### RATHI C R

**Designation**: Assistant Professor

**Qualification:** M.Sc.

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#### **Profile in Detail**

#### **Academic records**

- **M.Sc.**: Biotechnology, Bharathiar University, Coimbatore.
- **COPA**: Computer Operator and Programming Assistant, Govt ITI, Palakkad.
- **B.Sc.**: Zoology and Sericulture, Govt. Victoria College, Calicut University (Third Rank)

#### **ONLINE -CERTIFICATE COURSES**

- ♣ Learning to teach online : University of New South Wales Sydney.
- ♣ Positive Psychiatry and Mental Health : University of Sydney.
- Advanced Writing : University of California.
- ♣ Introduction to Genomic Technologies : Johns Hopikings University, Maryland.
- ♣ Understanding Research Methods : University of London.
- ♣ Bioinformatic Methods II : University of Toronto Canada.
- ♣ The Sustainable Development Goals- A global, transdisciplinary vision for the future: University of Copenhagen Denmark.
- ♣ COVID-19 What You Need to Know: Interstate Postgraduate Medical Association.
- **↓** Introduction to Big Data : University of California UC SanDiego.

## **Teaching / Research / Professional Experience**

Years (in total) – 11 years (Teaching-9.5, Research-1.5)

- ♣ Name of Institution: Mar Augusthinose College, Ramapuram.
- ♣ Position held: Asst. Professor
- ♣ Period (from-to): 2019 –to present
- ♣ Subject handled & Nature of duties: Teaching the subjects of UG and PG Biotechnology.
- **♣** Name of Institution: Newman College, Thodupuzha.
- Position held: Asst. Professor
- **♣** Period (from-to): 2015 –2017
- ♣ Subject handled & Nature of duties: Teaching the subjects of UG Botany with Biotechnology.



- ♣ Name of Institution: PRS, Kerala Agricultural University. Vazhakulam.
- **♣** Position held: Biotechnologist.
- ♣ Period (from-to): 2012 –2013
- ♣ Subject handled & Nature of duties: Research Assistant in Plant Tissue culture.
- ♣ Name of Institution: Mercy College, Palakkad.
- ♣ Position held: Asst. Professor
- ♣ Period (from-to): 2012 June –2012 December.
- ♣ Subject handled & Nature of duties: Teaching the subjects of UG Biotechnology.
- **♣** Name of Institution: JNV Palakkad.
- Position held: Post Graduate Teacher in Biotechnology.
- ♣ Period (from-to): 2008 –2012.
- ♣ Subject handled & Nature of duties: Teaching the subjects of Biotechnology.
- **♣** Name of Institution: DST-IRTC Palakkad.
- Position held: Research Assistant.
- ♣ Period (from-to): 2007 –2008
- ♣ Subject handled & Nature of duties: Research Assistant in DST- funded Project.

# Administrative responsibilities held in College

- **♣** Coordinator of MOOC-Organic Farming.
- ♣ Faculty of Value-Added courses
- **♣** Faculty of Add-on courses
- **♣** Coordinator of Anti-Narcotic club.

## **Positions held in University level**

♣ Additional Examiner for UG and PG Biotechnology.

## Publications in UGC journals/peer reviewed national/international journals

- **♣** "Green cellular delivery of silver nanoparticles from *Mirabilis jalapa* flower extract and its antipathogenic activity" International Journal of Creative Research Thoughts, Vol 8, 7 July 2020;4237-4243; ISSN :2320-2882.
- **♣** "Green cellular delivery of copper nanoparticles from *Mirabilis jalapa* flower extract and its antipathogenic activity" International Journal of Scientific Research in Science and Technology, Vol 7, July-August 2020; 255-262; ISSN:2395-6011.
- **4** "Green cellular delivery of iron nanoparticles from *Mirabilis jalapa* flower extract and its antipathogenic activity" International journal of science & Engineering development research, Vol 5,12 December 2020;139-144 ISSN: 2455-2631.
- **♣** " *Mirabilis jalapa* flower extract as therapeutic agent and cellular delivery by nanoparticles" Journal of drug delivery and therapeutics Vol 11(1-s: February 2021;53-56 ISSN: 2250-1177.

#### **Published books with ISBN**

- 1. "Screening of exogenous IAA producing plant growth promoting Rhizobacteria from agriculture soil", October 2020, Publisher: Amazon Publishers, USA, ISBN: 9798698630845.
- 2. "Synthesis of nanoparticles from Mirabilis jalapa and evaluation of antioxidant activity" September 2020, Publisher: Amazon Publishers, USA, ISBN: 9798692807755.
- 3. "Mirabilis jalapa as natural food dye and primary quality analysis." September 2020, Publisher: Amazon Publishers, USA, ISBN: 9798691058318.
- 4. "Evaluation of protoplast viability of *Mirabilis jalapa* and synthetic seed production", September 2020, Publisher: Amazon Publishers, USA, ISBN: 9798690573454.
- 5. "Oyster mushroom cultivation using sawdust and paddy straw as substrate and quality analysis", September 2020, Publisher: Amazon Publishers, USA, ISBN: 9798689791517.
- 6. "Evaluation of herbal ointment for the development of skin conditions", September 2020, Publisher: Amazon Publishers, USA, ISBN: 9798688228014.
- 7. "Wine production from vegetables and preliminary component analysis: an overview", 2019, Publisher: Amazon Publishers, USA, ISBN: 9781709797835.
- 8. "A comparative account on invitro antibacterial activity of bathing soaps and various plant extracts", 2020, Publisher: Amazon Publishers, USA, ISBN: 9798621321055.

# Paper presentations in Seminars/Conferences/Symposium

- 1. "Therapeutic proteins in the milk of transgenic animals **First prize** in the poster presentation. National seminar on stem cells and clinical applications. Centre for Biotechnology, Acharya Nagarjuna University, A.P, India
- 2. "Mirabilis jalapa flower extract as natural food dye and green synthesis of nanoparticles", in the International Conference on "Recent developments in Bioscience (ICRDBS-2021), jointly organised by Department of Biotechnology and Microbiology, Rathinam College of Arts and Science, Coimbatore.
- 3. "Mirabilis jalapa flower extract", International Conference on Current trends in Biotechnology (ICCTB 2020) Department of Biotechnology, SNGC, Bharathiar university, Coimbatore.
- 4. "Preparation of wine and preliminary component analysis from leafy vegetables", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.
- 5. "Comparative analysis of animal-based milk and plant-based milk", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.

- 6. "Emerging benefits of *Bacopa monnieri* (Brahmi) in neuro psychopharmacology", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.
- 7. "Cosmo pharmaceutical activity of *Grana mangostana*", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.
- 8. "Dynamic herbal formulations of *Adhatoda vasica* for management of dengue fever", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.
- 9. "Phytomedicinal and antioxidant activity of *Tinospora cordifolia* leaves extract", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.
- 10. "Green synthesis of silver nanoparticles from *Mirabilis jalapa* L. therapeutic and natural extract as food colorants", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.
- 11. "Evaluation of tea waste for their degradation and antioxidant potential along with caffeine extraction", International Conference on Homeopathy & Phytomedicine (ICHP), 2020, Department of Biochemistry, St. Thomas College pala.
- 12. "Genomics and proteomics way towards Parkinson's disease", International conference of "Biotechnology- proteins and Realities", P.S.G.R Krishnammal College, Coimbatore, and Tamil Nadu, India.

# Seminars/Conferences/Symposium/ Workshop/ Webinar attended

- ♣ International Webinar on "Nanocarriers for cancer drug delivery" organized by Department of Biosciences and IQAC, MACFAST on 27/10/2020.
- ♣ International Webinar on "Millets: Nutritional potential and challenges" organized by G.N Ramachandran science Club, MACFAST on 08/10/2020.
- ♣ International Webinar on "National education policy in nutshell" organized by Unnat Bharat Abiyan Cell, St Thomas College palai on 07/10/2020.
- ♣ International Webinar on "Informed walk across Ramachandran map in search of novel materials", G.N Ramachandran science Club, MACFAST on 07/10/2020.
- ♣ International Webinar on "Nonmuscle myosin II activity controls membrane protrusive activity", G.N Ramachandran science Club, MACFAST on 01/10/2020.
- ♣ International Webinar on "Malnutrition problems in Indians and future prospective", G.N Ramachandran science Club, MACFAST on 30/09/2020.

- ♣ International Webinar on "Bioweapons: a view on defens of the crops and foods against insects", G.N Ramachandran science Club, MACFAST on 29/09/2020.
- ♣ International Webinar on "Linking DNA replication to chromosome organization, cell cycle progression and genome stability", G.N Ramachandran science Club, MACFAST on 28/09/2020.
- ♣ International Webinar on "Towards a system level understanding of proliferation control in mammalian cells using MS based proteomics", G.N Ramachandran science Club, MACFAST on 24/09/2020.
- ♣ International Webinar on "A plants eye view on diversity and why plants matter", G.N Ramachandran science Club, MACFAST on 18/09/2020.
- ♣ International Webinar on "Structure based protein engineering to alter functional properties of enzymes for industrial and pharmaceutical applications", G.N Ramachandran science Club, MACFAST on 16/09/2020.
- ♣ International Webinar on "Nano size steps and meter long journeys reaching destination through obstacles and random walk", G.N Ramachandran science Club, MACFAST on 14/09/2020.
- ♣ International Webinar on "Cosmic fireworks: Violent death of exotic stars", G.N Ramachandran science Club, MACFAST on 10/09/2020.
- ♣ National Webinar on "Content writing masterclass" organized by Academic writing, Deepak Digital on 09/09/2020.
- ♣ International Webinar on "Neuroendocrine regulation of metabolic physiology", G.N Ramachandran science Club, MACFAST on 05/09/2020.
- ♣ International Webinar on "New Horizon for the chromosome segregation machinery", G.N Ramachandran science Club, MACFAST on 01/09/2020.
- ♣ International Webinar on "Drosophila and Zebrafish as Human Disease Models", G.N Ramachandran science Club, MACFAST on 25/08/2020.
- ♣ International Webinar on "Role of Genetics Alterations in Pathogenesis of Papillary thyroid Cancer" Department of Biotechnology, Mar Agusthinose College Ramapauram on 24/08/2020.
- ♣ International Webinar on "E-Resource in Teaching Learning and Research" IQAC, St. Albert's College Ernakulam on 21/08/2020.
- ♣ International Webinar on "Chemistry, Biology and the Unity of Nature", G.N Ramachandran science Club, MACFAST on 21/08/2020.
- ♣ National Webinar on "Women Empowerment", Women's cell, Mar Agusthinose College Ramapauram on 19/08/2020.
- ♣ International Webinar on "Antibiotic Resistance: The Next Pandemic", G.N Ramachandran science Club, MACFAST on 19/08/2020.

- ♣ International Webinar on "Speed Control in Animals: Making and Breaking Rules", G.N Ramachandran science Club, MACFAST on 18/08/2020.
- ♣ International Webinar on "Epigenetics-Recent trends in Genetics", Department of Biotechnology, Mar Agusthinose College Ramapauram on 17/08/2020.
- → International Webinar on "Multiple Facets of Gene Regulation: through the Eyes of pseudo exfoliation", G.N Ramachandran science Club, MACFAST on 17/08/2020.
- ♣ International Webinar on "Life at science", G.N Ramachandran science Club, MACFAST on 13/08/2020.
- ♣ International Webinar on "Personal Genomics to Precision Medicine Implication for Rare Genetic Diseases", G.N Ramachandran science Club, MACFAST on 12/08/2020.
- ♣ International Webinar on "Flower evolution in a nutshell", G.N Ramachandran science Club, MACFAST on 10/08/2020.
- ♣ International Webinar on "Science Communication through SARS-COV-2", G.N Ramachandran science Club, MACFAST on 05/08/2020.
- ♣ International Webinar on "Going viral: Evolution and spread of SARS-COV-2", G.N Ramachandran science Club, MACFAST on 01/08/2020.
- ♣ International Webinar on "Science: the joy of figuring things out", G.N Ramachandran science Club, MACFAST on 23/07/2020.
- ♣ International Webinar on "Cancer Nanotechnology", G.N Ramachandran science Club, MACFAST on 17/07/2020.
- ♣ National Webinar on "Moodle Platform", Department of Computer Science, Mar Agusthinose College Ramapauram on 17/07/2020.
- ♣ National Webinar on "Intellectual property Rights", Department of Biotechnology, Sas SNDP Yogam College Konni on 16 &17/07/2020.
- ♣ International Webinar on "Progress and pitfalls in COVID-19 Vaccine development", G.N Ramachandran science Club, MACFAST on 16/07/2020.
- ♣ International Webinar on "Modern Analytical Instrumentation and their Applications in Food Science", G.N Ramachandran science Club, MACFAST on 15/07/2020.
- ♣ National Webinar on "Cyber Ethics and Youth Relationships", IQAC, St. Albert's College on 13/07/2020.
- ▲ International Webinar on "Fundamentals & Regulatory Regulations for Pharmaceutical Industry Beginners and COVID19", Operant Pharmacy FederationOPFiCON~4, Dreamz College of Pharmacy, Sundernagar on 12/07/2020-13/07/2020.
- ♣ International Webinar on "Cryopreservation strategies for long term conservation of germplasm", G.N Ramachandran science Club, MACFAST on 13/07/2020.
- ♣ International Webinar on "Science, Biology and the Worlds Future", G.N Ramachandran science Club, MACFAST on 10/07/2020.

- ♣ National Webinar on "Starting the Startups", Institution Innovation Council, MES College Marampally on 09/07/2020.
- ♣ National Webinar on "Role of Institutional values and Green Practices in Accreditation Process", IQAC FDP, Kuriakose Elias College Mannanam on 07/07/2020.
- ♣ National symposium on "Frontiers in on Biotechnology" (NSFB) organized by the Department of Biotechnology Bharathiar University, Coimbatore.
- ♣ National Symposium on "Modern Biological Sciences" Department of Biosciences and research SNMV, Coimbatore, Tamil Nadu.

# Faculty development programs attended (Orientation/Refresher Course/ Workshop/ Short term courses)

- ♣ Faculty Development Programme (FDP) on Contemporary Advances in Biotechnology organized by Department of Biotechnology, National Institute of Technology, Andra Pradesh from 2nd to 6th<sup>th</sup> November 2020.
- ♣ Faculty Development Programme (FDP) on ADVANCED TRAINING IN ICT-ENABLED ONLINE TEACHING TOOLS conducted by the UGC-MHRD STRIDE Mahatma Gandhi University Kottayam, Kerala, from 12<sup>th</sup> to 16<sup>th</sup> October 2020.
- ♣ Faculty Development Programme (FDP) on BIOINFORMATICS FOR BASIC RESEARCH AND TEACHING organized by Centre for Bioinformatics, School of Biosciences, Mahatma Gandhi University, Kottayam, Kerala, from 28/11/2019 -03/12/2019.

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