

Dr. Mariappan Rajan

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MKU web page link of the faculty

<https://mkuniversity.ac.in/new/school/sc/rajan.php>

Scopus link if available:

<https://www.scopus.com/authid/detail.uri?authorId=7005852449>

Vidwan link if available

1. Personal Details

Date of Birth & Age : 15.03.1983
Gender & Marital Status : Male, Married
Nationality : Indian
Place of Birth : Tamil Nadu

2. Educational Qualifications**2.1. Academic: MSc., PhD****2.2. Research**

Degree	Name of the University	Title of the Thesis	Date of Submission	Date of Award
Ph.D.	Manonmaniam Sundaranar University, Tirunelveli- 627012	Mapping of fluoride distribution in tirunelveli district and defluoridation of water using Zirconium (iv) - impregnated activated carbons	08.12.2010	01.06.2011

3. Post-Doctoral/ Research Associate / Industrial Experience

Name of the University / Institute / Industry	Period of Work	Nature of Work
Periyar University	20 months	Synthesis and characterization of chitosan nano biopolymers for medical applications

4. Professional Experience

S. No	Name of the University / Institution	Position Held	From (Date)	To (Date)
1	Madurai Kamaraj University, Madurai – 21.	Assistant Professor Level 11	05.06.2017	Till Date
2	Madurai Kamaraj University, Madurai – 21.	Assistant Professor Level 10	05.06.2013	04.06.2017
3	Sree Sastha Group of Institution, Chennai - 600123	Lecturer	13.07.2011	10.09.2011
4	Sri Paramakalyani College, Alwarkurichi - 627412	Lecturer	01.06.2010	30.04.2011

5. Teaching

No	Year	Semester	Course Title	Hours per Week
1	2022 -2023	Odd Semester	(i) Analytical Core paper (MSc)	16 Hours
			(ii) Org. Prac. (MSc)	
			(iii) Elective Paper (MSc)	
			(iv) Core Paper 3 (PGDIMF)	
	2022 -2023	Even Semester	(i) Natural Prod Core (MSc)	16 Hours
			(ii) Elective Paper (MSc)	
(iii) Core Paper 6 (PGDIMF)				
2	2021 -2022	Odd Semester	(i) Analytical Core paper (MSc)	16 Hours
			(ii) Org. Prac. (MSc)	
			(iii) Elective Paper (MSc)	
			(iv) Core Paper 3 (PGDIMF)	
	2021 -2022	Even Semester	(i) Natural Prod Core (MSc)	16 Hours
			(ii) Elective Paper (MSc)	
(iii) Core Paper 6 (PGDIMF)				
3	2020 -2021	Odd Semester	(i) Analytical Core paper (MSc)	16 Hours
			(ii) Org. Prac. (MSc)	
			(iii) Elective Paper (MSc)	
			(iv) Core Paper 3 (PGDIMF)	
	2020 -2021	Even Semester	(i) Natural Prod Core (MSc)	16 Hours
			(ii) Elective Paper (MSc)	
(iii) Core Paper 6 (PGDIMF)				
4	2019-2020	Odd Semester	(i) Analytical Core paper (MSc)	16 Hours
			(ii) Org. Prac. (MSc)	
			(iii) Elective Paper (MSc)	
			(iv) Core Paper 3 (PGDIMF)	
	2019 -2020	Even Semester	(i) Natural Prod Core (MSc)	16 Hours
			(ii) Elective Paper (MSc)	
(iii) Core Paper 6 (PGDIMF)				
5	2018 -2019	Odd Semester	(i) Analytical Core paper (MSc)	16 Hours
			(ii) Org. Prac. (MSc)	
			(iii) Elective Paper (MSc)	
			(iv) Core Paper 3 (PGDIMF)	

	2018 -2019	Even Semester	(i) Natural Prod Core (MSc)	16 Hours
			(ii) Elective Paper (MSc)	
			(iii) Core Paper 6 (PGDIMF)	
6	2017 -2018	Odd Semester	(i) Analytical Core paper (MSc)	16 Hours
			(ii) Org. Prac. (MSc)	
			(iii) Elective Paper (MSc)	
			(iv) Core Paper 3 (PGDIMF)	
	2017 -2018	Even Semester	(i) Natural Prod Core (MSc)	16 Hours
			(ii) Elective Paper (MSc)	
			(iii) Core Paper 6 (PGDIMF)	
7	2016-2017	Odd Semester	(i) Organic Core papers	16 Hours
			(ii) Org. Prac.	
			(iii) Course work & In-depth study	
	2016-2017	Even Semester	(i) Organic Core papers	14 Hours
			(ii) M.Sc. and M.Phil. Project	
8	2015-2016	Odd Semester	(i) Organic Core papers	14 Hours
			(ii) Course work & In-depth study	
	2015-2016	Even Semester	(i) Organic Core papers	14 Hours
			(iii) M.Sc. and M.Phil. Project	
9	2014-2015	Odd Semester	(i) Organic Core papers	14 Hours
			(ii) Course work & In-depth study	
	2014-2015	Even Semester	(i) Organic Core papers	16 Hours
			(ii) Physical Core paper	
			(iii) M.Sc. and M.Phil. Project	
10	2013-2014-	Odd Semester	(i) Organic Core papers	16 Hours
			(ii) Org. Prac.	
			(iii) M.Phil In-depth study	
			(iv) M.Sc. and M.Phil Project	
	2013-2014-	Even Semester	(i) Organic Core papers	12 Hours
			(iii) M.Sc. and M.Phil. Project	

6. Design/Development of New Curricula and Courses

No	Description	Organization for which it was Developed	Level(PG/UG)

7. Creation of ICT Mediated Teaching-Learning Pedagogy

7.1. SWAYAM / MOOCs

No	Description	Organization for which it was Developed	Level(PG/UG)

7.2. E-Contents

No	Description	Organization for which it was Developed	Level(PG/UG)

7.3. Development of other ICT Mediated Teaching-Learning Pedagogy

No	Description	Organization for which it was Developed	Level(PG/UG)

8. Research Specialization / Field of Research

- Fabrication of biomaterials for bone, spinal and wound repair and regenerations
- Isolation of bioactive drugs from the medicinal plants, Computational Screening.
- Design and development of nanocarrier systems for Cancer, Tuberculosis, and Ophthalmic drug delivery.
- Fluoride, Heavy metal, and dye removal from drinking water and wastewater

9. Research Publications

Type	International	National
Papers Published in UGC-CARE Listed Journals	92	08
Papers in Refereed Journals (Not mentioned above)	01	01
Books Published	--	--
Books Edited	05	--
Contributions to Book Chapters	17	--
Editor of Conference/Seminar Proceedings	01	02
Papers Published in Conference/Seminar Proceedings	--	04
Papers Presented in Conferences/Seminars	31	33
Conference/Seminar/Workshop Attended	1	5
Deposits in CCDC, PDB, etc.	--	

10. Citation Metrics

Cumulative Impact Factor (Recent Annual JCR)	550.514/111 = 4.956
Total Citations (Scopus/Web of Science)	2302
h-Index (Scopus/Web of Science)	26
g-Index (Scopus/Web of Science)	--
i10 Index (Scopus/Web of Science)	79

11. Details of Patents

1. Rajan, M. (2020). A bioactive composite deposited osteoimplant and a process for preparing the same (India, 202011030611), Under Process.

12. Research Guidance/Supervision

Degree / Programme	Completed	Submitted	Ongoing
PhD (Full-time)	08	01	04 (Guide) 03 (Co-Guide)
PhD (Part-time)	00		01
MPhil Research Project (Full-time)	14	01	
MPhil Research Project (Part-time)	02		
MSc Projects/Dissertation	19		04
MSc Internships/Summer or Winter Projects			

13. Funded Research Projects

13.1. Ongoing

S.No	Title of the Project	Funding Agency	Period / Duration	Total Grants Sanctioned (Rs)
1.	Metal cross-linked ... Wound Healing	DST- ASRT	2020-2023	09,10,000
2.	Fight to Microbial Drug Resistance ... Nano-Therapy	DST- ASRT	2020-2023	41,63,240

13.2 Completed

No	Title of the Project	Funding Agency	Duration and Month & Year of Completion	Total Grants Received (Rs)	No of Papers out of Project
1.	Design and development of multi-properties encompassing materials for diabetic wound healing process	DBT- Wellcome Trust	01.05.2019 to 30.04.2020	5,40,000	01
2.	Multifunctional porous mineralized osteoblastic cells for orthopedic	ICMR	20.08.2018 to 19.08.2020	16,27,500	08
3.	Nano encapsulation of anti-TB drugs into multilayer biopolymer nanocomposites	DST- SERB	01.07.2016 to 30.06.2018	10,00,000	10
4.	Development of self-repair and biocompatible orthopedic implants for osteosarcoma tissue engineering	DST- SERB	01.06.2016 to 31.05.2019	24,00,000	12
5.	Nanoformulation of drugs from selected <i>Zingiberaceae</i> family plants using natural biopolymers for controlled and targeted delivery	UGC- MRP	01.07.2015 to 30.06.2018	6,23,000	12
6.	Development and hyaluronidase assisted anticancer drug delivery using biopolymers nanocomposites	UGC- BSR	01.08.2014 to 30.07.2016	6,00,000	06

14. Reviewer in Journals

Name of the Journal	Publisher	No of Papers Reviewed
Emergent Materials	Elsevier Publications	06
Drug Delivery	Taylor & Francis Online	05
Polymer Bulletin	Taylor & Francis Online	03
Expert Opinion on Drug Delivery	Taylor & Francis Online	02
Biomedical Materials	IOP science	02
Pharmaceutical Research	Springer Nature	01
Bioengineered	IOP science	01
Ecotoxicology	Springer Nature	01
International journal of polymeric mat. and polymeric biomaterials	Taylor & Francis Online	01
Sains Malaysiana	UKN Publications	01
Journal of Polymer Research	Springer Nature	01
Artificial Cell, Nanomedicine...	Taylor & Francis Online	01
Journal of Biomedical Materials...	Wiley Publications	01
Technology in Cancer Research...	SAGE Journals	01
international journal biological macromolecules	Elsevier Publications	12
Journal of the Mechanical Behavior of Biomedical Materials	Elsevier Publications	03
Biomaterials Advances	Elsevier Publications	05
RSC Journals	RSC Publications	10
ACS Journals	ASC Publications	07

15. Research Collaborations

Name of the Collaborator	Institute	Collaboration Details
Prof. dr Stevo Najman	Head of Department of Biology with Human Genetics Faculty of Medicine University of Nis Serbia	Co-Editor, Tissue Engineering Research
Prof. Heidi Abrahamse	Director: Laser Research Centre Faculty of Health Sciences University of Johannesburg Doornfontein Campus South Africa	Cancer _ Photodynamic Therapy
Prof Nicolette Houreld	Laser Research Centre University of Johannesburg South Africa	Wound Healing Research
Prof. Pradeep Kumar	Pharmaceutical Sciences Department of Pharmacy and Pharmacology	Cancer Research

	University of the Witwatersrand, Johannesburg, South Africa	
Prof. Akon Higuchi	National Central University, Taiwan	Biomaterials Research
Dr. S. Kishor kumar	Department of Mechanical & Industrial Engineering College of Engineering, Qatar University, Doha Qatar.	Biomaterials applications
Dr. Deepalekshmi Ponnamma	Center for Advanced Materials, Qatar University, Doha Qatar.	Biomaterials applications
V. N. Azger Dusthacker	Department of Bacteriology, National Institute for Research in Tuberculosis, Chennai	Anti - Tuberculosis analysis

16. Countries Visited

Name of the Country	Period	Purpose
South Africa	Three months	Collaboration Project
Qatar	One week	Collaboration Project

17. Honours / Awards / Recognitions

Name of the Honours / Awards / Recognition	Awarding Agency	International / National / State / Institute Level
Indo-Africa Mobility Award	Wellcome Trust-DBT India Alliance	International Level
DHR Winter School Fellowship Award in Government of India from November 15 to December 14, 2018.	Ministry of Health and Family Welfare,	National Level
Young Scientist Award, New Delhi (2016).	Department of Science and Technology	National Level
UGC-Dr.D.S.Kothari Post-Doctoral Fellowship Award,	University Grants Commission	National Level
Best library usage award	Sri Paramakalyani College, Alwarkurichi	Institute Level

18. Conferences / Seminars / Workshops Organized

Level	Conference Title	Date(s)	Place	Role Played	Funding
National	Three day hands-on training workshop on <i>In-Silico</i> Natural Products Drug design	13-15 October, 2022	Madurai Kamaraj University	Convener	SERB, BRNS, INSA, RUSA
International	International conference on Nanomedicine	25th & 26th Feb 2019	Madurai Kamaraj University	Convener	SERB, CSIR, MKU
National	Biomaterials in Medicinal Chemistry (BMC-2015)	21st & 22th Dec 2015	Madurai Kamaraj University	Convener	SERB, MKU
National Level	Current Trend in Chemistry (CTC-2017) in SPKC, Tirunelveli-24	March 3, 2017	Madurai Kamaraj University	Co-convener	--
National	Biomaterials in Medicinal Chemistry (BMC-2017)	12 & 13 April, 2017	Madurai Kamaraj University	Convener	ICMR, INSA

19. Invited Lectures / Resource Person

S. No.	Title of the Seminar / Conference	Organizing Agency	Invited Lecture / Resource Person / Keynote Speaker / Paper Presenter / Plenary Speaker	National / International	Date of Programme
1.	Biomaterials Applications in Tissue Regenerations and Career development	Seethalakshmi Ramaswami College	Invited Lecture	State / University	26/03/2022
2.	Frontiers in NMR/Biomaterial Science	VHNSN College	Resource Person	National	28/02/2022
3.	Analytical Techniques for Separation of Molecules	Jamal Mohamed College	Resource Person	State / University	17/12/2021
4.	Material Science	Karpagam Academy of Higher Education	Resource Person	National	11/03/2021
5.	Frontier Areas in Chemistry	The Madura College	Resource Person	State / University	08/03/2021
6.	Lab Analytical Techniques Demo Cum Lecture	Sri Meenakshi Government Arts College for Women (A)	Resource Person	State / University	02/11/2020
7.	Carrier Opportunists in India and Abroad for Chemistry Students	V.V.V College	Resource Person	State / University	08/10/2020
8.	Contemporary Advances in Chemistry	Mahendra Arts and Science College	Resource Person	National	26/02/2020

9.	Recent Trend on Materials for Health and Energy	J.K.K. Nattraja College of Arts and Science	Invited Lecture	State / University	21/02/2020
10.	Biomaterials in Tissue Engineering Application	J.K.K. Nattraja College of Arts and Science	Invited Lecture	State / University	21/02/2020
11.	Herbal Technology: Extraction, Purification & Identification	S. Vellaichamy Nadar College	Invited Lecture	State / University	10/01/2020
12.	Recent Trends in Chemistry-2019	Krishna Arts and Science College	Resource Person	National	27/09/2019
13.	Recent Developments in the Applications of Bioinorganic Chemistry	Aditanar College of Arts and Science	Resource Person	National	19/09/2019
14.	Nobel Prize Winners in Chemistry-2019	Alagappa University	Resource Person	National	12/03/2019
15.	Research Methodology for Dental Students	Saveetha Dental College and Hospital	Invited Lecture	State / University	08/02/2019
16.	Self-repair and biocompatible orthopedic implants for osteosarcoma	ANEH, Bishop Heber College	Resource Person	International (within India)	04/02/2019
17.	Biomaterials for Tissue Engineering Application	Shri Sakthikailash Women's College	Resource Person	State / University	11/05/2018
18.	Emerging Trends in Chemistry	K.S. R College of Arts and Science	Resource Person	National	09/03/2018
19.	Nanocarrier Technologies for Tuberculosis Chemotherapy	Manonmoaniam Sundaranar University	Resource Person	State / University	09/02/2018
20.	National Science Day Celebration	Fatima Michael College of Engineering and Technology	Resource Person	National	28/02/2017
21.	Chemistry of Natural Products	KSR College of Arts and Science for Women	Resource Person	State / University	01/08/2015
22.	Recent Trends in Biophysical Chemistry	AVS College of Arts & Science	Resource Person	National	06/03/2015
23.	Periyar University	PG Chemistry Central Valuation	Expert	State/University	05/12/2017
24.	Madurai Kamaraj University-DDE	MPhil Chemistry Viva voce	Expert	State/University	23/08/2017
25.	Periyar University	Doctoral Committee Meeting	Expert	State/University	27/07/2017
26.	Manonmoaniam Sundaranar University	Phd Viva-voce Examiner	Expert	State/University	10/08/2017
27.	Madurai Kamaraj University-DDE	Chemistry Practical Examination	Expert	State/University	10/05/2017
28.	Manonmoaniam Sundaranar University	Doctoral Committee Meeting	Expert	State/University	16/05/2017
29.	Parvathys Arts and Science College	Contact the nonsemester	Expert	State/University	27/06/2017

		examiner		
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20. Professional Development Programs / Faculty Development Programs Organized

21. Professional Development Programs / Faculty Development Programs Attended

Name of the Program	Place	Date(s)	Sponsor
UGC Sponsored Orientation Course	Academic Staff College, Madurai Kamaraj University	05.11.2013- 02.12.2014	UGC
UGC Sponsored Refresher Course	Academic Staff College, Madurai Kamaraj University	23.12.2014- 12.01.2015	UGC
DHR Winter School Programme in traditional medicine and Integrative Health	Department of Health Research	15.11.2018- 14.11.2018	MHRD
Orientation Training Programme of Ayurveda for Non-AYUSH doctors/ Scientists	Bharati Vidyapeeth Deemed to be University, Pune	27.01.2020- 01.02.2020	Rashtriya Ayurveda Vidyapeeth, Ministry of AYUSH
FDP on Chemistry: The Catalyst for Change	Ramanujan College, University of Delhi	14.07.2021- 28.07.2021	Ministry of EDUCATION
One Week STTP (Online) on Biomedical Devices: Design and Manufacturing	National Institute of Technology, Srinagar	20.06.2022- 24.06.2022	AICTE, New Delhi

22. Administrative Experiences

Role Played	Responsibilities	Period (from ... to)
Convenor, SAM_MKU Colloquium Lecture Series	Conduct the lectures	June, 2022 to still date
School of Chemistry Exam Co-ordinator	Conduct the School examinations	June, 2017 to May, 2019

23. Membership in Academic Bodies (BoS, DC, External Examiner, etc.)

Name of the University / Institute / College	Type of Membership	Duration / Period
VVV College	BOS, MSc Chemistry	07/12/2022
VIT University	Doctoral Committee member	02-11-2022
Arul Anandar College	Judge in CHEMFEST-2K22	23/03/2022
Madurai Kamaraj University	Valuation of semester exam	01/10/2021
Madurai Kamaraj University	Examiner Common entrance for PhD/MPhil	06/10/2021

Noorul islam Centre for higher Education	Doctoral Committee member	20/12/2021
Noorul islam Centre for higher Education	Doctoral Committee member	16/08/2021
Noorul islam Centre for higher Education	Doctoral Committee member	16/08/2021
Noorul islam Centre for higher Education	Doctoral Committee member	11/09/2021
Karunya University	Doctoral Committee member	09/12/2013
Sri Paramakalyani College	Doctoral Committee member	15/02/2017
Manonmoaniam Sundaranar University	Doctoral Committee member	30/11/2016
Karunya University	Doctoral Committee member	20/01/2015
Periyar University	Doctoral Committee member	15/07/2016
Periyar University	Examiner paper Valuation	22/12/2016
Sri Paramakalyani College	Doctoral Committee member	23/02/2018
E.R.K. Arts and Science College	MPhil Viva-Voce Examiner	30/01/2018
Aditanar College of Arts and Science	Doctoral Committee member	31/10/2017
Periyar University	Organic Chemistry Practical Examiner	24/10/2017
Fatima Michael college of engineering and tech	Resource Person, National Science day Celebration	28/02/2017
Periyar University	Chemistry Practical Examination	23/03/2017

24. Membership in Recognised Professional Bodies

Name of the Professional Body	International / National	Type of Membership
American Chemical Society	International	Life Member
Society for Technologically Associated Materials of India	National	Life Member
Society of biomaterials	International	Life Member
Asian Chemical Society (ACS/2018/LM527)	International	Life Member
International Natural Product Sciences Taskforce	International	Life Member

25. Languages Known

Languages	Read	Write	Speak
Tamil, English	Yes	Yes	Yes

26. Competence in Computer Applications

- ✓ Cheminformatic (StarDrop and SeeSAR)

27. Involvement in Extension Activities other than Academic Works

- ✓ Student – Teacher Councillor

28. Any Other Relevant Information

Details of Publications

1. Books Published

2. Books Edited

1. Mariappan Rajan, (2022). **Functional Nanomaterials for Regenerative Tissue Medicines**, CRC Press/Taylor & Francis, ISBN: 9780367690298.
2. Mariappan Rajan,(2021). **A Mechanistic Approach to Medicines for Tuberculosis Nanotherapy**, Elsevier Publication, Academic Press, Paperback ISBN: 9780128199855, ISBN: 9780128244845.
3. Mariappan Rajan,(2021). **Nanotechnology for Hematology, Blood Transfusion And Artificial Blood**, Elsevier Publications, ISBN: 9780128239711.
4. Mariappan Rajan,(2019). **Polymer Nanocomposites in Biomedical Engineering**, Springer-Nature Publications, ISBN: 978-3-030-25135-2.
5. Mariappan Rajan,(2019). **Proceedings of the International Conference on Nanomedicine (ICON-2019)**, Springer Publications, ISBN: 978-3-030-04741-2.

3. Contribution to Book Chapters

1. Muthuraman Raguraman and Mariappan Rajan, **Nanoengineering and Nanotechnology for Tissue Engineering and Organ Printing**, Emerging Nanotechnologies for Medical Applications, Elsevier, 2023, 1st Edition, ISBN: 9780323911825.
2. Ramakrishna Thilagar Uma Maheswari, Pradeep Kumar and Mariappan Rajan, **Mechanisms of anti-inflammatory effects of various naturally derived secondary metabolites**, Recent Developments in Anti-Inflammatory Therapy, Elsevier, 2023, 1st Edition.
3. Palanichamy Nandhini and Mariappan Rajan, (2022). Antimicrobial Activities of Conducting Polymers and Their Derivatives, Madurai, CRC Press, 1st Edition, DOI: 10.1201/9781003205418-17.
4. Murugesan Gowri, Nachimuthu Latha and Mariappan Rajan,(2022). **Fiber- and Fabric-Reinforced Shape-Memory Polymers, Shape Memory Composites Based on Polymers and Metals for 4D**, Madurai, Springer International Publishing, eBook ISBN: 978-3-030-94114-7, Print ISBN: 978-3-030-94113-0.
5. Selvakani Prabakaran and Mariappan Rajan,(2021). **Biosynthesis of nanoparticles and their roles in numerous areas, 1st Edition, Comprehensive Analytical Chemistry**

- Biosynthesized Nanomaterials**, Madurai, Elsevier Publications, Academic Press, 1st Edition, ISBN: 978-0-323-89881-2, ISSN: 0166-526X.
6. Prabakaran Selvakani, Sumathra Murugan, and Mariappan Rajan,(2021).**The pulmonary administration route: Advantages and challenges, 1st Edition, Mariappan Rajan, A Mechanistic Approach to Medicines for Tuberculosis Nanotherapy**,Madurai, Elsevier Publications, Paperback ISBN: 9780128199855, eBook ISBN: 9780128244845.
 7. E.R. Anishiya Chella Daisy, Kandasamy Vinothini, and Mariappan Rajan,(2021). **pH, thermo- and stimuli-responsive nanotherapy for tuberculosis, 1st Edition, Mariappan Rajan, A Mechanistic Approach to Medicines for Tuberculosis Nanotherapy**, Madurai, Elsevier Publications, Academic Press, Paperback ISBN: 9780128199855, eBook ISBN: 9780128244845.
 8. Ammavasi Nagaraj and Mariappan Rajan (2020).**Future needs and trends: influence of polymers on the environment, 1st Edition, Polymer Science and Innovative Applications**, Madurai, Elsevier publications, Paperback ISBN: 9780128168080, eBook ISBN: 9780128173039.
 9. Kandasamy Vinothini, E.R. Anishiya Chella Daisy, Mariappan Rajan (2020). **Mechanism of loading and release in nanocontainers Phuong Nguyen-Tri, Trong-On Do, Tuan Anh Nguyen (eds), Smart Nanocontainers; Micro and Nano Technologies**, Madurai, Elsevier Publication, ISBN 978-0-12-816770-0
 10. Mariappan Rajan, Ida Celine Mary George Raj and Amarnath Praphakar Rajendran (2020). **Biosynthesized Nanoparticles and Their Biological Applications. In: Krishnan A., Chuturgoon A. (eds) Integrative Nanomedicine for New Therapies. Engineering Materials**. Madurai, Springer, Cham, Print ISBN: 978-3-030-36259-1, ISBN: 978-3-030-36260-7.
 11. M Rajan, M Sumathra, (2019). **Biomedical Applications of Hydroxyapatite Nanocomposites, 1st Edition in Polymer Nanocomposites in Biomedical Engineering**, Madurai, Springer-Nature Publications, ISBN: 978-3-030-04741-2.
 12. M Rajan, RA Praphakar, P Pradeepkumar,(2019). **Polymer Composite Strategies in Cancer Therapy, Augment Stem Cell Osteogenesis, Diagnostics in the Central Nervous System, and Drug Delivery, 1st Edition in Polymer Nanocomposites in Biomedical Engineering**, Madurai, Springer-Nature Publications, ISBN: 978-3-030-04741-2.
 13. Deepalekshmi Ponnamma, Yara Hany, Mariappan Rajan, Deepu Thomas Cheriyan, Mariam Ali Al-Maadeed, (2017).**Shape memory behavior of conducting polymer**

nanocomposites, Smart Polymer Nanocomposites, Madurai, Springer Publications, 321-343, **ISBN: 978-3-319-50423-0** (Print), 978-3-319-50424-7 (Online).

14. Kandasamy Vinothini, Mariappan Rajan, (2016). **Mechanism for the NanoBased Drug Delivery System, Characterization and Biology of Nanomaterials for Drug Delivery, 1st Edition, Nanoscience and Nanotechnology in Drug Delivery**, Elsevier Publication, Editors: Shyam Mohapatra Shivendu Ranjan Nandita Dasgupta Raghvendra Mishra Sabu Thomas, eBook ISBN: 9780128140321, Paperback
15. Mariappan Rajan, Dharman Govintharaj, Murugan Sumathra, (2016) **Development of Microwave absorbers from Biopolymer Composites in Biopolymer Composites in Electronics, Biopolymer Composites in Electronics**, Madurai, Elsevier Publication, 1st Edition, Elsevier Publication, 2016, **ISBN: 9780081009741**.

4. Editor of Conference/Seminar Proceedings

Mariappan Rajan, editor. **Proceedings of the International Conference on Nanomedicine (ICON-2019)**, 25th&26th-February-2019, Madurai Kamaraj University, Madurai.

5. Research Publications

5.1. UGC-CARE Listed Journals

1. Synergistic effect of polymer functionalized graphene oxide system for breast cancer treatment, Kandasamy Vinothini, Sathish Sundar Dhilip Kumar, Heidi Abrahamse, **Mariappan Rajan**, International Journal of Pharmaceutics, 632, 2023, 122556. **IF- 6.51**
2. Carbon Quantum Dots (CQD) fabricated from Exiguobacterium sp. VK2 Exopolysaccharide (EPS) using hydrothermal reaction and its biodiesel applications, Ramaraju Kalpana, Nagamalai Sakthi Vignesh, Kandasamy Vinothini, **Mariappan Rajan**, Balasubramaniam Ashokkumar, Kathirvel Brindhadevi, Nguyen Thuy Lan Chi, Arivalagan Pugazhendhi, Perumal Varalakshmi, Fuel, 333, 2023, 126426. **IF- 8.035**
3. Investigation of therapeutic and immunomodulatory activity of Bacopa saponin from Bacopa monnieri, Govindan Pothiaraj, Murugan Manoranjani, Sasikumar Pitchaikani, Gowtham Kumar Seker, Konda Mani Saravanan, **Mariappan Rajan**, Harshavardhan Shakila, South African Journal of Botany, 151, ,2022, 639-650. **IF- 3.111**
4. Matrix Metalloproteinases in Chemoresistance: Regulatory Roles, Molecular Interactions, and Potential Inhibitors, Bernadette Xin Jie Tune, Maw Shin Sim, Chit

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 87. Mineral-substituted hydroxyapatite reinforced poly(raffinose-citric acid)-polyethylene glycol nanocomposite enhances osteogenic differentiation and induces ectopic bone formation, D Govindaraj, **Mariappan Rajan**, MA Munusamy, AA Alarfaj, SS Kumar, **New J. Chem.**, 41, 2017, 3036-3047. **IF-3.925**
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- Deepalekshmi Ponnamma, Kishor Kumar Sadasivuni, Murugan A. Munusamy, *Biomedicine & Pharmacotherapy*, 83, 2016, 201-211. **IF-7.419**
95. Size-controlled synthesis of biodegradable nanocarriers for targeted and controlled cancer drug delivery using salting out cation, **Mariappan Rajan**, Madasamy Hari Balakrishnan, *Bulletin of Materials Science*, 39, 2016, 69-77. **IF-1.878**
 96. Surface functionalization of natural lignin isolated from *Aloe barbadensis* Miller biomass by atom transfer radical polymerization for enhanced anticancer efficacy, Murugaraj Jeyaraj, Rajendran Amarnath Praphakar and **Mariappan Rajan**, *RSC Advances*, 6, 2016, 51310-51319. **IF-4.036**
 97. Mineral Substituted Hydroxyapatite Coatings Deposited on Nanoporous TiO₂ Modulate the Directional Growth and Activity of Osteoblastic Cells, Dharman Govindaraj, **Mariappan Rajan**, Murugan A. Munusamy, and Akon Higuchi, *RSC Adv.*, 5, 2015, 58980-58988. **IF-4.036**
 98. Osteoblast compatibility of minerals substituted hydroxyapatite reinforced poly(sorbitol sebacate adipate) nanocomposites for bone tissue application, Dharman Govindaraj, **Mariappan Rajan**, Murugan A. Munusamy, Manickam Dakshinamoorthi BalaKumaran, and Pudhupalayam Thangavelu Kalaichelvan, *RSC Adv.*, 5, 2015, 44705-44713. **IF-4.036**
 99. Natural deep eutectic solvent extraction media for *Zingiber officinale* Roscoe: The study of chemical compositions, antioxidants and antimicrobial activities, **Mariappan Rajan**, Prabhavathi S.A, and Ramesh U, *The Natural Products Journal*, 5, 2015, 3-13. **IF-NA**
 100. Use of chemically activated cotton nut shell carbon for the removal of fluoride contaminated drinking water: Kinetics evaluation, **Mariappan Rajan**, V. Raj and G. Alagumuthu, *Chinese Journal of Chemical Engineering*, 23, 2015, 710-721. **IF-3.898**
 101. Hyaluronidase enzyme core-5-fluorouracil-loaded chitosan-PEG-gelatin polymer nanocomposites as targeted and controlled drug delivery vehicles, **Mariappan Rajan**, V. Raj, Abdullah A. Al-Arfaj, and A. Murugan, *International Journal of Pharmaceutics*, 453, 2013, 514-522. **IF-6.51**
 102. Formation and characterization of chitosan/poly(lactic acid)/poly(ethylene glycol)/gelatin nanoparticles: A novel biosystem for controlled drug delivery, **Mariappan Rajan** and V. Raj, *Carbohydrate Polymers*, 98, 2013, 951-958. **IF-10.723**
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 104. Study of Fluoride Affinity by Zirconium Impregnated Walnut Shell Carbon in Aqueous Phase: Kinetic and Isotherm Evaluation, **Mariappan Rajan**, Alagumuthu, *Journal of Chemistry*, 2013, 2013, 1-8. **IF-3.241**
 105. Encapsulation, Characterisation and in-vitro release of anti-tuberculosis drug using chitosan - poly ethylene glycol nanoparticles, **Mariappan Rajan** and V. Raj. *Int. J. Pharm. Pharm. Sci.*, 4, 2012, 255-259. **IF-NA**

106. Kinetic and Equilibrium studies on fluoride removal by Zirconium (IV) - impregnated Groundnut Shell Carbon, G. Alagumuthu, **Mariappan Rajan**, Chemical Industry, 64, 2010, 295-304. **IF-0.91**
107. Comments on “Fluoride removal from water using activated and MnO₂-coated Tamarind Fruit (Tamarindus indica) shell: Batch and column studies, G. Alagumuthu, **Mariappan Rajan**, V. Veeraputhiran, Journal of Hazardous Materials, 183, 2010, 956-957. **IF-14.224**
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109. Chemometric studies of water quality parameters of Sankarankovil Block of Tirunelveli, Tamilnadu, G. Alagumuthu, **Mariappan Rajan**, Journal of Environmental Biology, 31, 2010, 581-586. **IF-0.781**
110. Epidemiological and Correlation Studies of Keezhapavoor block of Tirunelveli, Tamil Nadu, G. Alagumuthu, **Mariappan Rajan**, Journal of Indian Water Works Association, 4, 2009, 268-274. **I.F-NA**
111. Monitoring of fluoride Concentration in Ground water of Kadayam block of Tirunelveli District, India: Correlation with Physico-Chemical Parameters, G. Alagumuthu, **Mariappan Rajan**, Rasayan Journal of Chemistry, 4, 2008, 920-928. **IF-1.30**

5.2. Other Refereed Journals

5.3. Papers Published in Conference Proceedings

5.4. Papers Presented in Conferences / Seminars (*List under the following sub-heads*)

5.4.1. International

5.4.2. International held within India

1. Selvakani Prabakaran and Mariappan Rajan*, Titanium orthopedic plate with polydopamine and Lanthanides substituted hydroxyapatite/aloe vera composite on *in-vivo* bone tissue regeneration, One day international conference on Expanding Frontiers in Chemistry (EFC-2019) Arul ananthar college, Madurai, 13th Sep-2019.
2. Kandasamy Vinothini, Andy Ramu and Mariappan Rajan*, Design and Development of Polymer functionalized mesoporous carbon nanospheres for chemo-photodynamic therapy, One day international conference on Expanding Frontiers in Chemistry (EFC-2019), Arul ananthar college, Madurai, 13th Sep-2019.
3. Asokan Mani Priyanka, Subramani Pradeepa, Murugan Sumathra and (Mariappan Rajan*) Ultra-long Hydroxyapatite/Methacrylated chitosan /Methotrexate (UHAP/m-CS/MTX) composite synthesis and characterizations ICRTCB-2019, Madurai Kamaraj University, 15&16th 05.2019.

4. Kandasamy Vinothini, Andy Ramu and Mariappan Rajan*, Polymer coded RGO Magnetic Nano-platform for Dual Responsive Cancer therapy. International Conference on Recent Trends in Chemistry and Biosensors (ICRTCB-2019) Madurai Kamaraj University, 16th&17th-May-2019.
5. Saminathan Priya, S. Pradeepa, Kandasamy Vinothini and Mariappan Rajan*, Synthesis and characterization of bio-combatable mesoporous carbon nanocarrier for cancer drug delivery, International Conference on Recent Trends in Chemistry and Biosensors (ICRTCB-2019), Madurai Kamaraj University, 16 th&17th-May-2019.
6. E.R. Anishiya chella daisy, Dr. Andy Ramu and Mariappan Rajan*, Investigation of *Aloe vera* extract and Berberine Loaded Solid Lipid Nanoparticles for Ophthalmic treatment, International Conference on Recent Trends in Chemistry and Biosensors (ICRTCB-2019), Madurai Kamaraj University, 16 th&17th-May-2019.
7. E.R. Anishiya chella daisy and Mariappan Rajan*, Design and development of mucoadhesive ZnS tagged PCL-g-PVA nanofiber carrier for ocular drug delivery, International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
8. Prabakaran Selvakani and Mariappan Rajan*, *In vitro* and *in vivo* biocompatibility assessment of minerals substituted hydroxyapatite / poly sorbitol sebacate glutamate (PSSG) composite coating on titanium metal implant for biomedical orthopaedic applications, International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
9. Kandasamy Vinothini and Mariappan Rajan*, MWCNTs-PEG mediated folic acid functionalized drug carrier for doxorubicin delivery. International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, (25th&26th-February-2019).
10. D. Manikandan, Kandasamy Vinothini and Mariappan Rajan*, Design and development of imaging and anti cancer drug loaded carbon dot based drug carrier. International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
11. S.V Vennila Manasa Devi, Sumathra Murugan and (Mariappan Rajan*). Design and development of anticancer drug loaded multipotent composite for bone tissue engineering. International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.

12. Sumathra Murugan, and (Mariappan Rajan*) “Hydroxyapatite/ κ -carrageenan-Maleic unhydride/Casein incorporated with doxorubicin composite for bone development” International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
13. Ammavasi Nagaraj and and Mariappan Rajan*, Effective removal of tetracycline antibiotics from water using carbon based hybrid nanomaterials, International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
14. Periyakaruppan Pradeepkumar and Mariappan Rajan*, Design and Development of Deep Eutectic Solvent Functionalized Polymeric nanocarrier at Cerium Oxide based Drug Delivery System for Anticancer Therapy, International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
15. Rajendran Amarnath Praphakar and Mariappan Rajan*, *In Vivo* Approach of Simply Constructed Pyrazinamide Conjugated Chitosan-g-Polycaprolactone Micelles for Methicillin Resistance *Staphylococcus aureus*, International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
16. Dharman Govindaraj and Mariappan Rajan*, Minerals Substituted Hydroxyapatite Based Biocomposite Triple-layer on Anodized Titanium for Enhancing Antibacterial and Regulating Bone Balance Property, International conference on Nanomedicine (ICON-2019), Madurai Kamaraj University, 25th&26th-February-2019.
17. Mariappan Rajan*, Self-repair and biocompatible orthopedic implants for osteosarcoma tissue engineering applications, International conference on ANEH-2019, Bishop Hiber College, Bishop Heber College, Tiruchirappalli - 620 017, Tamil Nadu, India .
18. Rajendran Amarnath Praphakar, (Mariappan Rajan*) “Facile Fabrication of Polyesteramide Based Smart Micelles for High Efficient Combination Therapy: Potential application in Controlled and Sequential Release of Rifampicin and Ethambutol” at the three days international conference on Advanced Materials Science and Technology, Bannari Amman Institute of Technology, Sathyamangalam, August 2017, Erode, Tamil nadu, Indian.
19. Sumathra Murugan, (Mariappan Rajan*) “Anticancer Effect And Antioxidant Properties Of Ginger Extract Against Osteosarcoma For Enhancing Osteogenic

Differentiation And Development Of Bone Mimetic Hap/Pcs/G Composite Scaffolds For Bone Tissue Engineering” 4th International Conference on Nanoscience And Nantotechnology ICONN-2017 Organised by department of physics and nanotechnology, SRM University, Kattankulathur, India, (9-11 august 2017)

20. Periyakaruppan Pradeepkumar, (Mariappan Rajan*) “Synthesis Of CPT Releasing Poly (Citrate-Co- ϵ - Caprolactone) Drug Carrier By Using Deep Eutectic Solvents” at the three days international conference on Frontire Areas in Chemical Technologies [FACTS-2017] Organised by department of industrial Chemistry, Alagappa University, Karaikudi-630 003, Tamil Nadu, India, July 06-08/2017.
21. Nagaraj, (Mariappan Rajan*) “Fabrication of Nano-Hydroxyapatite Cellulose Composite on Mesoporous Silica Nanoparticles for Fluoride Removal Studies Energy” Environment And Advanced Materials For A Sustainable Future Two Days International Conference, Kongu Engineering College, Erode, 23rd&24th 05. 2017.
22. Dharman Govindaraj, (Mariappan Rajan*) “Coating of bio- mimetic minerals substituted hydroxyapatite on surgical stainless steel 316L....” International conference on advance in metallurgy, materials and manufacturing organized by department of metallurgical engineering, Goverment college of engineering, Salem, Tamil nadu, 6-8/ March/ 2017.
23. A. Nagaraj, (Mariappan Rajan*) “Advancement Of Polyvalent Metal Particle Impregnated Naturally Determined Cellulose For Fluoride Removal From Drinking Water” Chemical And Environmental Research One Day International Conference, Jamal Mohammed College, Trichy, Tamil Nadu, India,07.01.2017.
24. Periyakaruppan Pradeepkumar, (Mariappan Rajan*) “Synthesis Degradable Poly (2-Hydroxyethyl Methaacrylate) Using Natural Deep Eutectic Solvents For Sustainable Drug Delivery” Advanced Functional Materials And Devices International Workshop, Manonmanium Sundaranar University, Tirunelveli, Tamil Nadu, India, 8-12/01/2017.
25. Dharman Govindaraj, (Mariappan Rajan*) “Dual effect of minerals substituted hydroxyapatite nanoparticles” International conference on cancer biology:drug discovery and novel therapeutics, organized by department of zoology and chemistry, SBK college, Aruppukotai, 29-30 Sep 2016.

26. Rajendran Amarnath Praphakar, (Mariappan Rajan*) “Zn²⁺ Cross-Linked Sodium Alginate-G- Allylamine- Mannose Polymeric Nanocarriers Of Rifamicin For Macrophage Targeting The Therapy Of Tuberculosis” International conference on cancer biology:drug discovery and novel therapeutics, organized by department of Zoology and chemistry, SBK college, Aruppukotai, 29-30 Sep 2016.
27. Rajendran Amarnath Praphakar, Mariappan Rajan*, Zn²⁺ cross-linked Sodium alginate-g-allylamine-mannose polymeric nanocarriers for macrophage targeting rifampicin delivery, International Conference on Functional materials-2016, PSN College of Engineering and Technology, Tirunelveli, 2016
28. D. Govintha raj, Mariappan Rajan*, Synthesis and Spectral Characterization of Novel nano-Hydroxyapatite from *Moringa Oleifera* Leaf, RAINST-2015, Hindustan University, Chennai.
29. G.Alagumuthu, Mariappan Rajan*, Kinetic and Equilibrium study of fluoride removal on Zirconium (IV) - impregnated nanocarbons from Ground nut shells, Colloidal and energy, 2013.
30. M.Rajan, V,Raj and Mariappan Rajan*,”Removal of crystal violet reactive dye using raw and activated extracted plant waste material as biosorbents, International conference on Advanced Materials”, Vellore institute of Technology, Vellore, 2012.
31. M.R.Sudhakar, Mariappan Rajan*, Removal of organic pollutants in effluents using granular activated carbons from plant by-products”. International symposium on trace organic pollutants in the Environment (ISOTOPE’10) at Bharathidasan University, Tiruchy.
32. V. Veeraputhiran, M. Manikandan, G. Alagumuthu, Mariappan Rajan*,Inclusion of Leucine with α -Cyclodextrin: A Molecular Modeling Approach, “International conference on Drug Design and Development”, Nadar Saraswathi College, Theni.

5.4.3. National

1. Dharman Govindaraj, Mariappan Rajan*, Bio-mimetic minerals substituted hydroxyapatite coating titanium.... Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-2, 12-13th April 2017
2. Rajendran Amarnath Praphakar, Mariappan Rajan*, Drug And In-Vitro Performance Of Rifampicin –Loaded Poly(Esteramide)S Nanocarriers For The Delivery Of

- Rifampicin To Alveolar Macrophages Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017.
3. Periyakaruppan Pradeepkumar, Mariappan Rajan*, Synthesis Of Cisplatin Releasing Poly (Citrate-Co- ϵ - Caprolactone) Drug Carrier By Using Deep Eutectic Solvents Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017.
 4. Nagaraj, Mariappan Rajan*, Fluoride Removal From Drinking Water By Size Dependent Fe₃O₄@Fe-Al Composite Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017.
 5. Sumathra Murugan, Mariappan Rajan*, Calciferol Loaded Graphene Oxide/Chitosan Grafted Hydroxyapatite Nanocomposite Ccaffolds Osteogenesis And Guided Bone Regeneration Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017.
 6. Vinothin Kandasami, Mariappan Rajan*, Graphene Oxide Based Cancer Drug Delivery System System For Targeting Folate Receptor Of Cancer Cells Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017.
 7. Vairamuthu Priyanka, Siva Perumal, Mariappan Rajan *Synthesis of gadolinium oxide nanoparticle and their biological application Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017
 8. Pachaiyappan Rajeswari, Siva Perumal, Mariappan Rajan * Assessment of anticancer drug binding interaction on graphene platform as a drug carrier for cancer treatment Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017
 9. Selvasekaran Chithra Devi, Siva Perumal, Mariappan Rajan * Template synthesis of hydroxyapatite nanoparticle using natural fatty acid Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017.
 10. Ravi Revathi, Siva Perumal, Mariappan Rajan * Copper oxide nanoparticles synthesis using plant extract as a bio-template their antibacterial application: Greener approach

- Two days national conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 12-13th April 2017.
11. A. Nagaraj, Mariappan Rajan *Enhanced Removal Of Fluoride By Poly (Acrylamide-N-Propyltrimethylammonium Chloride) Anion Exchanger Entrapped Hydrous Gadolinium Oxide Nanocomposite Recent Trends In Chemistry One Day National Symposium, The American College, Madurai, Tamil Nadu, India. 24.02.2017.
 12. Vinothin Kandasami, Mariappan Rajan *Folate Receptor Targeting Pma Conjugated Graphene Oxide Nanocarrier For Targeting Ant-Cancer Drug Delivery Recent Trends In Chemistry One Day National Symposium, The American College, Madurai, Tamil Nadu, India. 24.02.2017.
 13. Rajendran Amarnath Praphakar, Mariappan Rajan *Multi-Anti Tuberculosis Drug Formulation In Chitosan-[Phosphorylated K- Carrogeenan Nanovehicles Asa Sustainable Delivery System For Tuberculosis Recent Advances In Chemical Research , National Seminar Viruthunagar Hindu Nadar's Senthikumara Nadar College, Viruthunagar, Tamil Nadu, India, 24th & 25th. 01.2017.
 14. Sumathra Murugan, Mariappan Rajan *Osteosarcoma Diseased Bone Implant For Nano Hydroxyapatite Strengthened Poly(Xylitol Sebacate) Scaffold With Co Substituted Antioxidant: Synthesis, Enhanced Degradation And Drug Release Recent Advances In Chemical Research, National Seminar Viruthunagar Hindu Nadar's Senthikumara Nadar College, Viruthunagar, Tamil Nadu, India, 24th & 25th. 01.2017
 15. Sumathra Murugan, Mariappan Rajan *Green Routh Synthesis Of Hydroxyapatite Nanocomposite Nanocomposite Scaffolds To Enhance Tissue Regeneration Recent Trends In Chemistry National Seminar, Jeyaraj Annapackiam College ,Periyakulam, Theni , Tamil Nadu, India, 11 & 12th/ 01/2017,
 16. Rajendran Amarnath Praphakar, Mariappan Rajan *Serum Biomarkers Of Treatment Response Within A Randomized Clinical Trial For Pulmonary Tuberculosis Two days National conference on biomaterials in medicinal chemistry organized by School of Chemistry, Madurai Kamaraj University, Madurai-21, 21-22 Dec 2016
 17. Rajendran Amarnath Praphakar, Mariappan Rajan *Synthesis Of Cs-G-Pcl Co – Polymeric Nanocarriers For Controlled And Targeted Anti-Tuberculosis Therapy Recent Developments In Chemistry One day national symposium, ,Madurai Kamaraj University, Madurai, 04.06.2016.
 18. D.Govindaraj, C.Yesudhasan, Mariappan Rajan*, Synthesis and spectroscopic investigation of minerals substituted hydroxyapatite using a green chelating agent as a

template, National Conference on *Recent Advances in Chemical Science* (RACS-2015), Gandhigram Rural Institute-Deemed University, Gandhigram – 624 302, Dindigul District, Tamil Nadu, India.

19. Periyakaruppan Pradeepkumar and Mariappan Rajan*, Extraction of safe natural polymer from *Wrightia tinctoria* latex for purpose of medicinal application, National Conference on *Recent Advances in Chemical Science* (RACS-2015), Gandhigram Rural Institute-Deemed University, Gandhigram – 624 302, Dindigul District, Tamil Nadu, India.
20. M.Hari Balakrishnan, Mariappan Rajan*, Development of cisplatin loaded nanoparticles using biodegradable polymers for controlled and targeted cancer drug delivery National Conference in Advanced Materials and its Applications (NCAMA-2014) on Annamalai University, Annamalai Nagar, Tamil Nadu, April 4,5, 2014.
21. Mariappan Rajan, Alagumuthu*, Adsorption of fluoride on zirconium impregnated cotton nut shell waste based powdered activated carbon National Seminar on New Frontiers in Chemistry (NSNFC-2010), Annamalai University, Annamalai Nagar.
22. M.Rajan, G.Alagumuthu*, Fluoride distribution in groundwater and survey of dental fluorosis among school children in the villages of the Vasudavanallur District of Tirunelveli, India National conference on New Vistas in Material sciences (NVMS-2009), Sri Paramakalyani College, Alwarkurichi.
23. M.Rajan, G.Alagumuthu*, Investigations on the kinetics and mechanisms of sorptive removal of fluoride from water using Zirconium Impregnated Cashew nut shell carbon National Seminar on Modern Trends in Chemistry, Thiyagaraja College, Madurai, 2009.
24. M.Rajan, G.Alagumuthu*, Fluoride Removal by waste Indigenous Material using batch Adsorption Techniques National conference on *Recent Trends in Chemistry (RTC-3)*, Jayaraj Annapackiam College for Women, Periyakulam, 2009.
25. M. Rajan, G.Alagumuthu*, Fluoride level in Ground water and surface reactions with some natural adsorbents, National conference on *Advances in Surface and Interface Analysis*, Periyar University, Tamil Nadu. (December, 2007).
26. V.Priya , V.Raj, M.Rajan, G.Alagumuthu* Cisplatin - polyoxalate nanoparticles for tumor-targeted drug delivery vehicle and controlled release, International conference on Bio-Inorganic Chemistry-2013, Periyar University, Salem.

27. V.Raj, M.Rajan, In-vitro drug release of chitosan and polyethylene-coated anti-tuberculosis drug, 12th Tamil Science Congress, Periyar University, Salem, 23-25 August (2012).
28. V.Raj, G.Alagumuthu*,M.Rajan.An innovative approach of fluoride removal using zirconium impregnated biosorbents, NSEB-2012, Periyar University, Salem, 05 and 06 Jan (2012).
29. V. Veeraputhiran, M.Rajan, G.Alagumuthu*,Identification of zirconium impregnated walnut shell carbon for fluoride removal in aqueous phase: Kinetic and isotherm evolution National seminar on MILIEU HELTH 2011 (NSMH'11) Udaya College of Arts and Science, Vellamodi – 629 204 on February 8 2011.
30. V. Veeraputhiran, M. Rajan, G.Alagumuthu*,Fluoride Exclusion From drinking waters using Bio-adsorbent National seminars on MILIEU HELTH 2011 (NSMH'11) Udaya college of Arts and Science, Vellamodi – 629 204 on February 8 2011.
31. V. Veeraputhiran, M. Rajan G.Alagumuthu*, Adsorption of Fluoride on Cotton Nut Shell Waste Based Powdered Activated Carbon, 98th Indian Science Congress – Environmental Sciences, SRM University, Chennai, January 3-7, 2011.
32. V. Veeraputhiran, G, M. Rajan, G.Alagumuthu*,Fluoride distribution in Drinking Water: A case report from Ottapidaram Block, Tuticorin District, Tamil Nadu, India, 98th Indian Science Congress – Environmental Sciences, SRM university, Chennai, January 3-7, 2011.
33. M.Rajan, G.Alagumuthu*,Adsorption of fluoride on walnut shell waste based powdered activated carbon, *Tenth Tamil Science conference*, Manonmanium Sundaranar University, Tirunelveli, 2012

5.4.4. State

5.5. Any Other Publications Not Mentioned Above

6. Conferences / Seminars / Workshops / Webinars Attended

One Day National Seminar on Current trends in Biology & Biotechnology (CTBBN-2012), 11.03.2013, Periyar University, Salem.

One Day Workshop on Applications of Radioisotopes in Chemical Sciences (ARCS-2012), 28.09.2012, Periyar University, Salem.

Two Days Lecture Workshop on Modern Trends in Chemistry, 13-14th August-2012, Periyar University, Salem.

Recent Trends in Chemistry (RTC-2012), 20.03.2012, Periyar University, Salem.

One Day Workshop on Open-Source Drug Discovery (OPDD-2011), 20.12.2011,

CSIR-Central Electrochemical Research Institute, Karaikudi.

Three Days International Level Conference on Synthetic Structural Chemistry, 7-10th December-2011, Mangalore University, Mangalore.

Three Days National Seminar on Physical and Biomedical Applications in Nanotechnology, 12th-14th October-2011, Sree Narayana College, Kollam.

One Day Workshop on Removal of Dyes from Textile Effluent using low cost Adsorbents, 2010, Ayya Nadar Janakiammal college, Sivakasi.

Two Day National Level Conference on Nanotechnology: Current approaches and Applications, Sri Paramakalyani Centre for Environmental Sciences (MS university), Tirunelveli.

One Day Lecture-Workshop on Recent Advances in spectroscopy: Theory, Instrumentation and Applications, Lady Doak College, Madurai.

One Day Consultative Workshop on River flows: Present, Past & Future, 22.03.2009, Sri Paramakalyani Centre for Environmental Science (MS University), Tirunelveli.

Two Days National Level Seminar on Recent trends in Chemistry, 18-19th March-2009, Sri Paramakalyani College, Alwarkurichi.

One Day Intercollegiate Seminar on Electro chemistry and Nano chemistry & Fluoride and Environment, 8.2.2008, St. Xavier's College, Tirunelveli.

Two Days National Workshop on Green Chemistry (AUWGC-2008), Alagappa University, Karaikudi.

7. Details of Deposits in CCDC, PDB, etc.