

Resume

Dr. M. Rajasekaran M.Sc., Ph. D.,
Assistant Professor (Selection Grade)
Department of Chemistry
Sourashtra College
Pasumalai
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Academic Experience in Institutions / University / Colleges

Sl. No	Name of Institution/ University /College	Designation	Teaching experience			
			Programme (UG/PG)	Regular /Self-Finance	From	To
1.	Sourashtra College Madurai Dt	Assistant Professor	UG only	Regular	14.08.2013	Till date
2.	Sourashtra College Madurai Dt	Assistant Professor	UG only	SF	01.02.2013	13.08.2013
3.	PSY Engineering College Sivagangai Dt	Assistant Professor	UG only	SF	April 2012	Jan 2013
4.	Yadava College Madurai	Assistant Professor	UG only	SF	July2011	April 2012
5.	Vivekananda College, Tirurvedakam west, Madurai Dt	Lecturer	UG & PG	SF	June 2005	April 2006

Academic Profile:

	<u>Year</u>	<u>Qualification</u>	<u>Institution</u>	<u>Percentage</u>
1	2006-2011	Ph.D.,	Madurai Kamaraj University, Madurai	Awarded (13-10-2011)
2	2003-2005	M.Sc., (Chemistry)	Vivekananda College, Madurai	68.71%
3	2000-2003	B.Sc., (Chemistry)	Thiagarajar College, Madurai	65.15%
4	1999-2000	H.Sc.,	Jayaraj Nadar H.S.S Nagamalai, Madurai	73.10%
5	1997-1998	S.S.L.C.,	Jayaraj Nadar H.S.S Nagamalai, Madurai	80.50%

Technical Skills:

Electron Spin Resonance (*ESR-JEOL: JES-FA200*)

- (Room Temperature, Liquid Nitrogen Temperature & Variable Temperature (+100 to -160°C))

UV-Vis spectrophotometer

(JASCO V-550, Shimadzu UV-1600 & Varian Cary 50)

- (Diffuse Reflectance Spectroscopic, Thin film and liquid with thermostat)

FT-IR spectrophotometer (*JASCO 410, Shimadzu FT-IR-8400s*)

- (Liquid cell, solid and thin film)

Viscometer (*Brook-field DV-II + pro*)

Cyclic Voltammetry

(Bio-Analytical System (BAS) CV-50W model electrochemical analyzer)

Spectrofluorometer (*JASCO FP-6300*)

Spectropolarimeter (*JASCO J-810*)

- (*DNA and Protein interaction*)

Electrophoresis (*DYY-6C power supplier*)

Computer skills:

- Chem draw (3D and Bioassys)
 - Photoshop
 - Coral draw
 - Microsoft Office (Word, Excel, Power point and outlook)
 - Origin professional
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Research Expertise:

Inorganic Chemistry
Bioinorganic Chemistry
Nano Bio-technology

Title of Ph. D., Thesis;

“Synthesis, Characterization and Applications of Nanoparticles in Drugs”

Supported by *UGC-Meritorious Student Fellowship* (2008-2012)
(PhD awarded on 13-10-2011)

Awards:

UGC-JRF *-Meritorious Student Fellowship (2008-2012)*

Academic Project (In Post Graduate):

“Synthesis and characterization of copper(II) complexes of β -diketonates having dithiol: Biomodels for copper proteins and as DNA intercalators”

Lectures / Talks given:

1. Delivered a special lecture on *“Nanotechnology-nanochemistry”* in EMG yadava college at Madurai (2015).
 2. Delivered a special lecture on *“Pollution removed by chemicals”* (Masu agatrum vethiporul) in **All India Radio** at Madurai (2011).
 3. Delivered a special lecture on *“LaTeX application in Chemistry”* in **PSY Engineering College** at Sivagangai Dt. (2012).
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Articles Published in International Journals:

1. “Analytical methods to determine the comparative DNA binding studies of curcumin–Cu(II) complexes” Jegathalaprathaban Rajesh, **Marichamy Rajasekaran**, Gurusamy Rajagopal and Periakaruppan Athappan. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 97 (2012) 223–230.
 2. “Studies on The Enhanced Biological Applications of PVA Loaded Nanocurcumin” J. Annaraj, R. Dhivya, M. Vigneshwar, K. Dharaniyambigai, G. Kumaresan, **M. Rajasekaran** *J. Nanosci. Nanotechnol.* 2014, Vol. 2, 490-495.
 3. “A Lucid Build-Up of Nanostructured Curcumin, Quercetin and Their Interaction with DNA” **Marichamy Rajasekaran** and Jamespandi Annaraj, *J. Nanosci. Nanotechnol.* 2014, Vol. 14, 1-6.
 4. “pH responsive curcumin/ ZnO nanocomposite for drug delivery” Raman Dhivya, Jothi Ranjani, Jeyaprakash Rajendhran, **Marichamy Rajasekaran** and Jamespandi Annaraj *Advanced Materials Letters* 2015, 6(6), 505-512.
 5. “Biological evaluation of redox stable cisplatin/Cu(II)-DNA adducts as potential anticancer agents” S Kathiresan, R Dhivya, M Vigneshwar, **M Rajasekaran**, J Ranjani, J Rajendhran, S Srinivasan, S Mugesh, M Murugan, PR Athappan, *Journal of Coordination Chemistry*, 2016, VOL . 69, NO . 2, 238–252.
 6. “Synthesis and Characterization of Nanoscale level Mono/bi-ligated Metal (II) Complexes” M. Rajasekaran, P.R Athappan, J. Annaraj and Suresh Sagadevand, *Malay. NANO Int. J.* Vol.3 (1) (2023) 17 – 30.
 7. “Biological appraisals of Cisplatin and Intercalating Analogies of Nanoscale level Metal (II) Complexes” M. Rajasekaran, P.R. Athappan, J. Rajendiran, J. Annaraj, and Suresh Sagadevan, *J. Molecular and Engineering Materials*, Accepted Papers 22 Nov 2023. <https://doi.org/10.1142/S2251237324400069>
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Paper presented in national/ international conferences:

1. Synthesis, characterization and DNA binding studies on nanorod metal (II) complexes, **M. Rajasekaran**, J. Annaraj and PR. Athappan, *International seminar on emerging Trends in Chemistry & Energy Science* (under UGC Autonomy Grant) PG and Research Department of Chemistry, Saraswathi Narayanan College, Madurai, 7th February 2020.
2. Synthesis, characterization and DNA binding studies of cisplatin analogous nanorod metal complexes, **M. Rajasekaran**, J. Annaraj and PR. Athappan. *National Seminar on Nanostructured Materials and Applications*, (NSNMA-2011), Madurai Kamaraj University, Madurai.
3. Design and development of bilayer dosage form containing multivitamin and minerals and their controlled release, L. Ramanathan, **M. Rajasekaran** and PR. Athappan. *Recent Advances in Inorganic and Nano Chemistry-2010*, (RAIN-2010), Madurai Kamaraj University, Madurai.
4. Synthesis of nanostructured organic drugs and their DNA binding, **M. Rajasekaran**, L. Ramanathan and PR. Athappan. *12th International Symposium on Inorganic Ring Systems (IRIS-12)*, Goa, Aug 16-21, 2009.
5. DNA binding studies of Co(II) and Ni(II) complexes containing natural drugs, **M. Rajasekaran** and PR. Athappan. *International Conference on Coordination and Organometallic Chemistry (ICCO-2009)*, Bharathiar University, Coimbatore, March 19 & 20, 2009.
6. Synthesis, characterization of tetraaza ligand metal complexes and its application, **M. Rajasekaran**, Leeju and PR. Athappan. *International Conference on Materials for the New Millennium (MAT con 2010) Cochin University of Science and Technology, Kochi, Kerala, India, 11-13 January 2010*.
7. Organized an one day intercollegiate symposium on, **Modern Trends in Chemistry, MTC-6** as lecturer in chemistry, PG and Research Department of Chemistry, Vivekananda College, Madurai, 4th January 2006.

Participation in National/International Conferences/Webniar

1. *The National level Webniar on Designing New Chiral Molecules for Asymmetric Organocatalysis* PG and Research Department of Chemistry, V.O. Chidambaram College, Thoothukudi, 11th June 2020.
2. *A Two day National Workshop on Nanomaterials for Human Safety and*

Envirnoment, Department of Physics, K.M.E. Socuety's G. M. Momin Women's College, Maharashtra, 15th and 16th May 2020.

3. *Three days online course on **Basic Priniciples of Spectroscopy***, Department of Chemistry, AVS College of Arts & Science, Salem, 17th -19th April 2020.
4. *International seminar on **Advanced Materials (AM-2019)***, Department of Material Science and Physical Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai, 23rd September 2019.
5. *The National conference on **Recent Developments in Chemistry (RDC-15)***, Department of Chemistry, SBK College, Aruppukottai, 13th and 14th February 2015.
6. *The State level Workshop on **Microscale Experiments in Physical Chemistry***, Department of Chemistry, V. V. Vanniaperumal College for Women, Virudhunagar, 29th January 2015.
7. *The Indo-Norwegian Satellite Meeting on **Advance in Solar Cell Materials & Technologies***, Department of Material Science, School of Chemistry, Madurai Kamaraj University, Madurai, 17th December 2011.
8. A two day national seminar on, ***Modern Trends in Chemistry, MTC-13***, PG and Research Department of Chemistry, Vivekananda College, Madurai, 26th & 27th February 2010.
9. A two day national seminar on, ***Modern Trends in Chemistry, MTC-9*** PG and Research Department of Chemistry, Vivekananda College, Madurai, 27th & 28th February 2007.
10. An one day intercollegiate seminar on, ***Recent Advances in Organic Chemistry***, organized by Department of Chemistry, NMSVN, Madurai, 16th March 2005.
11. ***Regional Seminar on Bioinformatics*** organized by PG Department of Zoology, Vivekananda College, Madurai, 3rd January 2005.
12. A two day national seminar on, ***Modern Trends in Chemistry, MTC-5*** PG and Research Department of Chemistry, Vivekananda College, Madurai, 29th & 30th Sepember 2004.
13. *The National Science day Exhibition and seminar conducted by the Thiagarajar College on 28th and 1st March 2002. (**Second prize** for seminar, **Third prize** for Exhibition)*

14. A Millennium Students Seminar, Department of Chemistry, Thiagarajar College, Madurai, 25th October 2002.

Attended Orientation/Refresher/FDP/Other Programme

S.No.	Topic	Orientation/ Refresher/ FDP	Name of the College/University	Date/Period
1	“Managing Online Classes & Co-creating MOOCS”	Inter-Disciplinary Two Weeks Refresher Course	Teaching Learning Centre, Ramanujan College, University of Delhi	11.11.2023 to 25.11.2023
2	“Natural Sciences”	Online Refresher Course	(PMMMNMTT), University of Delhi	28.06.2022 to 12.07.2022
3	1 st Online Refresher Course in Chemistry	Online Subject Refresher Course	UGC- Human Resource Development Centre, Gujarat University, Ahmedabad	28.09.2020 to 11.10.2020
4	Programme in Teaching (ARPIT)	Online Refresher Course In Chemistry For Higher Education	Swayam online ARPIT -16 Weeks course-University Of Delhi	Start Date : 01 Sep 2019 End Date : 31 Dec 2019 DOE: 16.02.2020
5	“Materials Science & Nanotechnology (FDP-MSNT-2020)”	14-days Online Faculty Development Programme	Department of Chemistry, B.S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai	03.08.2020 to 17.08.2020
6	Advanced Molecular Chemistry	3 days online FDP	PG & Research Department of Chemistry, AP College of Arts & Culture, Palani	01.06.2020 to 03.06.2020
7	Management of Self- A Holistic approach	One Day Faculty Development Programme	SCAAN & IQAC Sourashtra College, Madurai	29/08/2017
8	Digital Learning and Quality	FDP	IQAC Sourashtra College, Madurai	11/03/2017

9	Redefined Role of Teachers	FDP	IQAC Sourashtra College, Madurai	05/03/2016
10	Teachers on Teacher Effectivness	One day orientation programme	Sourashtra College, Madurai	07/03/2015
11	104 th Orientation Programme	Orientation Programme	Bharathiar University	06/11/2014 to 03/12/2014
12	Faculty Training And Motivation Program	FDP	CSIR-CECRI, KARAIKUDI	8/09/2014 to 10/09/2014

Other activities / information / academic credentials you would like to mention:

1. Additional Examiner in the Board of Chemistry - Major & Ancillary - Madurai Kamaraj University, Madurai
2. Examiner - Practical Examinations in various autonomous colleges and Madurai Kamaraj University, Madurai

Personal Profile

Name : M. Rajasekaran
Sex : Male
Date of Birth : 08-Oct-1982
Marital Status : Married
Community : Yadava
Nationality : Indian
Address : Plot No. 99, Amaidhi Solai Nagar
Thirunagar, Madurai – 625 006.

I hereby declare that the details furnished above, are true and correct to the best of my knowledge.

Place: Madurai

Signature

Date:

(M. RAJASEKARAN)