CURRICULUM VITAE

1. Name of the applicant : **Dr.N.Raman**

2. Designation and official address : Associate Professor of

Chemistry

VHNSN College (Autonomous)

Virudhunagar-626 001.

Phone No. (04562) 280154

3. (a) Date and Place of Birth : 08.08.1964; Meenachiapuram

(b) Nationality : Indian

(c) Nativity : Tamil Nadu, INDIA

4. Academic Qualifications : M.Sc., Ph.D.

Sl. No. Degree University Year of Subjects Class obtained Passing

1. B.Sc. NMSSVN College, Chemistry

Nagamalai, (Major)

Madurai Kamaraj 1985 Physics & First

University, Madurai Mathematics (Ancillaries)

2. M.Sc. School of Chemistry,

Madurai Kamaraj

University, Madurai 1987 Chemistry First

3. Ph.D. School of Chemistry,

Madurai Kamaraj 1992 Inorganic Chemistry University, Madurai (Title of the thesis:

Studies on Metal Complexes)

4. Field of specialization : Bio-Inorganic Chemistry

List of papers published in Journals/ Conferences

Journal		Conference		Total
International	National	International	National	
160	60	12	148	380

6. Books Edited / Published: 5+1+1

- a) One of the Editors of the following books:
 - i) A Treatise on Modern Trends in Chemical Sciences
 - ii) A Treatise on Emerging Trends in Bio-Inorganic Chemistry
 - iii) A Treatise on Recent Advances in Bio-Inorganic and Medicinal Chemistry
 - iv) Frontier Areas in Chemical Sciences
 - v) Recent Developments in the Applications of Transition Metal Complexes in Bio-inorganic and Medicinal Chemistry
- b) 'Combinatii complexe cu liganzi Izonicotinoil Hidrazona'- Coauthor The other author is Prof. Liviu Mitu, Editura Universitatii din Pitesti, Romania
- c) One of the Authors in the Book Chapter 'Porphysomes and Porphyrin-Based Nanomaterials for Drug Delivery System, in the Book 'Pharmaceutical Nanobiotechnology for Targeted Therapy, Chapter -10 published by Springer Nature, Hamed Barabadi et al. (Eds), ISBN number 978-3-031-12657-4 (in Press)

In addition to the above, I have written Reading Materials in Chemistry subject for Directorate of Distance Education (DDE) of Madurai Kamaraj University, Madurai.

Significant Records:

- a) State level Merit Scholarship in SSLC
- b) B.Sc. University Rank Holder (Seventeenth rank)
- c) M.Sc. University Rank Holder (Fourth rank)
- d) Young Scientist Fellowship Award by TamilNadu State Council for Science and Technology(1997-98).
- e) Recipient of **Man of the Year 2001** Award by the Governing Board of Editors of the American Biographical Institute, Inc., USA., in appreciation for my significant contribution to the society.

- f) Recipient of **Staff of the Year 2006-2007** Award by the Secretary and Correspondent, VHNSN College Managing Board, in appreciation for academic excellence
- g) INSA Visiting Fellowship Award by Indian National Science Academy, New Delhi(2002-2003).
- h) . Summer Research Project Fellowship Award by Indian Science Academy, Bangalore (2003-2004).
- i) Best NSS Programme Officer Award by Madurai Kamaraj University, Madurai (2002-2003) in recognition of the outstanding service to the Society.
- j) . Summer Research Project Fellowship Award by Indian Science Academy, Bangalore (2007-2008).
- k) Vocational Excellence Award by Rotary Club of Virudhunagar Elite, 2009.
- l) . Summer Research Project Fellowship Award by Indian Science Academy, Bangalore (2009-2010).
- m) **Best Teacher Award** by Chemical Research Society of India (CRSI) in the International Year of Chemistry-2011 for the contributions to Chemical Education.
- n) **Visiting Fellowship Award** by Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Department of Science and Technology, Government of India, Bangalore (2011-2012).
- o) **Distinguished Scientist Award** for the contribution and achievement in the field of Coordination Chemistry by the Centre for Advanced Research and Design of Venus International Foundation on 3.12.2016
 - p) **Prof.C.N.R.Rao Best Scientist Award** for the year 2016-2017 in recognition of the dedicated service in the field of Scientific Research by the Bose Science Society, established under the charter of Tamilnadu Scientific and Research Organization (TNSRO), affiliated with Vigyan Prasar, Department of Science & Technology, Government of India on 12.01.2017.
 - q). **Dr.APJ Abdul Kalam Award for Teaching Excellence-2017** by MARINA LABS Research and Development Organization, Chennai on 21.10.2017.
- r) **Bharat Ratna Dr.Radhakrishnan Gold Medal Award** by Global Economic Progress and Research Association(GEPRA), New Delhi on 21.03.2020.

s) Recently I have been recognized as 2% Top Scientists in the World from India in the field of Inorganic and Nuclear Chemistry (World-wide Rank is 711 based on an independent study done by Stanford University Scientists) in 2019.

In 2020 also 2% Top Scientists in the World from India (84154 rank out of 190064 scientists in the world and 460th Rank India in the field of Inorganic and Nuclear Chemistry, based on an independent study done by Stanford University Scientists)

t) 'Best Oral Presentation Award ' to our paper entitled 'Catalytic dehydration of methyl orange using *Acacia auriculiformis* derived silver nanoparticles' in the National Webinar on 'Recent Advances in Solid State Chemistry and Allied Sciences, organized by the Department Chemistry, Central University of Kerala, in association with the 'Association of Chemistry Teachers (ACT) & Indian Association of Solid-State Chemists and Allied Sciences (ISCAS)' during 16.08.2021 & 17.08.2021.

(i) Number of Papers Published :More than 200 (Recent Publications

are given at the last page.

(ii) Teaching Experience : Twenty-eight Years

(iii) Research Experience : 32 Years

(iv) Number of M.Phil. Students

Produced: 72

(v) Number of Ph.D. Students

Produced : Thirty

(v) Number of Ph.D. Students

Guiding : Five

(vi) The details of Projects undertaken

Number of Projects : Fourteen (PI)+ One (Co-P)
Sanctioned (Five Major; Nine Minor)

7. Work experience (in chronological order):

S.No	Positions held	Name of the Institute	From	To
1	Lecturer in	VHNSN College,	1991	1998
	Chemistry.	Virudhunagar-626001		
2	Senior Scale	VHNSN College,	1998	2003
	Lecturer in	Virudhunagar-626001		
	Chemistry			
3	Reader in	VHNSN College,	2003	2009
	Chemistry	Virudhunagar-626001		
4	Associate	VHNSN College,	2009	Till date
	Professor of	Virudhunagar-626001		
	Chemistry			

8. Membership:

- a) Journal of Indian Chemical Society-Life Member (F 3713/LM (1992))
- b)Indian Council of Chemists-Life Member (L-350)
- c) International Congress on Chemistry and Environment-Fellow (F-5010)
- d) Chemical Research Society of India-Life member (LM-1037)
- e) Association of Chemistry Teachers (ACT) –Life member (LM-1141)
- f) DNA Society of India –Life Member (LM-78)
- g) Bose Science Society established under the charter of Tamilnadu Scientific and Research Organization (TNSRO) affiliated with Vigyan Prasar, Department of Science & Technology, Government of India Life Member (M235/BSS/2016)
- h) Fellow of Bose Science Society established under the charter of Scientific and Research Organization (TNSRO), affiliated with Department of Science & Technology, Government of India Fellow number(F235/BSS/2016)

9. Other information:

- 1. As a Ph.D. External Examiner (both the thesis &Viva-voce)
- 2. As a Coordinator for the Department of Science and Technology (DST), Government of India sponsored INSPIRE Internship Programme for XI standard students (INTERNSHIP-2012) held during September 2012 for Five days (1.9.2012 to 5.9.2012).
- 3. As a Resource person in the National level seminar on 'Topical Drifts in Nanotechnology and Bio-inorganic Chemistry' held at Nadar Saraswathi College of Arts and Science on 07.09.2012 and delivered a talk on 'The Journey of DNA towards the Transition Metal Complexes.

- 4. Editorial Member of the following Journals:
 - 1. International Journal of Pharmaceutical Chemistry
 - 2. College Sadhana- One of the Associate Editors
 - 3. Advisory Board Member in the Research Journal 'Chemical Science Transactions'
 - 4. One of the Associate Editors in the Multidisciplinary Research Journal of VVV College
- 5. As a Resource person in the UGC sponsored Seminar on 'Emerging Trends in Chemistry' held at Sowrastra College on 09.03.2013 and delivered a talk on 'Impact of Transition Metal Complexes in DNA'.
- 6. As a Resource person in the one day seminar on 'Modern Trends in Chemistry-MTC-18' held at the PG and Research Department of Chemistry, Vivekananda College on 08.04.2013 and delivered a talk on 'Interaction of Transition Metal Complexes with DNA.
- 7. As a Resource person in the one day National level seminar on 'Recent Development in Nanomaterials (RDNM-2013)', organized by the Departments of Physics and Chemistry, Mohamed Sathak Engineering College, Kilakarai on 11.04.2013 and delivered a talk on 'Synthesis and characterization of Nanocomplexes and their Biomedical applications'.
- 8. As a Coordinator for the Department of Science and Technology (DST), Government of India sponsored INSPIRE Internship Programme for XI standard students (INTERNSHIP-2013) held during August 2013 for Five days (16.08.2013 to 20.08.2013).
- 9. As a Resource person in the INSPIRE Internship Programme held at PSR engineering College, Sivakasi and delivered a talk on 09.10.2013.
- 10. As a Resource person in the Young Student Scientist Programme (YSSP) organized by Tamilnadu State Council for Science and Technology (TNSCST), Chennai, organized by VHNSN College, Virudhunagar from 01.05.2013 to 20.05.2013.
- 11. As a Resource person to deliver a lecture on DNA and its interaction with transition metal complexes at the Department of Chemistry, SBK College, Aruppukotai on 7.10.2013.
- 12. As a Resource person in the INSPIRE Internship Programme held at PSR Engineering College, Sivakasi and delivered a talk on 'Chemistry around you' on 09.10.2013.
- 13.As a Resource person in the one day UGC sponsored National Seminar on Selected Topics in Chemistr-2014' organized by the PG & Research Department of Chemistry, NMSSVN College(Autonomous) Nagamalai, Madurai and delivered a talk on 'Metal chelates impact on DNA interaction towards anticancer activity on 04.03.2014.

- 14. As a Coordinator for the two day UGC sponsored National Seminar on 'Modern Trends in Chemical Sciences (MTCS-2014)' organized by the Department of Chemistry, VHNSN College(Autonomous), Virudhunagar from 18.07.2014 to 19.07.2014.
- 15. As a Coordinator for the Department of Science and Technology (DST), Government of India sponsored INSPIRE Internship Programme for XI standard students (INTERNSHIP-2014) held during August 2014 for Five days (02.08.2014 to 06.08.2014).
- 16. As a Resource person in the PG Inaugural Chemistry Association held at Department of Chemistry, VVV College for Women (Autonomous) on 02.09.2014 and delivered a talk on 'Interaction of Transition Metal Complexes with DNA'.
- 17. As a Coordinator and Organizing Secretary in the SERB sponsored National Seminar on Emerging Trends in Bio-inorganic Chemistry (ETBIC-2015), organized by the Department of Chemistry, VHNSN College, Virudhunagar, January 23 & 24, 2015.
- 18. As an External examiner to conduct the Interview on 01.02.2015 in the Department of Chemistry for the Selection Committee of JRF/RA in the Science & Engineering Research Board (SERB), New Delhi sponsored Project of Dr.R.Jeyamurugan, Assistant Professor of Chemistry, Dr.Zakir Husain College, Ilayangudi.
- 19. Acted as a Chairperson in the Two Day UGC sponsored National Level Conference on Recent Developments in Chemistry, organized by the Department of Chemistry, SBK. College, Aruppukottai, February 13 &14, 2015.
- 20.As a Resource person in the one day National Level Seminar on Current Advances in Nano & Green Chemistry-2015, organized by the PG & Research Department of Chemistry, NMSSVN college (Autonomous), Nagamalai, Madurai under UGC Autonomous Grant on February 18, 2015 and delivered a talk on 'Metal Based Drugs in Cancer'.
- 21. Attended the Board of Studies Meeting in Chemistry, conducted by the PG & Research Department of Chemistry, NMSSVN College (Autonomous), Nagamalai, Madurai under UGC Autonomous Grant on February 20, 2015.
- 22. As a Resource person in the One day Students' Seminar on 'Allotropes in Industry', held at Department of Chemistry, Sourashtra College (Autonomous), Madurai on 23.02.2015 and delivered a talk on 'Industrial Applications of Metal Complexes'.
- 23. As a Convener in the Guest Lecture Programme-2015, sponsored by UGC Autonomy Grant, organized by the Department of Chemistry, VHNSN College (Autonomous), Virudhunagar on 9.7.2015
- 24. As a Coordinator for the Department of Science and Technology (DST), Government of India sponsored INSPIRE Internship Programme for XI standard students (INTERNSHIP-2015) held during August 2015 for Five days (01.08.2015 to 05.08.2015).

- 25. As a Resource person in the one day UGC sponsored State Level Seminar on 'Recent advances in Chemistry' organized by the Department of Chemistry, Arulmigu Palaniandavar College of Arts and Culture, Palani and delivered a talk on 'Transition metal complexes in Cancer Treatment' on 11.08.2015.
- 26.As a Resource person and delivered a Guest Lecture on 'Transition metal complexes as Anticancer Agents' at the Department of Chemistry, Sri Kaliswari College (Autonomous), Sivakai on 13.08.2015.
- 27. As a Resource person and delivered a Guest Lecture on 'Transition metal complexes as anticancer agents' in the **SERB sponsored National Conference** on 'Recent Development of Bio-inorganic Chemistry in Medicinal Fields' organized by the Chemistry Research Centre, Department of Applied Science and Humanities, Mohamed Sathak Engineering College, Kilakarai on 29th August, 2015.
- 28.As a Coordinator of the Three Day Lecture Workshop on 'Emerging Trends in Chemical Sciences' sponsored by the Joint Science Education Panel of the Three Academies (Indian Academy of Sciences, Bangalore, Indian National Science Academy, New Delhi & The National Academy of Sciences, India, Allahabad) organized by the Department of Chemistry, VHNSN College, Virudhunagar, October 9-11, 2015.
- 29. As a Resource person and delivered a Guest Lecture on 'EPR-Principles and Applications' in the one day RUSA sponsored seminar on 'Recent Trends and Techniques in Chemistry' organized by the Department of Chemistry, Kanchi Mamuniver Centre for Post–Graduate Studies(Autonomous), Government of Pondicherry, Puducherry on 14th October, 2015.
- 30. As a Resource person and delivered a Guest Lecture on 'Interactions of metal complexes with DNA-Anticancer agents', organized by the Department of Chemistry, HKRH College, Uthamapalayam on 29th October, 2015.
- 31. As a Resource person and delivered an Invited Lecture on 'Interactions of Transition metal complexes with DNA, the Biopolymer: Basis in Cancer Therapy' in the DST SERB sponsored Two Day National Conference on 'Recent Frontiers in Bio-inorganic Chemistry and Medicinal Chemistry' on 27.11.2015, organized by the Department of Science and Humanities, Sri Sowdambika College of Engineering, Aruppukottai, 27th and 28th November 2015.
- 32. As one of the Vice-Chancellor's Nominee as Subject expert on the Selection Committee to conduct the Interview for the post of Assistant Professor in Chemistry held in SRNM College on February 9, 2016.
- 33. Conducted One day Conference on Health and Environmental Awareness Programme in RCC in joining hands with the Department of Chemistry and Mahavichakra Naik V.Raju& Mariapackiam Memorial Trust, Virudhunagar on 10.02.2016.

- 34. As a Resource person and delivered a Guest Lecture on 'Medicinal Applications of Metal Complexes' organized by the Department of Chemistry, Sri Parasakthi College for Women, Courtallam on February 11, 2016.
- 35. Participated in the RSC sponsored Symposium on 'Recent Trends in Chemistry', organized by the Department of Chemistry, DA College, Aruppukottai on 12.02.2016.
- 36. As a Resource person and delivered a Special Lecture on 'Metals in Medicines' organized by the Department of Chemistry, Sri Meenakshi Government Arts College for Women (Autonomous) on February 15, 2016.
- 37. As a Resource person and delivered a talk on 'Metals in Medicine' in the Association Meeting organized by the Department of Chemistry, St.Mary's College (Autonomous) on February 27, 2016.
- 38. As an External Subject Expert in the Ph.D. Research Colloquium held at the Department of Chemistry, ANJA College, Sivakasi on 04.04.2016.
- 39. As a Resource person in the Enrichment Programme for XII students-2016, held at KVS School, Virudhunagar, organized by VHNSN College (Autonomous), Virudhunagar from 11.04.2016 to 20.04.2016.
- 40. As an External Examiner in the Doctoral Committee Meeting held at the Department of Physics, Mepco Schlenk Engineering College, Sivakasi on 18.06.2016.
- 41. As an External Examiner in the Doctoral Committee Meeting held at Chemistry Research Centre, National Engineering College, Kovilpatti on 08.07.2016.
- 42. Ph.D. External Examiner, VIT University, Vellore on 20.07.2016, held at the Department of Chemistry, VIT, Vellore, Chennai.
- 43. As a Coordinator for the Department of Science and Technology (DST), Government of India sponsored INSPIRE Internship Programme for XI standard students (INTERNSHIP-2016) held during August 2016 for Five days (01.08.2016 to 05.08.2016).
- 44. As a Resource person and delivered a lecture on 'Metal Complexes as Anticancer Drugs' in the Inaugural Meeting of PG Chemistry Association organized by the Department of Chemistry, VVV College for Women (Autonomous) on 09.08.2016.
- 45. As an Inspection Committee member constituted by Madurai Kamaraj University, to visit E.M.G. Yadava Women's College, Madurai for second additional increase of seats during the academic year 2016-2017 for B.Sc. (Chemistry) on 19.08.2016.

- 46. As a Resource person and delivered a talk on 'Metal based anticancer agents' in the INSPIRE Internship Science Camp Programme, organized by Mar Ephraem College of Engineering and Technology, Elavuvilai on 22.08.2016.
- 47. As a Resource person and delivered a talk on 'Metal based anticancer agents' in the INSPIRE Internship Science Camp Programme, organized by Mohamed Sathak Engineering College, Kilakarai on 27.09.2016.
- 48. As a Chairperson in the **International Conference** on *Cancer Biology: Drug Discovery and Novel Therapeutics*, held on 29th & 30th, September 2016, organized by the Departments of Zoology & Chemistry, SBK College, Aruppukottai.
- 49. As a Resource person and delivered a talk on 'The Scientific Facts in our Daily Life' in the INSPIRE Internship Science Camp Programme, organized by SBK College, Aruppukottai on 17.11.2016.
- 50. As an External Subject Expert in the Doctoral Committee Meeting held at the Noorul Islam University, Kumaracoil, Kanyakumari District, Tamilnadu on 30.11.2016.
- 51. Participated and delivered a lecture on synthesis, spectral characterization and DNA interaction of mixed-ligand complexes incorporating phthalic acid in the 6th National Conference on National Sciences organized by Bose Science Society, Pudukkottai and PG Department of Zoology, Holy Cross College, Tiruchirappalli held on 12.01.2017 at Tiruchirappalli.
- 52. As a Coordinator in the ACT (Association of Chemistry Teachers) and RSC (Royal Society of Chemistry, South India Section) sponsored one day National Seminar on Recent Advances in Bioinorganic and Medicinal Chemistry (RABAMCHEM-2017), organized by the Department of Chemistry, VHNSN College, Virudhunagar on 15.02.2017.
- 53. As an Inspection Committee member constituted by Madurai Kamaraj University, to visit SMS College of Arts and Science, Kallamanaickerpatti for affiliation of the B.Sc Chemistry Course for the academic year 2017-2018 on 17.04.2017.
- 54. Attended as a Subject expert in the Doctoral Committee Meeting held at Norul Islam University, Kumaracoil, Kanyakumari District on 27.07.2017.
- 55. Ph.D. External Examiner (Bharathidasan University)- 19.08.2017 held at the PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli.
- 56. As an External Subject Expert in the Doctoral Committee Meeting held at the Chemistry Research Centre, National Engineering College, Kovilpatti, on 07.09.2017.
- 57.Attended as a Subject Expert in the Question papers Scrutiny Board held at PSG College of Arts and Science, Coimbatore on 28.10.2017

- 58. Ph.D. External Examiner (Anna University)- 31.11.2017 held at Kamaraj College of Engineering and Technology, Virudhunagar.
- 59. As a Resource person and delivered a talk on 'Metal based anticancer agents' in the INSPIRE Internship Science Camp Programme, organized by Mar Ephraem College of Engineering and Technology, Elavuvilai on 08.01.2018 and 09.01.2018.
- 60. Ph.D. External Examiner (Bharathidasan University)-14.2.2018 held at Government Arts College(Autonomous), Kumbakonam.
- 61. Ph.D. External Examiner (Bharathidasan University)- 15.2.2018 held at Jamal Mohamed College(Autonomous), Tiruchirappalli.
- 62. Ph.D. External Examiner, Bharathidasan University, Tiruchirappalli on 25.04.2018, held at the Department of Chemistry, Bishop Heber College (Autonomous), Tiruchirappalli.
- 63. Ph.D. External Examiner, Bharathiar University, Coimbatore on 13.06.2018, held at the Department of Chemistry, Coimbatore Arts College (Autonomous), Coimbatore.
- 64. As a Coordinator for the Department of Science and Technology (DST), Government of India sponsored INSPIRE Internship Programme for XI standard students (INTERNSHIP-2018) held during August 2018 for Five days (01.08.2018 to 05.08.2018).
- 65. As a Co-ordinator in the Three day Academies Lecture Workshop on **Emerging Trends in Chemical Sciences**, sponsored by *Science Academies of India (IASC, INSA & NASI)*, organized by the Department of Chemistry, VHNSN College(Autonomous), Virudhunagar from 27.09.2018 to 29.09.2018.
- 66. Ph.D. External Examiner, Bharathidasan University, Tiruchirappalli on 3.10.2018, held at the Department of Chemistry, Bishop Heber College (Autonomous), Tiruchirappalli.
- 67. As a Resource person and delivered a talk on 'Metal-based anticancer agents' in the INSPIRE Internship Science Camp Programme, organized by Mar Ephraem College of Engineering and Technology, Elavuvilai on 09.10.2018.
- 68. As a Resource person and delivered a talk on 'Transition metal complexes in Cancer Treatment' in the Guest Lecture organized by the Department of Chemistry, Vivekanadha Arts and Science College for Women, Sankari, Salem District on 22.01.2019...
- 69. Ph.D. External Examiner, Bharathidasan University, Tiruchirappalli on 25.03.2019, held at the Department of Chemistry, Bishop Heber College (Autonomous), Tiruchirappalli
- 70. Participated in the One day RRC Programme Officers Training organized by RRC, Madurai Kamaraj University on 22.03.2019.

- 71. As a Resource person and delivered a talk on 'Modern Periodic Table- International Year 2019' in the "Young Student Scientists Programme(YSSP-2019) sponsored by Tamil Nadu State Council for Science and Technology (TNSCST) organized by Dr.Zakir Husain College, Ilayangudi, on 18.05.2019.
- 72. As a Resource person in the two day National Level Conference on Recent Developments in the Applications of Bioinorganic Chemistry (RDABC-2019), organized by the Department of PG Chemistry, Aditanar College of Arts and Science, Tiruchendur and delivered a talk on 'Transition based anticancer agents' on 19.9.2019.
- 73. Ph.D. External Examiner (Manonmaniam Sundaranar University)- 06.12.2019 held at the Department of Chemistry, S.T. Hindu College, Nagercoil.
- 74. As a Resource person and delivered a talk on 'Concept of Spectroscopy and its Applications', organized as a part of the STAR College Programme by the MARIAN, STAR CENTRE (Department of Chemistry), St. Mary's College(Autonomous), Thoothukudi, sponsored by the Department of Biotechnology, New Delhi on 19.12.2019.
- 75. As a Resource person and acted as Chair person in the National Level Seminar on 'Recent Trends in Biological Nanochemistry (RTBNC-2020)' sponsored by the Tamilnadu State Council for Science and Technology (TNSCST), Chennai, organized by the Department of Chemistry, Dr.Zakir Husain College, Ilayangudi on 22.1.2020 and 23.01.2020.

76.Conducted, as a Local Convener, in the National level E-lecture Workshop, organized jointly by the Chemical research Society of India (CRSI-Trichy-Madurai Local Chapter) and the Chemistry Department our VHNSN College(Autonomous), Virudhunagar on 29.01.2021.

77. Conducted, as a Programme Coordinator, in the Webinar on Recent Evolution in Bio-Inorganic Chemistry, sponsored by the Department of Bio-Technology, Government of India (Under the DBT-Star College Strengthening UG Science Scheme) organised by our Chemistry Department on 6.2.2021.

78. Conducted, as a Programme Coordinator, in the Seminar on Inorganic Materials for Environment and Biosensing, sponsored by the Department of Bio-Technology, Government of India (Under the DBT-Star College Strengthening UG Science Scheme) organised by our Chemistry Department on 1.3.2021.

79. Conducted, as a Programme Coordinator, in the Seminar on Hydrotalcite Based Materials for Hydrogenation and Hydroformylation on 10.3.2021, sponsored by the Department of Bio-Technology, Government of India (Under the DBT-Star College Strengthening UG Science Scheme) organised by our Chemistry Department on 10.3.2021.

- 80. Delivered a lecture on 'Tips to Write a Good Research Project Proposal' in the Faculty Development Programme, organized by the Research Academia, VVV College for Women (Autonomous), Virudhunagar through online on 10.05.2021.
- 81. Acted as a Member of Judges of Oral presentation in the National Webinar on 'Recent Advances in Solid State Chemistry and Allied Sciences, organized by the Department Chemistry, Central University of Kerala, in association with the 'Association of Chemistry Teachers (ACT) & Indian Association of Solid-State Chemists and Allied Sciences (ISCAS)' during 16.08.2021 & 17.08.2021 through online.
- 82. Delivered a lecture on 'Know Our RRC' in the Inaugural cum Orientation Programme jointly organized by Red Ribbon Club and Youth Red Cross, Ayya Nadar Janaki Ammal College(Autonomous), Sivakasi through online on 18.08.2021.
- 83. Delivered a lecture on 'Transition Metal Complexes in Cancer Treatment' organized by the Department of Science and Humanities, Arasu Polytechnic College, Kumbakonam through online on 18.09.2021.
- 84. Delivered a lecture on 'Coordination Compounds in Medicine' in the Five Day Faculty Development Programme on 'Multifunctional Materials and their Applications' through online, organized by MEPCO SCHLENK Engineering College, Sivakasi on 22.09.2021.
- 85. Delivered a Guest-Lecture on 'Projects and Funding Agencies' in the Faculty Development Webinar for the Mantee Institution under PARAMARSH, jointly organized by IQAC and Department of Chemistry, SFR College for Women (Autonomous) Sivakasi on 24.09.2021
- 86. Participated in the TNSCST sponsored 'Chem Compa-2021', organized by the Department of Chemistry, Dr.Zahir Husain College, IIayangudi, Sivagangai District on 21.10.2021.
- 87. Ph.D. External Examiner, Manonmanium Sundaranar University, Tirunelveli on 26.11.2021, held at the Department of Chemistry, NM Christian College, Marthandam.
- 88. Conducted as an RRC programme Officer the World AIDS Day function and AIDS Taking Oath Ceremony on 7.12.2021.
- 89. Delivered a Guest-Lecture on 'Chemotherapy and its Applications' organized by the Department of Chemistry, SBK College, Aruppukotttai on 08.12.2021.
- 90. Ph.D. External Examiner, Manonmanium Sundaranar University, Tirunelveli on 13.12. 2021 through online organized by the Department of Chemistry, Women's Christian College Nagercoil.
- 91. Conducted, as a Programme Coordinator, in the Seminar on 'Potential of Metalloenzymes in Biocatalysis Reactions', sponsored by the Department of Bio-

Technology, Government of India (Under the DBT-Star College Strengthening UG Science Scheme) organised by our Chemistry Department on 14.12.2021.

- 92. As a Resource person in the programme on *'Creation of Scientific Awareness Programme-2022'* organized by the Department of Chemistry, Dr.Zakir Husain College, Ilayangudi, sponsored by TNSCST, DOTE Campus, Chennai on 11.1.2022.
- 93. Delivered an invited lecture and chairing a session in the two day '2nd International Conference on Advances in Chemistry with specific reference to Catalysis, Sensors, Drug Delivery, Energy Materials and Anti-Cancer Studies (2nd-ICACSEM 2022), organized by the Department of Physical Chemistry, University of Madras, Guindy Campus, Chennai on 28.03.2022 and 29.3.2022.
- 94.As a resource person and delivered a lecture on 'Basic Concepts of Spectroscopy and its applications' in the One day seminar, organized by the PG and Research Department of Chemistry, Vivekananda College, Tiruvedakam on 20.7.2022 under DBT Star College Scheme.
- 95. As a Resource person and delivered a lecture on 'Designing the suitable materials for metal based anticancer drugs 'in the DST-SERB sponsored two day National Conference (25th and 26th, August 2022) on 'Recent Trends in Green Chemistry & Material Science (RTGCMS 2022)', organized by the Department of Applied Science Humanities and Chemical Engineering, Mohamed Sathak Engineering College, Sathak Nagar, Keelakarai, Ramanathapuram District, on 26.08.2022.
- 96. As a resource person and delivered a lecture on 'Applications of Chelates in Medicinal Chemistry' in the Inaugural function of 'The Chemistry Association Meeting', organized by the Department of Chemistry, Sourashtra College(Autonomous), Madurai on 08.09.2022.

Webinar Participation:

- a) Participated in the webinar on 'Nalam Tharum Yoga' conducted by VHNSN College(Autonomous), Virudhunagar on 20.6.2020.
- b) Participated in the Webinar on "Super Brain Yoga' conducted by Fine Arts Club and Literary Forum JP College of Arts and Science, Ayikudi on 21.6.2020.
- c) Participated in the One day National Level Webinar on "Food Safety and Security during COVID- 19 Pandemic", conducted by the PG and Research Department of Chemistry, The Standard Fireworks Rajaratnam College for Women, Sivakasi, on 22.6.2020.

- d) Participated in the One day Webinar on "Archaeological Science", conducted by the P.G & Research Department of Chemistry, The Standard Fireworks Rajaratnam College for Women, Sivakasi, on 27.6.2020.
- e) Participated in the E-Quiz conducted by the IQAC, AVVM Sri Pushpam College, Poondi, Thanjavur Dt, Tamil Nadu on 27-6-2020.
- f) Participated in the online quiz, conducted by the PG and Research Department of Chemistry, VHNSN College(Autonomous), Virudhunagar on Darwin Day, 2021.
- g) Participated in the online quiz, , conducted by the Department of Environmental Science, VHNSN College(Autonomous), Virudhunagar on World Wildlife Day, 2021.
- h) Participated in the E-Quiz organised by the PG & Research Department of Zoology, VHNSN College(Autonomous), Virudhunagar on World Environment Day, 2021.
- i) Participated in the E-Quiz organised by the PG & Research Department of Zoology, VHNSN College(Autonomous), Virudhunagar on World Population Day, July 2021.
- j) Participated in the E-Quiz on 'Devoid of Plastics, organised by the PG & Research Department of Microbiology, VHNSN College(Autonomous), Virudhunagar on 7.01.2021
- k) Participated in the Research webinar on "How to Publish Good Research Articles in High Impact Journals", organized by the Department of Physics, Ramco Institute of Technology, Rajapalayam on 12-01-2021.
- 1) Participated in the E-Quiz in Connection with the World Environment Day, organised by the NSS of Arulmugu Palaniandavar College of Arts and Culture, Palani on 5.6.2021.
- m) Participated in the Online Quiz on Test your Knowledge in Aptitude and Reasoning, organised by the Department of Computer Applications, VHNSN College(Autonomous), Virudhunagar on 08.06 2021.
- n) Participated in the E- Quiz on Income Tax' organised by the Department of Commerce with Computer Applications(SF), VHNSN College(Autonomous), Virudhunagar on 08.06.2021.
- o) Participated in the Webinar on "Covid 19 Defence Against Pandemic Crisis' organised by the NSS and YRC of Veltech Ranga Sangu Arts College, Chennai on 11.6.2021.
- p) Participated in the International Webinar on 'Should Teachers and Students be Friends on Social Media?, organised by the Department of Mathematics, VHNSN College(Autonomous), Virudhunagar on 15.06.2021.
- q) Participated in the E-Quiz on 'Sickle Cell Anaemia,' organised by the PG & Research Department of Microbiology, VHNSN College(Autonomous), Virudhunagar on 18.6.2021

- r) Participated in the International Yoga Day 2021 Online Quiz Competition by the Department of Physical Education, VHNSN College(Autonomous), Virudhunagar on 21.6.2021.
- s) Participated in the Online Quiz on 'Fundamentals of Chemistry', organised by the PG Department of Chemistry, Aditanar College of Arts and Science, Tiruchendur from 26.06.2021 to 28.06.2021.
- t) Participated in the Webinar on Pin on Earth, Environment and Climate' on the International Plastic Bag Free Day, organized by the NSS of VHNSN College (Autonomous), Virudhunagar, on 03.07.2021.

About Research Projects:

Completed Projects: UGC, New Delhi: Major- 3; Minor- 3

TNSCST(Students Project Scheme): 9

DST, New Delhi -1

SERB- DST, New Delhi- 1

Seminars Organized as Convenor / Coordinator : 7 [UGC sponsored -2 &

DST sponsored -1

Three Day Lecture Workshop-1 ACT & RSC sponsored ----1

SERB sponsored ----1 ICMR sponsored—1]

Seminars, Workshop and Conferences Attended

National level Seminars / Conferences : more than 75

International level Seminars / Conferences :15

Research Publications:

Research publication in International Journals :160
Research publication in National Journals :60
h-index (Scopus) : 37
(Google Scholar) :45

Research Experience

: 32 Years

Degree	Awarded	Submitted	Guiding
Ph.D	30	-	5
M.Phil	72		

Invited Lecture Delivered : More than 30

Board of Studies - Member : M.Phil., M.Sc., & B.Sc.,

Honours Achieved : CRSI Best Teacher Award - 2011

Extension Activities : NSS Programme Officer (from 2000-2008)

RRC Programme Officer (from 2005 to till date)

12. Recent Significant Publications (for the past 10 years)

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	M. Samuel, R.Rajasekar, J.Porkodi, M.Selvaganapathy, V.Muniyandi and N. Raman	DNA interaction perspectives of sulphur containing Knoevenagel condensed copper(II) complexes: Molecular docking, DFT, antibiogram and insilico assessment	Inorg.Chim Acta,	533	120783	2022
2.	K.Palpandi, C.Bhuvaneswari, S.Ganesh Babu and N.Raman	Rational design of Ruddlesden-Popper phase Mn ₂ SnO ₄ for an ultra-sensitive and highly selective detection of chloramphenicol in real-life samples	New J.Chem	(In Press)		2022
3,	K.Palpandi and N.Raman	Hydrothermally synthesized a pyrochlore-type bismuth stannate (Bi ₂ Sn ₂ O ₇):Efficient electrochemical detection of nitroxoline	J. Electroana.Chem	899	115679	2021
4.	R. Rajasekar, M.Samuel, T. N. J. I. Edison and N. Raman	Sustainable synthesis of silver nanoparticles using <i>Alstonia scholaris</i> for enhanced catalytic degradation of methylene blue	J. Mol. Struct.,	1246	131208	2021 Publis hed in online
5.	A. Arunadevi and N.Raman	Indole derived water soluble N, O bi-dentate ligand based mononuclear transition metal complexes: In silico and in vitro biological screening, molecular docking and macromolecule interaction studies	J. Biomol. Struct. Dyn	38	1499	2020
6.	K.Palpandi and N.Raman	Electrochemical detection of 2-nitroaniline at novel sphere-like Co ₂ SnO ₄ modified glassy carbon electrode	New J.Chem	44	8454	2020
7.	N.Raman, Ponnukalai Ponya Utthra and T. Chellapandi	Insight into the in vitro anticancer screening, molecular docking and biological efficiency of pyridine based transition metal(II) complexes N.Raman, Ponnukalai Ponya Utthra and T. Chellapandi, .,73 (2020), 103-119.	J.Coord.Chem	73	103	2020
8.	A.Arunadevi and N. Raman	Biological response of Schiff base metal complexes incorporating amino acids – a short review	J.Coord.Chem	73	2095	2020
9.	T.Chandrasekar, A.Arunadevi and N.Raman	Synthesis, spectral characterization, DNA binding and antimicrobial profile of biological active mixed ligand Schiff base metal(II) complexes incorporating 1,8-diaminonaphthalene ,. 2020, https://doi.org/10.1080/00958972.2020.1870967	J.Coord.Chem	https://do i.org/10. 1080/009 58972.20 20.18709 67		2020
10	J.Porkodi, M. Samuel, A. Johnson and N.Raman	Synthesis, characterization, ADMET, in vitro and in vivo studies of mixed ligand metal complexes from a curcumin Schiff base and lawsone	Nucleos. Nucleot. Nucl.	https://do i.org/10. 1080/152 57770.20 20.18678 65		2020
11.	G. Kumaravel, P.Ponya Utthra , D. Mahendiran and	Exploring the DNA interactions, FGF growth receptor interaction and biological screening of metal(II) complexes of NNN donor ligand	Int. J. Biol Macromol	126	1303	2019

	N. Raman	derived from 2-(aminomethyl)benzimidazole				
12.	S. Hemalatha, J. Dharmaraja, S.Shobana, P.Subbaraj, T. Esakkidurai and N. Raman	Chemical and pharmacological aspects of novel hetero MLB complexes derived from NO ₂ type Schiff base and N2 type 1,10-phenanthroline ligands	J. Saudi Chem.Soc	23	61	2019
13.	G.Kumaravel, P. Ponya Utthra and N.Raman	Exploiting the biological efficacy of benzimidazole based Schiff base complexes with l-histidine as a co-ligand: Combined molecular docking, DNA interaction, antimicrobial and cytotoxic studies	Bioorg. Chem.	77	269	2018
14.	G. Kumaravel and N. Raman	A treatise on benzimidazole based Schiff base metal(II) complexes accentuating their biological efficacy: Spectroscopic evaluation of DNA interactions, DNA cleavage and antimicrobial screening	Mat.Sci. Engi. Part C	70	184	2017
15.	S. Packianathan, P. Ponya Utthra, N. Raman and Liviu Mitu	Mixed ligand N ₄ O ₂ type metal(II) complexes as metallointercalators: Preliminary investigation of DNA binding/cleavage and antimicrobial efficacy	Inorganic and Nano-Metal Chemistry	47	1117	2017
16.	R.Paul Pandiyan and N. Raman	Biological screening and DNA nuclease activity of transition metal complexes of N_2O_2 type of Knoevenagel condensate Schiff base	Appl.Organometal. Chem.	30	531	2016
17.	V.Muniyandi and N. Raman	Screening the DNA interaction ability and antimicrobial activity of a few novel bioactive complexes tethering N-((2-aminophenyl) (phenyl) methylene)-4-nitroaniline	Mat.Sci. Engi. Part C	68	258	2016
18.	P.Ponya Utthra, N.Pravin and N. Raman	Scrutinizing the DNA damaging and antimicrobial abilities of triazole appended metal complexes	J. Photochem. Photobiol. B Biol	158	136	2016
19.	M. Selvaganapathy, N. Pravin, V. Muniyandi, M. Nazeer and N. Raman	Exploring the photochemosensitivity by novel cysteine-based mixed ligand complexes	J. Photochem. Photobiol. B Biol	157	77	2016
20.	T. Arun, R. Subramanian and N. Raman	Novel bio-essential metal based complexes linked by heterocyclic ligand: Synthesis, structural elucidation, biological investigation and docking analysis	J. Photochem. Photobiol. B Biol	154	67	2016
21.	T. Arun, R.Subramanian, S. Packianathan and N. Raman	Fluorescence titrations of bio-relevant complexes with DNA: Synthesis, structural investigation, DNA binding/cleavage, antimicrobial and molecular docking studies	J.Fluoresc.	25	1127	2015
22.	T.Chandrasekar, N.Pravin and N.Raman	DNA incision evaluation, binding investigation and biocidal screening of novel metallonucleases of 1,7-bis(4-hydroxy-3-methoxyphenyl)hepta-1,6-diene-3,5-dione based Knoevenagel condensate having methionine: Synthesis and structural validation	J. Mol. Struct.	1081	477	2015
23.	S.Packianathan, T. Arun and N. Raman	DNA interaction and efficient antimicrobial activities of 4N chelating metal complexes	J. Photochem. Photobiol. B. Biol.	160	148	2015

24.	N.Raman, M.Selvaganapathy and S.Sudharsan	DNA, the biopolymer as a target material for metalloinsertors: From chemistry to preclinical implications	Mat.Sci. Engi. Part C.	53	239	2015
25.	N.Pravin, V.Devaraj and N.Raman,	Targeting protein kinase and DNA molecules by diimine-phthalate complexes in antiproliferative activity	Int. J. Biol Macromol.	79	837	2015
26.	N.Raman and N.Pravin	DNA fastening and ripping actions of novel Knoevenagel condensed dicarboxylic acid complexes in antitumor journey	European J Med Chem.	80	57	2014
27.	N.Raman, R.Mahalakshmi and L. Mitu	Bio-sensitive activities of coordination compounds containing 1, 10-phenanthroline as co-ligand: Synthesis, structural elucidation and DNA binding properties of metal(II) complexes	Spectrochim Acta- Part A	131	355	2014
28.	N.Raman, T.Arun, R.Mahalakshmi, S.Packianathan and R.Antony	Appraisal of DNA obligatory, DNA cleavage and in vitro anti-biogram efficiency of 9,10-phenanthrenequinone based metal complexes	Inorg. Chem. Commun.	46	263	2014
29.	N.Pravin and N.Raman	Investigation of in vitro anticancer and DNA strap interactions in live cells using carboplatin type Cu(II) and Zn(II) metalloinsertors	European J Med Chem.	85	675	2014
30.	N.Raman, R. Mahalakshmi and M.Packiaraj	Synthesis and characterization of efficient chemical nucleases: A joint refinement from XRD, antimicrobial screening, DNA binding and cleavage investigations	Inorg. Chem. Commun.	47	20	2014
31.	N.Raman and R.Rajakumar	Bis-amide transition metal complexes: Isomerism and DNA interaction study	Spectrochim Acta- Part A,	120	428	2014
32.	N.Raman and N.Pravin	Lasing the DNA fragments through beta- diketimine framed Knoevenagel condensed Cu(II) and Zn(II) complexes- An <i>in vitro</i> and <i>in vivo</i> approach	Spectrochim Acta- Part A	118	867	2014
33.	N. Raman and M. Selvaganapathy	Pyrazolone incorporating amino acid metallointercalators as effective DNA targets: Synthesis and <i>in vitro</i> biocidal evaluation	Inorg. Chem.Commun	37	114	2013
34.	S. Sudharsan, N. Raman and R. Senthilkumar	In vitro antitumor assessments of peptide nanocomplexes on Dalton's lymphoma ascites tumor model	Mat.Sci. Engi. Part C	33	884	2013
35.	N.Raman and S. Sudharsan	Self-Assemblies and <i>in vitro</i> cancer inhibition of peptide based nanocomplexes	Sci. Adv. Mater	5	127	2013
36.	N. Raman and S. Sudharsan	Phase-transfer synthesis and an insight into the interfacial antitumor mechanism of novel peptide functionalized metal nanoparticles	Syn. React.Inorg. MetOrg. Nano- Met.Chem.	43	355	2013
38.	N. Raman, S. Sudharsan, V. Veerakumar, N. Pravin and K. Vithiya	Pithecellobium dulce mediated extra-cellular green synthesis of larvicidal silver nanoparticles	Spectrochim Acta-Part A	96	1031	2012
39.	N. Raman, S. Sobha, M. Selvaganapathy and R. Mahalakshmi	DNA binding mode of novel tetradentate amino acid based 2-hydroxybenzylidene-4-aminoanti pyrine complexes	Spectrochim Acta- Part A	96	698	2012
40.	N.Raman and S.Sobha	Inspired research on the DNA binding ability of 4-aminoantiprine derived mixed ligand complexes	Inorg. Chem.Commun.	17	120	2012

41.	N.Raman and	Investigation of DNA binding mechanism,	J.Enzyme Inhibit.	27	380	2012
	A.Selvan	photoinduced cleavage activity, electrochemical	Med. Chem.			
		properties and biological functions of mixed				
		ligand copper(II) complexes with benzimidazole				
		derivatives: Synthesis and spectral				
		characterization				
42.	N.Raman, S.Sobha	Synthesis, structural elucidation, DNA interaction	Monatshefte fur	143	1019	2012
	and L.Mitu	and biological evaluation and molecular docking	Chemie - Chemical			
		of an isatin derived tyramine bidentate Schiff	Monthly			
		base and its metal complexes				
43.	N. Raman and S.	Exploring the DNA binding mode of transition	Spectrochim Acta-	85	223	2012
	Sobha	metal based biologically active compounds	Part A			