RESUME

Dr.G. RAJKUMAR M.Sc., Ph.D., (NET, SET)

Assistant Professor of Chemistry

Vivekananda College Tiruvedakam West

Madurai - 625 234

Tamil Nadu, India.

Mob. No: +91 95008 69470 Email id: rajkchem@gmail.com

Web Page: https://sites.google.com/view/rajkumarganesan/home

YouTube Channel Link: https://www.youtube.com/c/DrRajkumarGanesan



ACADEMIC QUALIFICATION

COURSE	INSTITUTION	BOARD/ UNIVERSITY	YEAR OF COMPLETION	MARKS %
Ph.D., Chemistry	Gandhigram Rural Institute (Deemed University) Gandhigram	Gandhigram Rural Institute	2011-2016	
M.Sc., Chemistry	Gandhigram Rural Institute (Deemed University) Gandhigram	Gandhigram Rural Institute	2009-2011	79.41 (University II nd)
B.Sc., Chemistry	St. Joseph's College, Trichy	Bharathidasan University	2006-2009	80.38 (Gold Medal)
H. Sc.	E.R. Higher Secondary School, Trichy	State Board	2004-2006	70.41
SSLC	St. Joseph's College Higher Secondary School, Trichy	State Board	2003-2004	91.60

Present Positions:

- **❖** NSS Programme Officer (since 1st October 2021)
- **❖** SWAYAM-NPTEL Coordinator (since 1st November 2021)
- **❖** AICTE Translator for Chemical Engineering Courses (since August 2021)
- **❖** NPTEL Translator for Chemistry Courses (since May 2020)
- ❖ Member, Entrepreneurship Development Cell. (since 2019)
- **Community Member,** American Chemical Society (ACS) since July 2020.
- **Editorial Board Member, SKIREC Publications, Punjab.**
- Academic Counselor, Indira Gandhi National Open University (IGNOU) since January 2020.

Positions Held:

- ❖ NSS Assistant Programme Officer, (2016-2021)
- ❖ Department Coordinator, Website Data Maintenance Committee. (2019-2021)
- ❖ Coordinator, Intercollegiate Competition (2018-2022)

Examinations Qualified:

- State Eligibility Test (SET-2017)
- State Eligibility Test (SET-2016)
- CSIR-JRF-2014 (70th Rank at the All India Level) conducted by UGC-CSIR, New Delhi, December, 2014
- State Eligibility Test (SET-2012)

Membership in Professional Bodies:

- **❖** Member, National Council of Teacher Scientist (NCTS), Unit of Raman Science and Technology Foundation, since 2021.
- **❖** Lifetime member in Institute of Scholars (InSc) since 2020, Bengaluru, India
- **❖** Community Member, American Chemical Society (ACS) since July 2020.

Reviewer:

- ❖ Waste and Biomass Valorization (WAVE), Springer
- ❖ International Journal of Agricultural Technology
- ❖ Journal of Advanced Research in Fluid Mechanics and Thermal Sciences
- ❖ InSc-International Journal of Basic and Applied Sciences.
- **❖** Journal of Environmental Nanotechnology

Books Edited:

❖ International Conference on Modern Trends in Chemistry (MTC-25) (ISBN: 978-81-933998-6-6), Chithiram Publications, 2018.

Project Undertaken:

S.No.	Title	Month and	Agency
		Year	
1.	Biogenic synthesis of silver	March	TNSCST,
	nanoparticles (AgNPs) and its	2022	Govt. of Tamil Nadu
	applications in robust sensing		(Student Projects Scheme)
	and catalytic reduction of		
	environmental pollutants		

Programs Organized:

- ❖ Treasurer, SYNTHON-003 (Interdepartmental Competition), 03rd February 2023.
- Convenor, Online Student Development Programme on Computational Chemistry, 21st July 2022.
- Convenor, Online Faculty Development Programme on Computational Chemistry, 25th March 2022.
- Convenor, Faculty Enrichment Programme on Catalysis and Stereochemistry (under UGC-CPE grant), 29th March 2021.
- ❖ Convenor, One Day Faculty Enrichment Programme on Emerging Fields in Chemical Sciences (under UGC-CPE grant), 22nd March 2021.
- ❖ Convenor, Online Student Development Programme (SDP), 30th July 2020.
- ❖ Convenor, One Day International Webinar, 28th July 2020.
- Coordinator, One Day International Seminar on Modern Trends in Chemistry (MTC-26) (under UGC Autonomy grant), 27th February 2020.
- ❖ Treasurer, SYNTHON-002 (Interdepartmental Competition), 3rd February 2023.
- Organizing Secretary, SYNTHON-002 (Interdepartmental Competition), 5th February 2020.
- Organizing Secretary, SYNTHON-001 (Interdepartmental Competition), 15th March 2019.

No. of Classes handled for IIT-JAM/CSIR/GATE Examinations: 36

Resource Person/Invited Lectures: 66

- Served as Chief Guest in the Inauguration of Chemistry Association and delivered a lecture on Basic Organic Reactions for Competitive Examinations organized by Department of Chemistry, Ayya Nadar Janaki Ammal College, Sivakasi on 06th July 2023.
- 2) Served as one of the Resource Persons in "Chemistry Research Drive (CRD-2023) Programme and delivered a lecture on "Important Naming Reactions-II" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, at Vels Institute of Science, Technology and Advanced Studies, during 21st and 22nd June 2023.

- 3) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2023) Programme and delivered a lecture on "Important Naming Reactions-I" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, at Vels Institute of Science, Technology and Advanced Studies, during 29th May 2023.
- 4) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2023) Programme and delivered a lecture on "Reactive Intermediates-II" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation on 26th May 2023.
- 5) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2023) Programme and delivered a lecture on "Reactive Intermediates-I" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation on 25th May 2023.
- 6) Delivered a lecture on "A Problem-solving Approach on Conformational Analysis" organized by PG and Research Department of Chemistry, Seethalakshmi Ramaswami College, Trichy on 07th March 2023.
- 7) Delivered a lecture on "Stereochemistry and Conformational Analysis" in One Day Workshop on "CSIR NET/SET/TRB Exams" organized by PG and Research Department of Chemistry, The Standard Fireworks Rajaratnam College for Women, Sivakasi on 23rd January 2023.
- 8) Served as Chief Guest and delivered a lecture in One Day Workshop on "Organic Spectroscopy Problems-Solving Tricks for Clearing CSIR and GATE Exams" organized by PG Department of Chemistry, SDNB Vaishnav College, Chennai on 20th January 2023.
- 9) Served as Chief Guest and delivered a lecture in National Level Seminar on "Chemistry Learning in Creative Knowledge" organized by Department of Chemistry, Don Bosco College, Dharmapuri on 19th October 2022.
- 10) Served as one of the Resource Persons in "Online Coaching Programme (2022-2023) for UGC-CSIR-JAM and delivered a lecture on "Chemistry of Organic Reactive Intermediates-II" for IIT-JAM/CSIR/GATE aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 16th October 2022.
- 11) Served as one of the Resource Persons in "CSIR Coaching Programme and delivered a lecture on "Problems in Organic Reactive Intermediates" for

- **CSIR/GATE aspirants** organized by Department of Chemistry, National College, Trichy on 16th October 2022.
- 12) Served as one of the Resource Persons in "Online Coaching Programme (2022-2023) for UGC-CSIR-JAM and delivered a lecture on "Chemistry of Organic Reactive Intermediates-I" for IIT-JAM/CSIR/GATE aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 09th October 2022.
- 13) Served as one of the Resource Persons in "CSIR Coaching Programme and delivered a lecture on "Problems in Aromaticity" for CSIR/GATE aspirants organized by Department of Chemistry, National College, Trichy on 09th October 2022.
- 14) Served as one of the Resource Persons in "Online Coaching Programme (2022-2023) for UGC-CSIR-JAM and delivered a lecture on "Concept of Aromaticity-II" for IIT-JAM/CSIR/GATE aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 01st October 2022.
- 15) Served as one of the Resource Persons in "Online Coaching Programme (2022-2023) for UGC-CSIR-JAM and delivered a lecture on "Concept of Aromaticity-I" for IIT-JAM/CSIR/GATE aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 25th September 2022.
- 16) Served as Chief Guest and delivered a lecture on "The Role of Chemistry in Dayto-day Life" in the Inauguration of Chemistry Association organized by Department of Chemistry, National College, Trichy on 19th September 2022.
- 17) Served as Chief Guest and delivered a lecture on "Molecular Rearrangement Reactions in Organic Chemistry" organized by PG Department of Chemistry, Vivekanandha Arts and Science College for Women, Sankakiri, Salem on 13th September 2022.
- 18) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2022) Programme and delivered a lecture on "Important Oxidation Reactions" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation on 06th September 2022.
- 19) Served as Chief Guest and delivered a lecture on "The Important Aspects of Asymmetric Synthesis" in the Inauguration of Chemistry Association organized by Department of Chemistry, Arul Anandar College, Madurai on 30th August 2022.

- 20) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2022) Programme and delivered a lecture on "Important Naming Reactions and their Applications-02" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation on 25th August 2022.
- 21) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2022) Programme and delivered a lecture on "Important Naming Reactions and their Applications-01" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, Chennai on 23rd August 2022.
- 22) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2022) Programme and delivered a lecture on "Conformational Analysis for CSIR and GATE Exams" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, Chennai on 10th August 2022.
- 23) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-2022) Programme and delivered a lecture on "Conformational Analysis for CSIR and GATE Exams" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, Chennai on 9th August 2022.
- 24) Served as Resource Person and delivered a lecture on "CSIR-NET/GATE Coaching Class for PG" in the Inauguration of Chemistry Association organized by PG Department of Chemistry, Bishop Heber College (Autonomous), Trichy on 02nd August 2022.
- 25) Served as one of the Resource Persons in "Chemistry Research Drive (CRD-2022) Programme and delivered a lecture on "Conformational Analysis" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, Chennai held at VELS Institute of Science, Technology & Advanced Studies (VISTAS), Chennai on 29th July 2022.
- 26) Served as Resource Person and delivered a lecture on Recent Advances in Biogenic Synthesis of Silver Nanoparticles (AgNPs) and their Applications in National Conference on "Science & Technology for Sustainable Development" VELS Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, 13th May 2022.
- 27) Served as Resource Person and delivered a talk on "Hands-on-training programme on Preparation of Solutions" organized by PG Department of

- Chemistry, Jamal Mohamed College (Autonomous), Trichy under DBT Star College Scheme during 21 and 22nd March 2022.
- 28) Served as Resource Person and delivered a talk on "Stereochemistry-An Approach towards Problem Solving" organized by PG Department of Chemistry, Sri Meenakshi Govt. Arts College for Women, Madurai on 04th March 2022.
- 29) Served as Resource Person in National Level Lecture Series for PG students in Chemistry and delivered a talk on "Stereochemistry-An Overview" organized by Taywade College and Guru Nanak College of Science, Maharashtra on 30th and 31st December 2021.
- 30) Served as Resource Person in webinar on "Aromaticity Concepts for IIT-JAM, CSIR and GATE Examinations" organized by Universal Intellectual Trust, Viluppuram on 20th December 2021.
- 31) Served as Resource Person in webinar on "NET/SET Examination" organized by Nanjil Catholic College of Arts and Science, Kanyakumari on 04th and 05st October 2021.
- 32) Served as one of the Resource Persons in "Online Coaching Programme (2021-2022) for UGC-CSIR-JAM and delivered a lecture on "Organic Intermediates" for IIT-JAM/CSIR aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 1st August 2021.
- 33) Served as one of the Resource Persons in "Online Coaching Programme (2021-2022) for UGC-CSIR-JAM and delivered a lecture on "Stereochemistry" for IIT-JAM aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 17th and 31st July 2021.
- 34) Served as one of the Resource Persons in "Online Coaching Programme (2021-2022) for UGC-CSIR-JAM and delivered a lecture on "Aromaticity" for IIT-JAM-NET aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 18th and 25th July 2021.
- 35) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-21) Programme and delivered a lecture on "Naming Reactions and Rearrangements" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, Chennai on 14th and 16th July 2021.

- 36) Served as one of the Resource Persons in "Online Chemistry Research Drive (CRD-21) Programme and delivered a lecture on "Conformational Analysis" for CSIR-NET aspirants organized by Prof.Ramasubbu Jeyaram Science Foundation, Chennai on 12th July 2021.
- 37) Served as one of the Resource Persons in "Online Coaching Programme (2021-2022) for UGC-CSIR-JAM and delivered a lecture on "Naming Reactions" for IIT-JAM aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 03rd and 10th July 2021.
- 38) Served as resource person and delivered national level one day webinar in Recent Research Trends in Chemistry on "Electropolymerization" organized by Departemnt of Chemistry, Sri Manakula Vinayagar Engineering College, Puducherry on 11th May, 2021.
- 39) Served as resource person and delivered national level webinar on "Stereochemistry A Special focus towards CSIR/NET/SET Examination" organized by IQAC, RBVRR Women's College, Hyderabad on 01st April, 2021.
- 40) Served as resource person and delivered national level webinar on "e-Content Development Tools and Techniques" organized by IQAC, RBVRR Women's College, Hyderabad on 8th January, 2021.
- 41) Served as one of the Resource Persons in "Weekend Online Coaching Programme for CSIR-NET and IIT-JAM (2020-2021)" and taken a class on the topic "Common Named Reactions and Rearrangements" for IIT-JAM aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 01st and 08th November 2020.
- 42) Served as one of the Resource Persons in "Weekend Online Coaching Programme for CSIR-NET and IIT-JAM (2020-2021)" and taken a class on the topic "Aromaticity" for CSIR-GATE aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 11th October 2020.
- 43) Served as one of the Resource Persons in "Weekend Online Coaching Programme for CSIR-NET and IIT-JAM (2020-2021)" and taken a class on the topic "Stereochemistry" for IIT-JAM aspirants organized by Ayya Nadar Janaki Ammal College, Sivakasi on 04th October 2020.
- 44) Served as Resource Person in one week online workshop and National FDP on Econtent Learning Skill Development Programme on **Google form and quiz &**

- **Testmoz-Demonstration** organized by Thiruvalluvar College Papanasam, Tirunelveli, on 17th and 18th July 2020.
- 45) Served as Resource Person in "Skill Development Programme on CSIR/GATE/SET/IIT-JAM Exam" and taken a class on "Organic Reagents" conducted by NGM College of Arts and Science College, Pollachi during 08.07.2020 to 13.7.2020.
- 46) Served as resource person and delivered a talk in National Online FDP on "Online Demonstration of Free Quiz" organized by Hindusthan College of Arts and Science, Coimbatore on 04th July 2020.
- 47) Served as resource person and delivered a webinar on "Online Demonstration of Google Classroom and Customization of Certify'em" organized by Guru Nanak College on 26th June 2020.
- 48) Served as resource person and delivered a talk in Online International FDP on "Asymmetric Synthesis: An Overview" organized by Dr.N.G.P Institute of Technology, Coimbatore on 15th June 2020.
- 49) Served as resource person and delivered a Webinar on "Career Opportunities for Chemistry Graduates" organized by SNMV College of Arts and Science, Coimbatore on 11th June 2020.
- 50) Served as resource person and delivered a Webinar on "Role of Chemistry in Everyday Life" organized by VELS Institute of Science, Technology & Advanced Studies, Chennai on 08th June 2020.
- 51) Served as resource person and delivered a Webinar on "Chemoselective Reactions for Competitive Exams" organized by Nadar Saraswathi College of Arst and Science, Theni on 05th June 2020.
- 52) Served as resource person and delivered a talk in National Online FDP on "How to make an interactive free online quiz" organized by Hindusthan College of Arts and Science, Coimbatore on 04th June 2020.
- 53) Served as resource person and delivered a talk in webinar on "Asymmetric Synthesis: An art of organic synthesis" organized by Holy Cross College, Trichy on 03rd June 2020.
- 54) Served as resource person and delivered a talk in national webinar on "ICT Tools for College Teachers" on the topic of "Creation of Free Online Quiz and MCQ"

- organized by Seth Kesarimal Porwal College of Arts and Science and Commerce, Nagpur, Maharashtra on 29th May 2020.
- 55) Served as resource person and delivered webinar on the topic "Development of Educational Videos" organized by Stella Centre for Effective Education and Development (SCEED), Stella Maris College, Chennai on 25th May, 2020.
- 56) Served as resource person and delivered webinar on the topic "Research-Scientific thinking with Academic Integrity" organized by Stella Centre for Effective Education and Development (SCEED), Stella Maris College, Chennai on 22nd May, 2020.
- 57) Served as resource person and delivered national level webinar on the topic "Organic Reagents for CSIR/GATE/IIT-JAM AND TIFR Exams" organized by Department of Chemistry, RBVRR Women's College, Hyderabad on 21st May, 2020.
- 58) Served as resource person and delivered national level webinar on the topic "Organic Reagents for Competitive Examinations" organized by Department of Chemistry, GTN Arts College, Dindigul on 12th May, 2020.
- 59) Served as resource person and delivered national level webinar on the topic "Principle and Applications of Electronic Spectroscopy" organized by Department of Chemistry, Annai College of Arts and Science, Kumbakonam on 07th May, 2020.
- 60) 'Handled NET-CSIR/GATE Coaching Class for PG Students organized by the Department of Chemistry, Sri Meenakshi Government Arts College for Women, Madurai on 13th February 2020.
- 61) Served as Resource Person and given a "Hands-on Training on e-Content Development" for Faculty Members organized by Gobi Arts and Science College, Gobichettipalayam, Erode during 10th and 11th February, 2020.
- 62) Delivered a lecture on **Research Methodology** for PG, M.Phil, Ph.D., scholars in One Day Workshop organized by Research Cell, Sri Sarada College for Women, Salem on 25th January 2020.
- 63) Handled **NET-CSIR Coaching Class for PG Students** organized by the Department of Chemistry, Sri Sarada College for Women, Salem on 25th January 2020.

- 64) Served as Resource Person and given a Hands-on Training on e-Content Development for Faculty Members in Faculty Enrichment Programme organized by Vivekananda College, Madurai on 21st January, 2020.
- 65) Served as Resource Person and Delivered a lecture in **Second State Level Preparative Workshop in Chemistry for the IIT JAM-2020 Aspirants (WSJAM-2019)** organized by the Department of Chemistry, St. Joseph's College (Autonomous), Tiruchirapalli on 29th November 2019.
- 66) Handled **NET-CSIR Coaching Class for Scholars and Students** organized by the Department of Chemistry, Gandhigram Rural Institute-DU, Gandhigram on 08th December 2019.

SWAYAM-NPTEL Courses Completed:

Sl.No.	Name of the Course	Duration	Percentage	Type of Certificate
1.	Basics in Inorganic Chemistry	4 Weeks (JanFeb., 2022)	83	Elite with Silver (Topper)
2.	Bioinorganic Chemistry	4 Weeks (AugSep., 2019)	97	Elite with Gold (Topper)
3.	Stereochemistry	8 weeks (July-Sep., 2019)	69	Elite
4.	Coordination Chemistry	12 Weeks (July-Oct., 2019)	75	Elite with Silver

Number of e-Contents Developed: 25

https://www.youtube.com/c/DrRajkumarGanesan

Online Activities:

Number of National Webinars Participated		
Number of International Webir Participated	nars 5	
Online FDP Attended		
MOOC Courses Completed		
Online Courses Completed		

Teaching / Learning / e-Content Development Workshop Attended:

- 1) Participated in Ten Days Workshop on "Teaching-Learning and Evaluation for Faculty Members of Higher Educational Institutions (HEIs)" held at Central University of Rajastan (CURaj), Bandarsindri, Rajastan during 04th to 14th November, 2019.
- 2) Participated and received "Best Observer" award in "A Five Day Capacity
 Building Programme on e-Content Development" organized by Centre for

Teacher Resource and Academic Support, School of Education under the MHRD project held at Manonmaniam Sundaranar University, Tirunelveli during 15-19, July, 2019.

Project Students Guided:

- ❖ M.Sc., Students: 06
- * B.Sc., Students: 09

Project Students Guiding:

- ❖ M.Sc Students: 01
- . B.Sc., Students: 04

Field of Interest - RESEARCH:

- Corrosion Inhibition
- Electrochemistry
- Nanocomposite Coatings

Field of Interest - TEACHING:

- Organic Chemistry
- Inorganic Chemistry

Fellowships Received:

- Awarded Summer Research Fellowship 2016 sponsored by Indian Academy of Sciences IAS, INSA, NASI in National Chemical Laboratory (NCL), Pune under Dr.K. Krishnamoorthy, 18th April 2016 to 12th June 2016.
- Senior Research Fellowship (SRF) of UGC-BSR, New Delhi, from March, 2014 to July, 2015.
- ❖ Junior Research Fellowship (JRF) of UGC-BSR, New Delhi, during March 2012- March 2014.

Awards Received:

- "Swami Vivekananda Award" for having been conferred Doctorate Degree in 45th College Day Celebrations, 2016.
- "Swami Chidbhavananda Appreciation Award" for having been selected "Summer Research Fellowship Programme" sponsored by Science Academies of India (IISc, INSA and NASI) on 45th College Day Celebrations, 2016.
- Recipient of **Gold Medal** in B.Sc., Chemistry, 2006.
- ❖ Fr. Mathew J. Model Medal for outstanding performance in B.Sc., Chemistry.

- ❖ Thiru AC Joseph Medal for securing First Rank in B.Sc., Chemistry.
- ❖ Shri KG Ramani Endowment Cash Award in B.Sc., Chemistry.
- Fr. Cam Boulives SJ Medal (Sri Sriram Iyer) for First Prize in Major, B.Sc., Chemistry.
- Thiru Govinda Rao Medal for Chemistry Staff and Students in B.Sc., Chemistry.

Achievments / Honors:

- Received Young Researcher Award-2020 from Institute of Scholars (InSc), Bengaluru.
- Selected to CSIR- Online Summer Research Training Programme (SRTP-2020) under the guidance of Dr.Rajeev Sakhuja, Associate Professor, Birla Institute of Technology & Science (BITS), Pilani, Rajasthan during June-August, 2020.
- ❖ Received "Best Observer" award in "A Five Day Capacity Building Programme on e-Content Development" organized by Centre for Teacher Resource and Academic Support, School of Education under the MHRD project held at Manonmaniam Sundaranar University, Tirunelveli during 15-19, July, 2019.
- Served as a Judge for "School Science Exhibition" at Sri Sarada Vidyavanam Girls Matriculation Higher Secondary School during 05 & 06th February 2016.
- Special Invitee for Board of Studies (BoS) meeting in Gandhigram Rural Institute, Gandhigram.
- Selected to attend a Seventh Science Conclave (A Congregation of Nobel Laureates) at IIIT-Allahabad, Dec. 08–12, 2014.
- ❖ Awarded Best Oral Presentation and Cash Award in International Corrosion Prevention Symposium – CORSYM, IIT-Bombay, during Feb. 20-21, 2014.
- ❖ Selected to attend a **Second Science Conclave** (A congregation of Nobel laureates) at IIIT-Allahabad, Dec. 08–14, 2010.
- ❖ Selected to attend a "Summer Training Programme in Chemistry (STPIC)-2010" Conducted by University of Madras, Chennai, 31.05.2010 to 18.06.2010.
- Second place winner in Bournvita Quiz Contest Intra School Quiz 2001 in St. Joseph's College Higher Secondary School, Aug., 27, 2001.

Orientation/Refresher Course Attended:

- ❖ Participated Two Weeks Online Refresher Course in Chemistry conducted by UGC-HRDC, University of Hyderabad, Hyderabad from 08.11.2021 to 20.11.2021.
- ❖ Online Refresher Course in Chemistry for Higher Education-2019, SWAYAM-NPTEL. (Roll No: ARP20101983)
- ❖ Participated **Refresher Course in Chemistry** conducted by UGC-HRDC, Bharathidasan University, Trichirappalli from 20.09.2019 to 03.10.2019.
- ❖ Participated 103rd Orientation Programme conducted by UGC-HRDC, Bharathidasan University, Trichirappalli from 18.05.2018 to 14.06.2018.

FDP Attended:

- ❖ **SWAYAM-NPTEL**, Bioinorganic Chemistry, 4 Weeks (Aug.-Sep., 2019).
- ❖ SWAYAM-NPTEL, Coordination Chemistry, 12 Weeks (July-Oct., 2019).
- ❖ Participated in the "Faculty Development Programme on Entreprenueurship Promotion in Educational Institutions" organized by the PMO-IEDP (Programme Monitoring Office-Innovation and Entrprenuership Development Programme) from 16th to 18th September 2019 at Thiagarajar College of Engineering, Madurai.

Research Publications in SCI Journals - 10

- 1) **G. Rajkumar** and R. Sundar, Sonochemical-assisted eco-friendly synthesis of silver nanoparticles (AgNPs) using avocado seed extract: Naked-eye selective colorimetric recognition of Hg²⁺ ions in aqueous medium, **Journal of Molecular Liquids**, 368 (2022) 120638. **(Impact Factor: 6.633)**. https://doi.org/10.1016/j.molliq.2022.120638.
- 2) G. Rajkumar and R. Sundar, Biogenic one-step synthesis of silver nanoparticles (AgNPs) using an aqueous extract of *Persea americana* seed: Characterization, phytochemical screening, antibacterial, antifungal and antioxidant activities, Inorganic Chemistry Communications, (Impact Factor: 3.428) 143 (2022) 109817. https://doi.org/10.1016/j.inoche.2022.109817.
- 3) K.Vinothkumar, G. Rajkumar and M.G. Sethuraman, Enhancement of protection of copper through electropolymerised poly-2-amino-1,3,4-thiadiazole and its composite films, Materials Chemistry and Physics, 259

- (2021) 123987-124000. (Impact Factor: 4.094) (ISSN: 0254-0584) DOI: 10.1016/j.matchemphys.2020.123987
- 4) **G. Rajkumar** and M.G. Sethuraman, A novel hybrid composite coating of poly-3-amino-5-mercapto-1,2,4-triazole/TiO₂ on copper for corrosion protection, Iranian Polymer Journal, 25 (2016) 119-128 (Impact Factor: 1.899) (ISSN: 1735-5265) DOI: 10.1007/s13726-015-0406-4
- 5) **G. Rajkumar** and M.G. Sethuraman, A study of the inhibition of copper corrosion by self-assembled films of 3-mercapto-1H-1,2,4-triazole, Research on Chemical Intermediates, 42 (2016) 1809-1821 (Impact Factor: 1.37) (ISSN No: 1568-5675) DOI: 10.1007/s11164-015-2119-x
- 6) **G. Rajkumar**, R. Sagunthala and M.G. Sethuraman, Investigation of inhibiting properties of self-assembled films of 4-aminothiophenol on copper in 3.5% NaCl, Journal of Adhesion Science Technology, 29 (2015) 1107-1117. (Impact Factor: 1.15) (ISSN No: 1568-5616) DOI: 10.1080/01694243.2015.1019391
- 7) **G. Rajkumar** and M.G. Sethuraman, Electrochemical synthesis of poly-3-amino-5-mercapto-1,2,4-triazole on copper and its protective effect in 3.5% NaCl medium, Research on Chemical Intermediates, 41 (2015) 8041-8055 (Impact Factor: 1.54) (ISSN No: 1568-5675) DOI: 10.1007/s11164-014-1876-2
- 8) **G. Rajkumar** and M.G. Sethuraman, Synthesis, characterization and corrosion protection of poly-4-methyl-3-mercapto-1,2,4-triazole/TiO₂ composite on copper, Polymer Bulletin, 71 (2014) 3249–3260 (Impact Factor: 1.43) (ISSN No: 1436-2449) DOI: 10.1007/s00289-014-1248-5
- 9) **G. Rajkumar** and M.G. Sethuraman, Corrosion protection ability of self-assembled monolayer of 3-amino-5-mercapto-1,2,4-triazole on copper electrode, Thin Solid Films, 562 (2014) 32–36 (Impact Factor: 1.88) (ISSN No: 0040-6090) DOI: 10.1016/j.tsf.2014.03.074
- 10) **G. Rajkumar** and M.G. Sethuraman, Electrosynthesis of a novel poly(3-amino-1, 2, 4-triazole) + TiO₂ hybrid composite on copper and its corrosion protection, Industrial and Engineering Chemistry Research, 52 (2013) 15057–15065, **ACS**, (Impact Factor: 2.84) (ISSN No: 1520-5045), DOI: 10.1021/ie401444b

<u>Papers Presented in International / National Conferences - 16</u>

1) M.V. Saikumar, **G.Rajkumar** and M.G.Sethuraman "An electrochemical study on the corrosion protection of copper surface using self-assembled films of5-

- (Methylthio)-1,3,4-thiadiazole-2-thiol" in International Conference on Research Initiatives in Chemistry for Sustainable Development (RICS), Gandhigram Rural Institute-Deemed to be University, Gandhigram, p.228, during 18th & 19th March 2019. (ISBN: 978-93-86712-63-9)
- 2) T. Srinivasan, **G. Rajkumar** and M.G. Sethuraman "A poly-3-amino-1,2,4-triazole/ZnO composite coating on Cu-Ni (90/10) alloy for corrosion inhibition" in International Conference on Research Initiatives in Chemistry for Sustainable Development (RICS), Gandhigram Rural Institute-Deemed to be University, Gandhigram, p.250, during 18th & 19th March 2019. (ISBN: 978-93-86712-63-9)
- 3) **G. Rajkumar**, K. Vinothkumar and M.G. Sethuraman, "Anti-corrosion properties of self-assembled monolayers of thiadiazole derivative on copper", in International Conference on Modern Trends in Chemistry (MTC-25)", Vivekananda College, Tiruvedakam West, p.13 on 23rd February 2018. (ISBN: 978-81-933998-6-6)
- 4) K.Vinothkumar, **G. Rajkumar** and M.G. Sethuraman, "Fabrication of SAMs of thiadiazole derivative on Cu-Ni (90/10) alloy for protection from corrosion" in National Conference on Recent Advances in the Applications of Macromolecular Materials (RAAMM -2017), Gandhigram Rural Institute (DU), Gandhigram, during 02 & 03rd March 2017.
- 5) **G. Rajkumar,** M. Ragu, M. Ganesan, T. Rajendran and V.K. Sivasubramanian, Corrosion Inhibition of Mild Steel in 0.5 M H₂SO₄ Medium by p-nitrobenzaldehyde-p-phenylenediamine Schiff Base, International Conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015), Gandhigram Rural Institute (DU), Gandhigram, during 14 & 15th December 2015.
- 6) **G. Rajkumar** and M.G. Sethuraman, Modification of copper surface by self-assembled films of 2-amino-5-mercapto-1,3,4-thiadiazole for its corrosion protection, Corrosion Awareness Day (CAD-2015), Gandhigram Rural Institute (DU), Gandhigram, p.1.39, on 17th April 2015.
- 7) **G. Rajkumar** and M.G. Sethuraman, Study of the protection performance of 4-methyl-4H-1,2,4-triazole-3-thiol monolayers on copper, National Conference

- on Recent Advances in Chemical Sciences- RACS 2014, Gandhigram Rural Institute (DU), Gandhigram, p.53, during 05 & 06th March 2015.
- 8) Susanti Prithika Vijaykumar, **G. Rajkumar** and M.G. Sethuraman, Robust method of biogenic preparation of silver nanoparticles (AgNPs) using *Garcinia mangostana*, National Conference on Advances and Innovations in Chemical Sciences (NCAICS-2015), University of Mumbai, during 12 & 13th February, 2015.
- 9) **G. Rajkumar** and M.G. Sethuraman, The modification of copper surface by self-assembled 3-mercapto-1H-1,2,4-triazole thin films for its corrosion protection, International Conference on "Chemistry and Materials" (ICCM 2014), Anna University, Trichy, p. 22, Nov. 14-15, 2014 (ISBN: 978-93-81521-49-6).
- 10) **G. Rajkumar** and M.G. Sethuraman, Corrosion protection of poly-3-amino-5-mercapto-1,2,4-triazole films on copper, The Seventeenth National Congress on Corrosion Control, NCCI, CSIR-CECRI, Karaikudi, p.103, during 21-23rd August 2014.
- 11) T. Srinivasan, G. Rajkumar and M.G. Sethuraman, Enhanced corrosion protection of poly-3-amino-5-mercapto-1,2,4-triazole/TiO₂ composite on aluminium, The Seventeenth National Congress on Corrosion Control, NCCI, CSIR-CECRI, Karaikudi, p.80, during 21-23rd August 2014.
- 12) **G. Rajkumar**, R. Sagunthala and M.G. Sethuraman, Protection of copper through self-assembled monolayer of 4-aminothiophenol, International Conference on Electrochemical Science and Technology-2014, IISc Bangalore, p.94, during 07-09, August 2014.
- 13) G. Rajkumar and M.G. Sethuraman, A novel composite coating for the corrosion protection of copper in 3.5% NaCl medium, International Corrosion Prevention Symposium CORSYM 2014, IIT-Bombay, during 20-21th Feb., 2014.
- 14) T. Srinivasan, **G. Rajkumar** and M.G. Sethuraman, Corrosion protection ability of poly-3-amino-1,2,4-triazole+TiO₂ composite on aluminium in 3.5% NaCl medium, International Corrosion Prevention Symposium CORSYM 2014, IIT-Bombay, during 20-21th Feb., 2014.

- 15) **G. Rajkumar** and M.G. Sethuraman, Self-assembled monolayer of 3-amino-5-mercapto-1,2,4-triazole on copper and its corrosion protection in 1% NaCl solution, Recent Advances in Surface Science (RASS-2013), Gandhigram Rural Institute (DU), Gandhigram, p.246, during 14 & 15th February 2013.
- 16) N.S. Nagarajan and **G. Rajkumar**, A study on phenolic mordants for vegetable dyeing, The Fiber Society 2011 Spring Conference, The Hong Kong Polytechnic University, Hong Kong, p.271, during 23-25th May 2011.

National Seminars / Symposium Attended -10

- 1) Participated and presented a paper entitled "The Role of Antioxidant Phytochemicals for the Prevention of Diseases" in the KALEIDOSCOPE organized by IQAC, Vivekananda College on 17th September 2021.
- 2) Participated in **International Seminar on Recent Advances in Chemical Research-2021** organized by the Department of Chemistry, Presidency College, Chennai on 22.12.2021.
- 3) Participated State Level Seminar on "Recent Trends in Chemistry" organized by Fatima College, Madurai on 28th September 2018.
- 4) A Two Day National Workshop On "Training of Trainers: Becoming Effective Teachers and Trainers" conducted by Web Enhancement and Public Relations Office (WEPRO), Loyola College, Chennai during 20 and 21st April 2018.
- 5) One Day National Level Seminar on "Modern Trends in Chemistry (MTC-24)" conducted by the Department of Chemistry, Vivekananda College, on 09th March 2017.
- 6) Participated State Level Conference on "Current Innovations of Chemistry in Medicine" conducted by the Department of Chemistry, V.V. Vanniaperumal College for Women, Virudhunagar, on 27th January 2017.
- 7) One Day State Level Seminar on "**Expanding Frontiers in Chemistry (EFC-16)**" conducted by the Department of Chemistry, Arul Anandar College, Karumathur on 23rd September 2016.
- 8) One Day National Level Seminar on "Modern Trends in Chemistry (MTC-23)" conducted by the Department of Chemistry, Vivekananda College on 16th July 2016.

- 9) One Day National Level Seminar on "Modern Trends in Chemistry (MTC-22)" conducted by the Department of Chemistry, Vivekananda College, on 28th March 2016.
- 10) "A National Level Symposium HORIZON-2015 on Innovative Catalysis" at National Institute of Technology (NIT), Trichy, during 11 and 12th September, 2015.

Workshops / Hands on Training Programme Attended - 12

- 1) NPTEL-SPOC Felicitation Workshop at IIT Chennai on 25th June 2022.
- Attended Two Days In-Servive Training Programme organized by TANSCHE at Sri Meenakshi Govt. Arts College for Women, Madurai during 05th to 06th May 2022.
- 3) Participated in Ten Days Workshop on "Teaching-Learning and Evaluation for Faculty Members of Higher Educational Institutions (HEIs)" held at Central University of Rajastan (CURaj), Bandarsindri, Rajastan during 04th to 14th November, 2019.
- 4) Participated and received "Best Observer" award in "A Five Day Capacity Building Programme on e-Content Development" organized by Centre for Teacher Resource and Academic Support, School of Education under the MHRD project held at Manonmaniam Sundaranar University, Tirunelveli during 15-19, July, 2019.
- 5) Attended Hands on Training Programme in the "Interpretation of Electrochemical Impedance and TEM Data" organized by Lady Doak College, Madurai on 24th January 2019.
- 6) Workshop on "Bioinformatics and Cheminformatics Tools for Science" conducted by, School of Biotechnology, MKU, Madurai on 22nd December 2017.
- 7) One day user awareness programme on "Access to E-resource under UGC-INFONET Digital Library Consortium" conducted by INFLIBNET Centre-Ahmedabad, Gandhigram, on 13th February 2015.
- 8) One day workshop on "Copyrights and Anti-plagiarism" conducted by Gandhigram Rural Institute, Gandhigram, on 09th January 2015.
- 9) National Workshop on "Fundamentals and Applications of Catalysis" organized by Royal Society of Chemistry (RSC) in Gandhigram Rural Institute, Gandhigram, on 17th October 2014.

- 10) Science Academies Lecture Workshop on "Advances in Chemistry", Gandhigram Rural Institute, Gandhigram, during 06-07th September 2013.
- 11) NRB Research Dissemination Workshop on "**Titanium Matrix Composites**", Department of Metallurgical and Materials Engineering, **IIT-Madras**, 30th August 2013.
- 12) Science Academies Lecture Workshop on "Advances in Chemistry", Madurai Kamaraj University, Madurai, during 26-27th July 2013.
- 13) National Workshop on "Intellectual Property and Innovation Management in Knowledge Era", Gandhigram Rural Institute, Gandhigram, conducted by National Research Development Corporation (NRDC), New Delhi, on 17th October 2012.
- 14) National Workshop on Career Guidance at Gandhigram Rural Institute, Gandhigram, on 02nd February 2011.
- 15) National Workshop on **Indian Nuclear Power Programme** (WIN-2010) at Sree Sevugan Annamalai College, Devakottai, during 26-27th July 2010.

NSS Related Activities:

- 1) Attended **NSS Programme Officer's Meeting** at Madurai Kamaraj University on 25th August 2022.
- 2) Participated in **Online National Voter Awareness Quiz Contest** conducted by Election Commission of India on 29.03.2022.
- 3) Attended three days **Training Programme on Psychosocial Care during COVID- 19** organized by the Centre of Disaster Management, Dept. of Environmental Studies, Madurai Kamaraj University at CSI Jeyaraj Annapackiam College of Nursing and Allied Sciences, Madurai from 24.03.2022 to 26.03.2022.
- 4) Participated in **Online Human Rights Awareness Workshop** organized by Ministry of Youth Affairs and Sports and Regional Directorate of NSS on 17.02.2022 at 3.00 pm.

Ph.D. Thesis Title:

❖ "DEVELOPMENT OF PROTECTIVE METHODS FOR COPPER CORROSION IN NEUTRAL MEDIUM USING AZOLE DERIVATIVES" 2011-2016.

M.Sc., Project Title:

❖ "A Study on Phenolics as Mordants and Babool Gum as Thickeners in Textile Printing" 2010-2011.

Summer Project Title:

"Fabrication of layer-by-layer self-assembly of polyphenols and perylenediimide on platinum surface" April-June, 2016, National Chemical Laboratory, Pune

Research Experience - 11 Years

- **❖ Two years** of research experience in green synthesis of nanoparticles and its applications in sensing and biological activities.
- ❖ Eight years of Research Experience in the field of "Electropolymerized composite coatings and self-assembled monolayers of azole derivatives and its corrosion protection".
- One year of Research Experience in the field of textile printing using phenolic compounds and its applications in anti-bacterial studies.

Teaching Experience - 7 Years

Working as Assistant Professor of Chemistry in Vivekananda College, Tiruvedakam West, Madurai, Tamil Nadu since 15.07.2015 to till date.

Extra-curricular Activities:

- Participated in "Paryatan Parv 2019 Quiz" on 25th October 2019, conducted by Ministry of Tourism, India.
- ❖ Participated in online "Science Quiz" on 25th October 2019, conducted by Department of Science and Technology (DST) and Vigyan Prasar, India.
- ❖ Active member, National Service Scheme (NSS), 2006-2009.
- ❖ Actively participated in **Social Awareness towards Humanity**, Jan., 24, 2008.