antioxidant and Antibacterial Properties

M Kavitha, K Shenbagam, **R Kanmani**, S Philomina Mary, *Oriental Journal of Chemistry*, 38 (5), 1320, 2022.

15. Antiurolithiatic Activity of Biogenically Synthesized Silver Nanoparticles Using the Stem Bark Extract Of *Hybanthus enneaspermus* (L) f. Muell

**Kanmani R**, Devika S , Kavitha M and Shenbagam K, *IJBPAS*, February, 2023, 12(2): 724-737.

16. In Vitro Alpha Amylase and Alpha Glucosidase Inhibitory Activity of Important Lettuces from South Indian Region

Rakkini A. Motcha, Rosaline L. Mary Arul, Ramya G., Florence J. Felicita, **Kanmani R.**, Juliat J. Kiruba and Joice J. Amala Infant, *International Journal of Zoological Investigations*, Vol. 9 (Special Issue 1), 39-45, 2023.

### **Book Chapter**

1. Selective Behaviour of Aromatic Acetals Towards N-Haloamides- A kinetic Approach

**Kanmani R**, Kavitha M and Shenbagam K, *Emerging Trends in Science, Social Science, Engineering and Management - A Multidisciplinary Approach*, 2022.

### **12. BOOK PUBLICATION**

❖ Co-author in the book entitled “**Industrial Chemistry Study Resources**”

❖ Co-author in the book entitled “**Lab Manual**” for Chemistry Students

**Research** I have completed my Ph.D as a fulltime scholar.

**Ph.D - WORK PROFILE:**

- Extraction and Isolation of naturally occurring compounds, such as flavonoids, alkaloids, tannins, Phenolic compounds, sugars etc. from plants which are used in the folk medicine.
- Identification and characterization of the isolated compounds using <sup>13</sup>CNMR, <sup>1</sup>HNMR, IR, UV, HPLC and Mass spectrometry.
- The work also involved a quantitative and qualitative determination of primary and secondary metabolites.
- Studies on antimicrobial activity for the isolated compounds.
- Studies on anti-inflammatory and antioxidant properties of the plants by in-vivo method.