# **CURRICULUM VITAE**

## Dr. R. RANJITH KUMAR, Ph.D., FERA

Researcher & CSO, Viyen Biotech LLP, 5/42, AKS Nagar, Rakkipalayam, Coimbatore - 641031, Tamil Nadu, INDIA E-mail: biotechranjith@gmail.com Phone: (+91) 9843925312, 9025683587 Scopus ID : 57208159927 Web of Science : ABH-3411-2021 **Research and Product development:** 



Nanoparticle; Agriculture Nanotechnology; Polymer Nanocomposite; Environmental Nanotechnology; Antimicrobial Nanotechnology

Professional Link: LinkedIn; Scopus; Research Gate; Google Scholar; Web of Science.

Personal Details	
Father's name	: RAJAMANI.R
Date of Birth	: 05/06/1984
Phone	: (+91) 9843925312, 9025683587
E-mail	: biotechranjith@gmail.com
Permanent address	: Melkavatty Village, Muthorai Post,
	The Nilgiris - 643004, Tamil Nadu, India.
Academic Performance	
Ph.D., (2011-2016)	: Highly Commended
Discipline	: BIOTECHNOLOGY
University	: Bharathiar University
M.Sc., (2005-2007)	: 73 % (First Class)
Discipline	: BIOTECHNOLOGY
University	: Bharathiar University
B.Sc., (2002-2005)	: <b>62</b> % (First Class)
Discipline	: BIOCHEMISTRY
University	: Bharathiar University
Title of the Thesis	

#### Title of the Thesis

**Ph.D.**, Phytochemicals, antioxidant and bioinspired silver nanoparticles studies on betel nuts and betel leaf-As antibacterial and anticancer agent.

**M.Sc.**, Production, Purification of *Taq1* and *Bst1* from *Thermus aquaticus* and *Bacillus stearothermophilus* and mapping its restriction sites.

#### Feb 2021 to till Date

**Position #1:** Chief Scientific Officer at Viyen Biotech LLP, Coimbatore, Tamil Nadu, India.

#### 01stJune 2022 to till Date

<u>Position #2:</u> International Research Fellow at INTI International University, Negeri Sembian, Malaysia.

#### 15<sup>th</sup> Feb 2023 to till Date

<u>Position #3:</u> Adjunct Faculty at Department of Zoology, PSGR Krishnammal College for Woman, Coimbatore, Tamil Nadu, India.

#### 09th March 2023 to till Date

<u>Position #4:</u> Visiting Professor at Department of Biotechnology, Sri Ramakrishna College of Arts and Science, Coimbatore, Tamil Nadu, India.

#### Professional Experience Summary

#### 03rd March 2022 to March 2023

**Position: Researcher** (Part-Time) at **Medicinal Chemistry, Hi-tech Agriculture & Bioactive Compounds Research Group, School of Engineering and Technology, Van Lang University, Ho Chi Minh City, Vietnam.** 

Experience: 1 year in Research and Publications

#### June 2018- Feb 2021

**Position: Assistant Professor** at Department of Biotechnology, **Kongunadu Arts and Science College**, Coimbatore, Tamil Nadu, India.

Experience: 2 years 8 Months in Teaching, Research and Start-up Promotion

#### Dec 2017 - May 2018

**Position: Assistant Professor** at Department of Biotechnology, **Nehru Arts and Science College**, Coimbatore, Tamil Nadu, India.

Experience: 5+ Months in Teaching, Administration and Research

## <u>Nov 2015 – Dec 2017</u>

**Position: Research Faculty** at **KIRND Institute of Research and Development**, Trichy, Tamil Nadu, India.

Experience: 2 Years 1 Month in Research, Innovation and Administration

#### Nov 2007- Dec 2010

**Position: Customer Support Representative** (LS) at **E4E Business Solutions Pvt Ltd**, Bangalore, India – Project FDI Client LCS -US client.

Experience: 3 Years 1 Month in Administration, Data Processing and Data Filtering.

#### Additional Professional Experience (Voluntary Service)

#### March 15th 2023 to Till date

<u>Position:</u> GSFN Enterprise India Chair [Sustainable Development Goals - SDG-6 Water, Manufacturing and Agriculture] at Global Sustainable Futures Progress through Partnerships Network, United Kingdom.

**Responsibility:** Activities to achieve Sustainable Development Goals

## Feb 2021 to Till Date

**<u>Position:</u>** Research Director at the Nilgiris Education and Research Foundation, the Nilgiris, Tamil Nadu, India.

**Responsibility:** First Generation Entrepreneur – Supporting to Start-up Company – Developmental Programmes for the Tribals communities in the Nilgiris District/Medicinal plant utilization and conservation/Biological farming and important- Mentorship

## Sept 2014 to 8th Feb 2021

**Position: Visiting Researcher** at **The Nilgiris Education and Research Foundation**, the Nilgiris, Tamil Nadu, India.

**Experience:** 6+ years in Research, Leadership and Administration activities in the development of Tribals communities in the Nilgiris District and Mentorship in education and Research.

## **Fund Received**

Received Rs. 25,000/- from "Tamil Nadu State Council for Science and Technology", Tamil Nadu, India for organizing Conference on 19.09.2019 to 21.09.2019. "International Level Conference on Impact of innovation in Science and Technology for Society Development (IISTSD-2019)", held on 19.09.2019 to 21.09.2019, held at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.

## Awards

- Vocational Excellence Award-2018 from *Rotary Ootacamund*, The Nilgiris, Tamil Nadu, India.
- Best Young Scientist National Award 2019 for outstanding in learning, teaching and research from *Innovative Research Developers and Publishers (IRDP)*, Chennai, Tamil Nadu, India on 23<sup>rd</sup>August, 2019.
- Meritorious Award Academic Year 2018 2019 for organizing National Workshop and Publication of Research Papers from *Kongunadu Arts and Science College*, Coimbatore, Tamil Nadu, India on 23<sup>rd</sup> February 2019.
- Meritorious Award Academic Year 2019 2020 for organizing International Conference and publication of research papers from *Kongunadu Arts and Science College*, Coimbatore, Tamil Nadu, India on 06<sup>th</sup> March 2020.

- Meritorious Award Academic Year 2019 2020 for the Best Paper published in Kongunadu Research Journal under the interdisciplinary (Biophysics) category from Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India on 06<sup>th</sup> March 2020.
- Gold Award for the creating awareness among students towards on Sustainable Development Goals (SDGs), from Global Sustainable Futures Network (GSFN), UK on 16<sup>th</sup> December 2023.

## Member in Professional Body for Academic Development

- **BIRAC E-YUVA Technical Evaluation Panel (TEP) Member** BIRAC E-YUVA Centre at PSGR Krishnammal College for Women, India.
- Fellow Member of Einstein Research Academy (ERA) 2021 for the contribution of research and development in bionanotechnology.
- Expect reviewer in Academic Exchange Information Center (AEIC), China.
- Appointed as **member** of **AEIC Annual Academic Committee (2022)** for AEIC Annual program by **The AEIC Academic Exchange Information Center**, Guangzhou, **China**.
- Active Member in Institute's Innovation Council at PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India from 2021 to till date.
- Member of the Academic Council of KPR Institute of Engineering and Technology as Subject Except (Industry) from Industry for Department of Science and Humanities.
- Member of the Academic Board of Studies Biotechnology Sri Ramakrishna College of Arts and Science, Coimbatore, Tamil Nadu, India.
- Member of Industry Expect at Department of Biotechnology, Bannari Amman Institute of Technology, Tamil Nadu, India.
- Member of the Academic Board of Studies Subject Except (Industry), Department of Physics – Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore, Tamil Nadu, India.
- External Examiner B. Tech, Biotechnology Laboratory Course (Innovation Practices) at PSG College of Technology, Coimbatore, Tamil Nadu, India

## Jury, Mentor, Honour in Scientific Proceedings & Innovations

- Primary Evaluator in Toycathon 2021 organized by Ministry of Education Innovation Cell, Government of India.
- Startup committee member for idea scrutinizing of Tamil Nadu Student Innovators - 2021 for ideation camp organized by Entrepreneurship Development & Innovation Institute (EDII-TN) Tamil Nadu, India.

- Mentor and Evaluator in YUKTI INNOVATION REPOSITORY (ideas/innovation/startups), Institutions Innovation Council (IIC), Ministry of Education's Innovation Cell, Govt. of India for PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India.
- External Jury (south zone of Tamil Nadu) for School Innovator Development Project – 2022 for ideation camp organized by UPSHIFT & Entrepreneurship Development & Innovation Institute (EDII-TN) Tamil Nadu, on 27<sup>th</sup> & 28<sup>th</sup> January 2023 at Anna University, Coimbatore, Tamil Nadu, India.
- Global Judging Committee of Solving for Humanity 2023, the first youth-led challenge for human development with the support of United Nations and beyond, organized by South-North Scholars.
- External Jury Member for the MSME Idea Hackathon 3.0 (Woman) on 26<sup>th</sup> August 2023, at KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu.
- External Jury Member for the MSME Idea Hackathon 3.0 (Woman) on 30<sup>th</sup> August 2023, at Sri Ramakrishna Engineering College, Coimbatore, Tamil Nadu.
- Act as External expert in the Internal Hackathon at PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, for the ideation and validation the team members for Smart India Hackathon – 2022 participants on 23<sup>rd</sup> March 2022.
- External Juries in the Demo Day Event on "Business plan/prototype developed and linkage with Innovation ambassadors for mentorship" at PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, for the ideation and validation the team members for Smart India Hackathon – 2022 on 20th May 2022.
- External Juries in the Startup Pitch Content in the "Centre for innovation, Incubation and Entrepreneurship Development (CIIED)" at PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu on 03th September 2022.
- Panel member in the "INSPIRICON Interactive Scientific Panel discussion" organized by Alpha Bio Cell and Biotech Research Society, Vellore Institute of Technology, Vellore, Tamil Nadu, India on 24<sup>th</sup> September 2022 in VIT.
- Panel member in the "VIT Biosummit 2022 Bridging Industry and Academia" on 3<sup>rd</sup> November 2022, organized by School of Bio Sciences and Technology, Vellore Institute of Technology, Vellore, Tamil Nadu, India.
- Act as external expert in the pre-TNSI ideas screening at PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, for the ideation and validation the team members for TNSI- 2022 participants on 25<sup>th</sup> January 2023.
- RAPPORTEUR in National Conference on Bioengineering and Nanotechnology in Medicine and Biology on 23<sup>rd</sup> & 24<sup>th</sup> March 2023 at Sri Ramakrishna College of Arts and Science, Coimbatore, Tamil Nadu, India.
- External Jury Panel member for the Project Competition on 09th June 2023, at Bannari Amman Institute of Technology, Sathyamangalam, Tamil Nadu, India.

- External Jury Panel member for the Innovation Expo on 08th August 2023, at PSGR
   Krishnammal College for Women, Coimbatore, Tamil Nadu, India.
- External Jury Member for the Internal BIT Hackathon on 09th September 2023, at Bannari Amman Institute of Technology, Tamil Nadu, India.
- External Jury Member for the Internal Smart India Hackathon on 16<sup>th</sup> September 2023, at Dr. N.G.P Arts and Science College, Coimbatore, Tamil Nadu, India.
- External Jury Member for the Internal Smart India Hackathon on 23<sup>rd</sup> & 25<sup>th</sup> September 2023, at PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India.
- Act an International Technical Committee member for "International Inter Varsity Innovation Challenge – 2023 (IVIC 2023)", organized by Einstein Research Academy, supported by INTI International University, Malaysia.
- Evaluator Smart India Hackathon 2023, organized by All India Council for Technical Education (AICTE) & Ministry of Education (MoE), Government of India.
- Mentor for Smart India Hackathon 2023, organized by All India Council for Technical Education (AICTE) & Ministry of Education (MoE), Government of India.
- External Panel Member for the Youth to Entrepreneurship (Y2E) Ideathon on 23<sup>rd</sup> February 2024, at United Institution of Technology, Coimbatore, Tamil Nadu, presented by Swadeshi Jagran Manch.
- External Panel Member for the Innovsense 24 (Project Expo) on 22<sup>nd</sup> March 2024, organized by Centre for Innovation, Incubation and Entrepreneurship Development (CIIED), at KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India.
- External Panel Member for the Final Year B-Tech Biotechnology Students Project Expo on 1<sup>st</sup> April 2024, at Department of Biotechnology, Kalaignarkarunanidhi Institute of Technology (KIT), Coimbatore, Tamil Nadu, India.

## Invited/Guest Talk

- Delivered a special lecture in one week-short term course on "Advances in Biological Systems and Material Science in Nano World" held on April 17<sup>th</sup> to -23<sup>rd</sup>, 2017 organized by Department of Chemistry, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu, India Sponsored by AICTE.
- Delivered a special lecture in "Biology and Technology-A New Era is Beginning Biotechnology" held on Nov 07th, 2017 at KG College of Arts and Science, Coimbatore, Tamil Nadu, India.
- Delivered a special lecture in TEQIP III Sponsored FDP on "Emerging Trends on Science and Technology" during 10<sup>th</sup> to 16<sup>th</sup> December 2018 organized by Department of Chemistry, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu, India.

- Delivered a special lecture on "Session on Idea Generation and Validation workshop" during 21<sup>st</sup> November 2021 organized by Institutions Innovation Council, at PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India.
- Delivered a special lecture in "Bio-entrepreneurship" held on April 04th, 2022 at KG College of Arts and Science, Coimbatore, Tamil Nadu, India.
- Delivered Special Guest talk on "Biotechnology Marketing and Industry Trends Shaping-2022" at Department of Biotechnology, Sri Ramakrishna College Arts & Science, Coimbatore, Tamil Nadu, India for the Student Induction Programme 2022 on 08th August 2022.
- Delivered Special Guest talk on "Innovation Thinking &Bio business" at Department of Biotechnology, KSG College of Arts and Science, Coimbatore, Tamil Nadu, India for the Inauguration of Programme 2022 on 15<sup>th</sup> September 2022.
- Deliver Guest talk on "Novel Antibacterial Drugs: Innovation and Challenges" in "Microbial Proteomics & Therapeutics -2022 (MPT-2022) hands-on workshop on Advanced Molecular Techniques", on 23<sup>rd</sup> September 2022, organized by Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, sponsored by DST- FIST.
- Deliver Guest talk on "Opportunity in Biotechnology" at Department of Biotechnology, Rathinam College of Arts and Science, Coimbatore, Tamil Nadu, India for the Inauguration of Programme 2022 on 27th September 2022.
- 10. Deliver Guest talk on "Fundamentals of Entrepreneurship" in First Preneur -2022" organized by SNS Innovation Hub, SNS College of Enginerring, Coimbatore, Tamil Nadu, India for the creating awareness among the students to entrepreneurship journey on 28th September 2022.
- Deliver Guest talk on "Innovation A Changing Relationship Between Academia and Entrepreneurship" organized by Department of Biotechnology, Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India on 4th November 2022.
- 12. Deliver Guest talk on "Promoting Entrepreneurship Among the Graduating Students" organized by SNS CT-Entrepreneurship Development Cell sponsored by Entrepreneurship Development & Innovation Institute (EDII) Government of Tamil Nadu, Chennai 32 and Entrepreneurship Development Cell Anna University Regional Campus Coimbatore, Tamil Nadu on 21st November 2022.
- 13. Deliver Guest talk on "Promoting Entrepreneurship Among the Graduating Students" organized by Entrepreneurship Development Cell, JCT College of Engineering and Technology sponsored by Entrepreneurship Development & Innovation Institute (EDII) Government of Tamil Nadu, Chennai 32 and Entrepreneurship Development Cell Anna University Regional Campus Coimbatore, Tamil Nadu on 22<sup>nd</sup> November 2022.

- 14. Deliver Guest talk on "Promoting Entrepreneurship Among the Graduating Students" organized by Entrepreneurship Development Cell, Arjun College of Technology sponsored by Entrepreneurship Development & Innovation Institute (EDII) Government of Tamil Nadu, Chennai – 32 and Entrepreneurship Development Cell - Anna University Regional Campus Coimbatore, Tamil Nadu on 23<sup>nd</sup> November 2022.
- 15. Deliver Guest talk on "Challenges to Transforming Bioscience Ideas into Global Business Brands" organized by Institution Innovation Cell & Department of Biotechnology, SNMV College of Arts and Science, Coimbatore, Tamil Nadu on 28th November 2022.
- Deliver resource person talk on "Institutional Idea Competition Challenge Startup" organized by Institution Innovation Council & JCT College of Engineering and Technology, Tamil Nadu, India on 30th November 2022.
- Deliver resource person talk on "Entrepreneurship Skill, Attitude and Behaviour Development" organized by Karpagam Innovation Center, Karpagam College of Engineering, Coimbatore, Tamil Nadu, India on 13th December 2022.
- 18. Deliver invited talk on "Challenges to Transforming Scientific Innovation into Global Business Brands" organized by Chemistry Association, Department of Chemistry, Avinashilingam Institute for Home Science & Higher Education for Women, Coimbatore, Tamil Nadu, India on 11th January 2023.
- 19. Deliver invited talk on "Development of Novel Research Concepts, Innovation & Challenges" organized by Research and Development Cell, Avinashilingam Institute for Home Science & Higher Education for Women, Coimbatore, Tamil Nadu, India on 11<sup>th</sup> January 2023.
- 20. Deliver Guest talk on "TNSI 2022 Awareness Programme" organized by Entrepreneurship Development Cell, Kalaignarkarunanidhi Institute of Technology (KIT) sponsored by Entrepreneurship Development & Innovation Institute (EDII) Government of Tamil Nadu, Chennai – 32 and Entrepreneurship Development Cell - Anna University Regional Campus Coimbatore, Tamil Nadu on 24th January 2023.
- 21. Deliver Guest talk on "Promoting Entrepreneurship Among the Graduating Students" organized by Entrepreneurship Development Cell, RVS Technical Campus sponsored by Entrepreneurship Development & Innovation Institute (EDII) Government of Tamil Nadu, Chennai – 32 and Entrepreneurship Development Cell -Anna University Regional Campus Coimbatore, Tamil Nadu on 25th January 2023.
- 22. Deliver Guest talk on "Innovative Approaches and Opportunities for Budding Engineers" organized by Department of Physics, & Institution's Innovation Council, KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu on 13th Feb 2023.

- 23. Deliver Guest talk on "Innovative Approaches and Opportunities for Young Minds" organized by Department of Science & Humanities, & Institution's Innovation Council, Sri Ranganathar Insitute of Engineering and Technology, Coimbatore, Tamil Nadu on 14th Feb 2023.
- 24. Deliver Guest talk on "Workshop on Entrepreneurship Skill, Attitude and Behavior Development" organized by BIT Entrepreneurship Development Cell & BIT Institution's Innovation Council, Bannari Amman Institute of Technology, Tamil Nadu on 16<sup>th</sup> Feb 2023.
- 25. Deliver Guest talk on "Youth Entrepreneurship" organized by Training, Placement and Entrepreneur Cell, Raja Serfoji Government College, Thanjavur, Tamil Nadu sponsored by Rajiv Gandhi National Institute of Youth Development, Sriperumbudur and Ministry of Youth Affairs and Sports, New Delhi on 15<sup>th</sup> March 2023.
- 26. Deliver Guest talk on "How to conduct Market Survey: Tools, Technique and Guidelines" organized by Kalaignarkarunanidhi Institute of Technology, Tamil Nadu, sponsored by Department of Science & Technology, Government of India, New Delhi on 06th April 2023.
- 27. Deliver Guest talk on "Business Model Canvas" organized by Karpagam Innovation Center, Karpagam College of Engineering, Coimbatore, Tamil Nadu, India on 12th April 2023.
- 28. Delivered Special Guest talk on "Biotechnology Marketing and Industry Trends Shaping-2023" at Department of Biotechnology, Sri Ramakrishna College Arts & Science, Coimbatore, Tamil Nadu, India for the Student Induction Programme 2023 on 20<sup>th</sup> June 2023.
- 29. Delivered Special Guest talk on "Inspiring the Next Generation Research to Product" at Department of Biotechnology, Sri Ramakrishna College Arts & Science, Coimbatore, Tamil Nadu, India for the Student Induction Programme 2023 on 20<sup>th</sup> June 2023.
- 30. Deliver Guest talk on "Interfacing with financial Institutions for Business Plan Appraisal" organized by Kalaignarkarunanidhi Institute of Technology, Tamil Nadu, sponsored by Department of Science & Technology, Government of India, New Delhi on 13th & 19th July 2023.
- 31. Deliver Guest talk on "Business Plan for a Life Science Startup" on 24th July 2023, organized by Department of Biochemistry, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India.
- 32. Delivered Special Guest talk on "Biotech Era Opportunities and Challenges" at Department of Biotechnology, KSG College of Arts and Science, Coimbatore, Tamil Nadu, India for the Inauguration of Programme 2022 on 27th July 2023.

- 33. Delivered Special Guest lecture on "How to plan for startup Legal & Ethical steps" at Department of Commerce (Business Analytics), PSG College of Arts and Science & IIC, Coimbatore, Tamil Nadu, India on 31st July 2023.
- 34. Deliver Guest talk on "Experience Sharing & Awareness on startup" organized by Kalaignarkarunanidhi Institute of Technology, Tamil Nadu, sponsored by Department of Science & Technology, Government of India, New Delhi on 10<sup>th</sup> & 16<sup>th</sup> August 2023.
- 35. Deliver Guest talk on "Innovative Understanding the value of Industry and academic Collaboration" organized by Department of Chemical Engineering & Institution's Innovation Council, KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu on 26<sup>th</sup> August 2023.
- 36. Deliver Guest talk on "Value of Entrepreneurial Education" organized by Department of Biotechnology, Kalaignarkarunanidhi Institute of Technology, Tamil Nadu, India on 2<sup>nd</sup> September, 2023.
- 37. Deliver Guest talk on "Value of Entrepreneurial Education in Class Room" organized by School of Management and Entrepreneur Development, Bharathiar University, Coimbatore, Tamil Nadu, India on 5th September, 2023.
- 38. Deliver Inaugural address on "Bio-Entrepreneurship Workshop" organized by Golden Jubilee Biotech Park for Woman Society, Chennai in association with PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India at PSGRKWC on 8<sup>th</sup> September, 2023.
- 39. Deliver Guest talk on "Potential applications of green chemistry in nanotechnology and opportunities" organized by all India Chemical Society & Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu on 21st September, 2023.
- 40. Act as a resource person in National Innovation Day Celebration & deliver guest talk on "Innovation & Opportunity" organized by Centre for Innovation, Dr. N. G. P. Arts and Science College, Coimbatore, Tamil Nadu on 17th Oct 2023.
- 41. Deliver Guest talk on "Opportunities in Entrepreneurship" organized by all Department of Data Science, Sri Krishna Adithya College of Arts and Science, Coimbatore, Tamil Nadu on 21st September, 2023.
- 42. Deliver Guest talk in Roadshow on Global Bio-India 2023 (BIRAC) on "Unleashing Opportunities for New Age Entrepreneurs" organized by PSG-STEP:BioNEST, Coimbatore, Tamil Nadu on 20th November, 2023.
- 43. Deliver Guest talk on "Innovation and Design Thinking for Agriculture and Allied Sector" organized by all E-YUVA (BIRAC) Centre & Department of Biotechnology, Tamil Nadu Agriculture University, Coimbatore, Tamil Nadu on 29<sup>st</sup> November, 2023.

- 44. Deliver Guest talk on "Entrepreneurship and Innovation as Career Opportunities" organized by Karpagam Innovation Center, Karpagam College of Engineering, Coimbatore, Tamil Nadu, India on 30<sup>th</sup> November, 2023.
- 45. Deliver Guest talk on "Entrepreneurship Skill and Development" organized by Institution Innovation Council (IIC), Hindustan College of Engineering and Technology, Coimbatore, Tamil Nadu, India on 27th December, 2023.
- 46. Deliver resource person talk on "Value of Startup Ecosystem" on National Startup Day organized by Institution Innovation Council & JCT College of Engineering and Technology, Tamil Nadu, India on 09th January 2024.
- 47. Deliver Invited talk on "Applying Green Synthesized Nanomaterials in Agriculture Sector for achieving Sustainable Development Goals" at International Conference organized by all KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu on 10<sup>th</sup> January 2024.
- 48. Deliver Invited talk on "Nanomaterials in Agriculture Sector for achieving Sustainable Development Goals" at National Agriculture Conference organized by all Department of Biotechnology, Kalaignarkarunanidhi Institute of Technology, Coimbatore, Tamil Nadu on 30<sup>th</sup> January 2024.
- 49. Deliver Guest talk on "Entrepreneurship Skill and Attitude Development" organized by Department of Computer Science & BIT – Institution's Innovation Council, Bannari Amman Institute of Technology, Tamil Nadu on 03<sup>rd</sup> February 2024.
- 50. Deliver Guest talk on "Entrepreneurship opportunity in Life Science Startup" organized by Department of Biotechnology, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, on 12th February 2024.
- 51. National Science Day Celebration deliver Guest talk on "Research and Innovation Two Different Poles in Life Science Economy" organized by Department of Biotechnology, Karunya Deemed University, Coimbatore, Tamil Nadu, on 28th February 2024.
- 52. Celebration of World Consumer Right Day 2024 deliver Guest talk on "Fair and Responsible AI Consumer 2024", organized by Department of Food Processing Technology & Management, Hindustan College of Arts and Science, Coimbatore, Tamil Nadu on 14<sup>th</sup> March 2024.
- 53. Deliver Guest talk on "Advance Techniques to Detect Pesticides in Food" organized by School of Technology, Van Lang University, Vietnam on 03<sup>rd</sup> April 2024.
- 54. Deliver Guest talk on "Research and Innovation Two Different Pole in Economic Development" at Faculty Development Program organized by Teaching Learning Centre of Excellence (TLCE), association with School of Bioscience and Technology, Vellore Institution of Technology, Vellore, Tamil Nadu on 05th April 2024.

## **Conference and Workshop Organized**

- Successfully coordinated two days program Makeintern & BECon 2K18-19-IIT Delhi Event on "Bioinformatics" held on 29th & 30th September 2018 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- Successfully organized Indian Science Congress Association, Coimbatore Chapter sponsored one day state level workshop on "Plant Genomic Transformation" held on 8<sup>th</sup> December 2018 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- Successfully organized Indian Science Congress Association, Coimbatore Chapter sponsored one day workshop on "Research Methodology" held on 8th March 2019 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 4. Successfully organized Indian Science Congress Association, Coimbatore Chapter sponsored one day workshop on "Algal Biotechnology techniques and prospects for the sustainable bioeconomy" held on 24<sup>th</sup> July 2019 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 5. Successfully organized Science and Engineering Research Board (SERB Govt. of India), Tamilnadu State Council for Science and Technology (TNSCST) and Indian Science Congress Association sponsored International Conference on "Impact of innovations in Science and Technology for Societal Development (IISTSD-2019)" held on 19<sup>th</sup> - 21<sup>st</sup> September, 2019 organized by Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India and Faculty of Technology, Mahasarakham University, Mahasarakham, Thailand.
- 6. Successfully organized India Science Congress Kolkata, sponsored National Conference on "Empowerment of Rural Communities through innovations in Science and Technology" held on 21<sup>st</sup> and 22<sup>nd</sup> February, 2020, jointly organized by India Science Congress, Coimbatore Chapter and Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 7. Successfully organized "KASC INNOVATE 2020" as a part of National Science Day Competitions conducted at Kongunadu Arts and Science College, Coimbatore during 28<sup>th</sup> February to 8<sup>th</sup> March 2020, jointly organized by Institutions Innovation Council, KASC I-HUB and PG and Research Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 8. Organizing Co-chair in "Global Congress on Sustainable Growth and Development 2021- Health and Life Science" organized by Einstein Research Academy, India during 8th and 9th October 2021 and co-partner with INTI International University, Geomatika University College, Malaysia, Vels Institute of Science, Technology and Advance Studies and Viyen Biotech LLP, India. https://einstein.co.in/gcsgd2021event/
- 9. Organizing Co-chair in "Global Congress on Sustainable Growth and Development 2022 - Health and Life Science" organized by Einstein Research Academy, India during 25th & 26th November 2022 and co-partner with INTI International University, Geomatika University College, Malaysia, Savitha

University, PSGR Krishnammal College for Woman and Viyen Biotech LLP, India. <u>https://einstein.co.in/gcsgd-2022/</u>

10. Organizing Co-chair in "Global Congress on Sustainable Growth and Development 2023 - Health and Life Science" organized by Einstein Research Academy, during 15<sup>th</sup> December 2023 and co-partner with INTI International University, Geomatika University College, Malaysia, Vels Institution of Science, Technology & Advance studies (VISTAS), and Viyen Biotech LLP, India. https://einstein.co.in/gcsgd-2023/

## **Research output - Patents and Publications**

## Patents

- Title: Bimetallic-semi-aromatic polyester nanocomposite and method for preparation thereof, Inventors : P. K. Gupta, S. Pandit, R. Gahtori, S. C. Chabattula, G. Choudhury, S. Yadav, M. Sahni, <u>R. Ranjithkumar</u>, S. S. Mathapati, S. Sengupta. Patent no : 202111040353, Publication Date: 01.10.2021
- Title: Anti-microbial chitosan-based nanoparticles composition and method for fabrication thereof, Inventors: P.K. Gupta, S. Pandit, S. Chauhan, R. Gahtori, S. C. Chabattula, H. C. Joshi, S. Narayanan, M. Sahni, <u>R. Ranjithkumar</u>, P. Senthilkumar. Patent no: 202111040350, Publication Date: 01.10.2021

## **Research Publications**

2013

- <u>Ranjithkumar R</u>, K. Selvam and M. Shanmugavadivu. Green synthesis of silver nanoparticles using areca nut extract for enhanced antibacterial activity. *Journal Green Science Technology*, 1(2): 102-106, (2013). [American Scientific Publishers]
- <u>Ranjithkumar R</u>, K. Selvam and M. Shanmugavadivu. Antimicrobial coated textile via biogenic synthesis silver nanoparticles. *Journal Green Science Technology* 1(2): 111-113, (2013). [American Scientific Publishers]

- Dinesh. B., Sinjula. S., Sathish. S., Sankaran. M., Ramesh, M., <u>R. Ranjithkumar</u> and Chandarshekar, B. Indium Titanium Oxide Nanoparticles Induced Hepatic Damage: Hepatoprotective Role of Novel 2-Imino-4-Methyl-1, 2- Dihydropyrimido [5, 4-C] Quinolin-5(6-H) - One. *Advances in Toxicology*, 1-7, (2014).
- B. Dinesh, K. Jijimol, S. Sathish, M. Ramesh, D. Sivanesan, <u>R. Ranjithkumar</u> and Chandarshekar B. Indium Titanium Oxide Nanoparticles induced Hepatotoxicity -Role of *Aegles marmelos* as a Hepatoprotective agent. *Journal of Bionanosciences*, 8:183-189, (2014). [Scopus]
- M. Shanmugavadivu, K. Selvam and <u>R. Ranjithkumar</u>. Green syntheses of silver nanoparticles from pomegranate peel extract and its antimicrobial activity. *American Journal of Advance Drug Delivery*. 2, (2):174-182, (2014).

- M. Shanmugavadivu. K. Selvam and <u>R. Ranjithkumar</u>. *Lippia nodiflora* Linn. A Potential Antibacterial Agent. *Int. J. Pharmacol. Bio. Sci.*, 8(1):19-23, (2014).
- K. Harish Kumar, M. Shanmugavadivu, <u>R. Ranjithkumar</u> and K. Selvam. Antibacterial activity of leaf extracts of *Ageratina adenophora* L medicinal plant of Nilgiris Hill, Tamilnadu against human pathogens. *Int. J. Biosci. Nanosci.*1 (1):1-3, (2014).
- 8. Dinesh B, <u>Ranjithkumar. R</u>, Bhuvaneshwari. V, Sathish S, Ramesh M, and Chandar Shekar B. Partial purification and Insilico analysis of Bst1 from *Bacillus stearothermophilus*. *Int. J. Biosci. Nanosci*.1 (1): 4-8, (2014).
- Harish Kumar. K, Shanmugavadivu. M, <u>Ranjithkumar. R</u> and Selvam Kuppusamy. Activity of Different Solvent Extracts of Medicinal Plant: *Ruta Graveolens* L. Int. J. Biosci. Nanosci.1 (1):9-11, (2014).
- B. Ranjithkumar, S. Sathish, D. Nadaraj, M. Shankar, B. Dinesh, <u>Ranjithkumar. R</u>, R. Sengodan, M. Ramesh and B. Chandar Shekar. Structural and Electrical properties of LaAlO<sub>3</sub> Nanoparticles. *Int. J. Biosci. Nanosci.* 1(1):28-32, (2014).
- Sagadevan. P, R. Rajakumar, S. N. Suresh, <u>Ranjithkumar. R</u>, P. Karthikeyan, and S. Rathish Kumar. Isolation and mass inoculum production of Azospirillum from Paddy field soil, *Int. J. Biosci. Nanosci.* 1 (6):141-145, (2014).

- S. Sathish, B. Chandar Shekar, D. Dinesh, R Sengodan, K.P.B Dinesh and <u>Ranjithkumar. R</u>. Novel hybrid PVA-InZnO transparent thin films and sandwich capacitor structure by dip coating method: Preparation and characterizations. *RSC Advance*, 5, 10599-10610, (2015), [SCI, IF - 4.036]
- S. Sathish, B. Chandar Shekar, S. Chandru Kannan, R Sengodan, K.P.B Dinesh and <u>Ranjithkumar. R</u>. Wide Band Gap Transparent Polymer-Inorganic Composite Thin Films by Dip Coating Method: Preparation and Characterizations. *Int. J. Poly. Ana. Character*, 20(1): 29-41, (2015), [SCI, IF - 1.837]
- 14. S. Sathish, B. Chandar Shekar, R Sengodan, K.P.B. Dinesh and <u>Ranjithkumar. R.</u> New Transparent PVA-InTiO hybrid thin films: Influence of InTiO on the structure, morphology, optical and dielectric properties. *Polymers for Advanced Technologies*, 26 (12): 1486-1493, (2015). [SCI, IF - 3.4]
- Senthil Kumaran C K, S. Sugapriya, Dhayalan Velauthapillai, <u>Ranjithkumar. R</u> and Chandarshekar B. Influence of Dietary Selenium Nanowires on Growth Performance of Broiler Chicken. *Int. J. Biosci. Nanosci*, 2(4): 78-83, (2015).
- Rajmohan, D, D. Saranya, K. Logankumar, <u>Ranjithkumar. R</u> and B. Chandrashekar. Biomimetic Synthesis and Characterization of Silver Nanoparticles (AgNPs) Using *Vincarosea* Aqueous Extract. *Kong. Res. J.* 2(2): 1-5, (2015).

- <u>Ranjithkumar. R</u>, B. Chandar Shekar, C.K. Senthil Kumaran, C. Sharman and V. Simi. Green synthesis of silver nanoparticles using graviola leaf aqueous extract at room temperature. *Kong. Res. J.* 2(2): 6-10, (2015).
- Sugapriya, S., S. Lakshmi, C. K. Senthilkumaran, B. Chandar Shekar and <u>Ranjithkumar. R</u>. ZnO needle-like structures: synthesis and characterization, *Kong. Res. J.*2 (2): 13-15, (2015).
- Rajmohan. D, Saranya. D, Logankumar. K, <u>Ranjithkumar. R</u>and B. Chandrashekar. Silver Nanoparticles against dengue vector, *Aedes Aegypti* (Culicidae: Diptera). *Int. J. Nanosci. Biosci.* 2 (5): 118-122, (2015).
- P. Sagadevan, S.N. Suresh, <u>Ranjithkumar. R</u>, S. Rathishkumar, S. Sathish and B. Chandar Shekar. Traditional use of *Andrographis paniculata*: Review and Perspectives. *Int. J. Nanosci. Biosci.* 2 (5): 123-131, (2015).
- Sathish, S., Mohd Noor, B. A., Mohd Faizal, J., Chandarshekar, B, Sagadevan. P. <u>Ranjithkumar. R</u> and S. Rathishkumar. Transparent with wide band gap InZnO nano thin film: Preparation and characterizations. *Optical Materials*, 49: 348-356. (2015). [SCI, IF – 3.9]
- <u>Ranjithkumar. R</u>, K. Selvam, P. Sagadevan and B. Chandarshekar, Green route: An approach for synthesis of silver and gold nanoparticles. *Int. J. Biosci. Nanosci.* 2(8), 185-191, (2015).
- Sengodan Raja, Dinesh Bheeman, <u>Ranjithkumar. R</u>, Sagadevan, P., Sathish, S., and Chandarshekar, B. Synthesis, Characterization and Remedial Aspect of BaTiO<sub>3</sub> Nanoparticles against Bacteria, *Nanomedicine and Nanobiology*, 2(1): 16-20, (2015). [American Scientific Publishers]

- 24. Sengodan, R., Chandarshekar, B., Dinesh Bheeman and <u>Ranjithkumar. R</u>. Structural and Optical Properties of Vacuum Evaporated V<sub>2</sub>O<sub>5</sub> Thin Films. *Int. J. for Light and Electron Optics*, 127 (1): 461-464, (2016).[SCI, IF 3.1]
- Rajmohan, D, Haldurai, L., <u>Ranjithkumar. R.</u>, Logankumar, K and Chandarshekar,
   B. Data mining on crude partially purified and doped silver nanoparticles of two plant species against dengue vector. *Aedes aegypti.* J. Biol. Nature. 5 (1), 20-25, (2016).
- 26. Sengodan Raja, Chandarshekar B, Senthilarasu Sundaram, Gopal Subramanian and <u>Ranjithkumar. R</u>. Thickness dependence on Structural, Dielectric and AC Conduction Studies of Vacuum Evaporated Sr doped BaTiO<sub>3</sub> thin films. *Int. J. for Light and Electron Optics*, 127, 3200-3205, (2016). [SCI, IF – 3.1]
- Gayathri S. <u>Ranjithkumar. R</u>, A. S. Balaganesh and B. Chandar Shekar. Antimicrobial Properties of Lanthanum Aluminate Nanoparticles. *Kong. Res. J.* 3(1): 1-5, (2016).

- 28. Rajmohan, D, <u>Ranjithkumar. R</u>, K. Logankumar, P. Sagadevan, B. Chandrashekar and R. Yamuna. Green route synthesized silver nanoparticles: as potential antibacterial material. *Kong. Res. J.* 3(1): 73-75, (2016).
- 29. <u>Ranjithkumar. R</u>, Selvam Kuppusamy, Shanmugavadivu. M and D. Rajmohan. Preliminary phytochemical screening of aqueous extract of betel nut and betel leaves. *Int. J. Biosci. Nanosci*, 3(1):14-18, **(2016)**.
- 30. Rajmohan Devadass, Ponraj Goruswami and <u>Ranjithkumar. R</u>. Effects on the survival and development of fourth instar larva of *Culex quinquefasciatus* and *Aedes aegypti*. *Int. J. Biosci. Nanosci.* 3(2):25-28, (2016).

- 31. J. Manikantan, B. Ramalingam, B. Chandar Shekar, B. Murugan, <u>Ranjithkumar. R</u> and J. Sai Santhoshi. Wide band gap of Strontium doped Hafnium oxide nanoparticles for opto-electronic device applications-Synthesis and characterization. *Materials Letters*, 186: 42-44, (2017) [SCI, IF – 3]
- 32. J. Manikantan, B. Ramalingam, B. Chandar Shekar, B. Murugan, <u>Ranjithkumar. R</u> and J. Sai Santhoshi. Physical and Optical properties of HfO<sub>2</sub> NPs - Synthesis and characterization in finding its feasibility in opto-electronic devices. *Advanced Powder Technology*, 28(7), 1636-1646, (2017). [SCI, IF - 5.2]
- 33. P Sagadevan, Suresh Natarajan, <u>Ranjithkumar. R</u>, Chandar Shekar Bellan, Rathishkumar Sivaraman. Evaluation of *C. albicans* induced wound healing activity of methanolic leaf extract of *Andrographis paniculata*. *Indo American J. Pharmaceutical Res*, 7(01), 7483-7493, **(2017)**.
- 34. J. Manikantan, B. Ramalingam, B. Chandar Shekar, B. Murugan, <u>Ranjithkumar. R</u> and J. Sai Santhoshi. Structural and Optical Properties of Phase Transformation Barium doped HfO<sub>2</sub> nanorods - Synthesis and Characterization. *Int. J. for Light and Electron Optics*, 140, 347-355, (2017). [SCI, IF - 3.1]
- 35. Shobana Maria Flory, <u>Ranjithkumar. R</u>, Dinesh Bheeman. Optimization of alpha amylase for better dough preparation. *Journal of Microbiology Biotechnology Food Science*, 66), 1272-1275, (2017). [SCI, IF – 0.225]
- 36. K. Tharshanapriya, P. Sagadevan, K. Jayaramjayaraj, V. Bhuvaneshwari, S.N. Suresh, J. Pavithra, S. Sarah, B. Chandar Shekar and <u>Ranjithkumar. R</u>. Health hazards of pulp and paper industrials workers. *American J. Pharmaceutical Res.*, 7(7), 157-163, (2017).
- 37. V. Malayaman, N. Sisubalan, S. S. Mohamed, R.P. Senthilkumar, <u>Ranjithkumar.R</u> and M. Ghouse Basha. Chitosan mediated enhancement of hydrolysable tannin in *Phyllanthus debilis* Klein ex Willd via plant cell suspension culture. *International Journal of Biological Macromolecules*, 104, 1656-1663, (2017). [SCI, IF – 8.2]
- B. Murugan, B. Ramalingam, B. Chandar Shekar, J. Manikantan, <u>Ranjithkumar. R</u> and J. Sai Santhoshi. Facile Synthesis of Hafnium Carbide Nanoparticles and Its

Optical Studies for Application in Optoelectronic Devices. *Int. J. Control Theory and Applications*, 10, 1-7, (2017).

- 39. R.P. Senthil Kumar, V. Bhuvaneshwari, <u>Ranjithkumar. R</u>, S. Sathiyavimal, V. Malayaman, J. Manikantan and B. Chandarshekar. Synthesis, characterization, and antibacterial activity of hybrid chitosan-cerium oxide nanoparticles as a bionanomaterials. *International Journal of Biological Macromolecules*, 104, 1746-1752, (2017). [SCI, IF 8.2]
- 40. R. Sengodan, B. Chandarshekar, R. Balamurugan, R. Kannan, <u>Ranjithkumar. R</u>. Temperature dependence of optical properties on BaTiO<sub>3</sub> thin films for optoelectronics applications. *Journal of Optoelectronics and Advanced Materials*, 19(9-10), 595-603. (2017). [SCI, IF - 0.5]

- 41. R. Sengodan, <u>Ranjithkumar. R</u>, K. Selvam and B. Chandarshekar. Antibacterial Activity of Silver Nanoparticles Coated Intravascular Catheters against biofilm producing pathogens. *Rasayan J. Chemistry*, 11(1), 63-69, **(2018)**. [Scopus]
- 42. C. Sharmila, <u>Ranjithkumar. R</u> and B. Chandarshekar. *Psidium guajava*: a novel plant in the synthesis of silver nanoparticles for biomedical applications. *Asian Journal of Pharmaceutical and Clinical Research*, 11(1), 341-345, **(2018)**. **[Scopus]**
- 43. Dhivyavarshni. R, Sagadevan. P, Jayaram Jayaraj. K, Chandarshekar. B, <u>Ranjithkumar. R</u> and S. Rathish Kumar. Studies on phytochemical screening, antibacterial potential, and Hemostatic activity of *Tridax procumbens*. *Drug Discovery*, 12, 1-6, (2018).
- 44. P. Surthi, Sagadevan. P, Jayaram Jayaraj. K, Chandar Shekar B, <u>Ranjithkumar. R</u> and Rathish Kumar. S. *In vitro* antioxidant potential of methanol flower extracts of *Cassia auriculata* Linn. *Discovery Biotechnology*, 8(1), 1-8, (2018).
- 45. B. Chandar Shekar, <u>Ranjithkumar. R</u>, K.P.B. Dinesh, C. Sulana Sundari and K. Punithavathi. Preparation of poly (methyl methacrylate) thin films by spin coating technique for OTF and wound healing applications. *Kong. Res. J.* 5(1), 20-22, (2018).
- <u>Ranjithkumar. R</u>, Selvam Kuppusamy, Chandar Shekar Bellan, Pratheep Hallan Ravi and P. Sagadevan. Biosynthesis, Characterization and Remedical Aspect of Silver Nanoparticles against Pathogenic Bacteria. *MOJ Toxicology*, 4(3):103-109, (2018).
- 47. R.P. Senthilkumar, V. Bhuvaneshwari, V. Malayaman, <u>Ranjithkumar. R</u> and S. Sathiyavimal. Phytochemical Screening of Aqueous Leaf Extract of *Sida acuta* Burm. F. and its Antibacterial Activity. *J. Emerging Technologies and Innovative Res.*, 5(8), 474- 478, (2018). [Scopus]
- B. Chandar Shekar, <u>Ranjithkumar. R</u>, K.P.B. Dinesh, C. Sulana S. Sunnitha and K. Punithavathi. Preparation and Characterization of Polyvinyl Alcohol Thin Films

for Organic Thin Film Transistors and Biomedical Applications. *Kong. Res. J.* 5(2), 19-18, (2018).

 A. S. Balaganesh, R. Sengodan, <u>Ranjithkumar. R</u>, B. Chandarshekar. Synthesis and Characterization of Porous Calcium Oxide Nanoparticles (CaO NPs). *Int. J. Innovation Technology and Exploring Engineering*, 8(2S), 312-314, (2018). [Scopus]

- 50. Sharmila Chandran, Prabhavathi Venkatesan, Dinesh Bheeman, <u>Ranjithkumar. R</u> and Chandarshekar Bellan. Shape controlled synthesis of dextran sulfate stabilized silver nanoparticles: Biocompatibility and anticancer activity. *Material Research Express*, 6(4), 1-7, (2019) [SCI, IF – 2.3]
- Bharathi. D, <u>Ranjithkumar. R</u>, Vasantharaj. S, Chander Shekar. B, Bhuvaneshwari.
   V. Synthesis and characterization of chitosan/iron oxide nanocomposite for biomedical applications. *International Journal of Biological Macromolecules*, 132, 880-887, (2019). [SCI, IF – 8.2]
- 52. Vidhya, P., A. Ranjitha, A.S. Balaganesh, <u>Ranjithkumar. R</u> and B. Chandar Shekar. Structural and optical properties of cadmium sulfide nanoparticles prepared by precipitation method. *Kong. Res. J.* 6(1): 22-23, (2019).
- 53. Bharathi. D, <u>Ranjithkumar. R</u>, Chandar Shekar. B, Bhuvaneshwari. V. Bio-inspired synthesis of chitosan/copper oxide nanocomposite using rutin and their anti-proliferative activity in human lung cancer cells. *International Journal of Biological Macromolecules*, 141, 476-483, (2019). [SCI, IF 8.2]
- Dinesh, B, <u>Ranjithkumar. R</u>, C. Sharmila, K. Selvam and B. Chandar Shekar. Anticancer activity of silver nanoparticles against human breast cancer cell line. *Kong. Res. J.* 6(1): 24-28, (2019).
- 55. Bharathi. D, <u>Ranjithkumar. R</u>, Chandar Shekar. B, Bhuvaneshwari. V. Preparation of chitosan coated zinc oxide nanocomposites for enhanced antibacterial and photocatalytic activity: As a bionanocomposite. *International Journal of Biological Macromolecules*, 129, 989-996, (2019). [SCI, IF - 8.2]
- 56. R.P. Senthilkumar, V. Bhuvaneshwari, V. Malayaman, G. Chitra, <u>R. Ranjithkumar</u>, K.P.B. Dinesh and B. Chandar Shekar. Biogenic method of cerium oxide nanoparticles synthesis using wireweed (*Sida acuta Burm.f.*) and its antibacterial activity against *Escherichia coli*. *Material Res. Express*, 6, 1-6, (2019). [SCI, IF 2.3]
- 57. C.A. Soto-Robles, P.A. Luque, C.M. Gómez-Gutiérrez, O. Nava, A.R. Vilchis-Nestor, E. Lugo-Medina, <u>R. Ranjithkumar</u>, A. Castro-Beltrán. Study on the effect of the concentration of Hibiscus sabdariffa extract on the green synthesis of ZnO nanoparticles. *Results in Physics*, 15, (102807), 1-8, (2019). [SCI, IF - 5.3]
- 58. <u>Ranjithkumar R</u>, Manikantan J, Balaganesh A.S, Dinesh K.P.B, Chandar Shekar B. Fruit Biowaste Mediated Green Route Approach Silver Nanopartilces - As Antibacterial Material, *Kong. Res. J.*, 6(2), 81-86, (2019).

59. Balaganesh A.S, Pavithra N, <u>Ranjithkumar R</u>, Dinesh K.P.B Chandar Shekar B, Bio-Assisted Synthesis of Potassium Doped Ferric Sulphide Nanoparticles for Agricultural Applications, *Kong. Res. J.*, 6(2), 4-7, (2019).

#### 2020

- 60. Sharmila Chandran, Thilagavathy Ponnusamy, Dinesh Bheeman, <u>Ranjithkumar R</u>, Chandarshekar Bellan. Dextran sulfate stabilized silver nanoparticle: next generation efficient therapy for cancer. *International Journal of Applied Pharmaceutics*, 12 (1), 59-63, (2020). [Scopus]
- Pavithra. N, Shiva Subramani M, Balaganesh A.S, <u>Ranjithkumar. R</u>, Dinesh, K.P.B, Chandar Shekar. B. Bio-assisted synthesis of ferric sulphide nanoparticles for agriculture applications. *Kong. Res. J.*, 7(1), 35-38, (2020).
- 62. P. Ning, C.C. Liu, Y.J. Wang, X.Z. Li, <u>**R. Ranjithkumar**</u>, Z.H. Gan, Y.Y. Wu, T. Fu. Facile synthesis, antibacterial mechanisms and cytocompatibility of Ag-MnFe<sub>2</sub>O<sub>4</sub> magnetic nanoparticles. *Ceramic Int.*, 46, 20150-20115, (2020). [SCI,IF 5.2]
- 63. Kiran Raj. T, <u>Ranjithkumar. R</u>, Kanthesh. B.M, Gopenath. T.S. C-Phycocyanin of *Spirulina plantesis* inhibits nsp12 required for replication of SARS-COV-2: A novel finding *in-silico*. *Int. J. Pharma. Sci. Res.*, 11(9), 4271-4278. (2020). [Scopus]
  - 64. Preethi. S, Abarna. K, Nithyasri. M, Kishore. P, Deepika. K, <u>Ranjithkumar. R</u>, Bharathi. D. Synthesis and characterization of chitosan/zinc oxide nanocomposite for antibacterial activity onto cotton fabrics and dye degradation applications. *International Journal of Biological Macromolecules*. 164(1), 2779-2787, (2020). [SCI, IF - 8.2]
  - 65. S Tharani, Devaraj Bharathi, <u>Ranjithkumar. R</u>. Extracellular green synthesis of chitosan-silver nanoparticles using *Lactobacillus reuteri* for antibacterial applications. *Biocatalysis and Agricultural Biotechnol.*, 101838, (2020). [SCI, IF - 4]

- 66. Madhan, G., Begam, A.A., Varsha, L.V., <u>Ranjithkumar. R</u>. and Bharathi, D. Facile synthesis and characterization of chitosan/zinc oxide nanocomposite for enhanced antibacterial and photocatalytic activity. *International Journal of Biological Macromolecules*, 190, (1), 259-269. (2021). [SCI, IF 8.2]
- 67. Piyush Gupta, Senthilkumar. P, Tamilarasi. G, <u>R. Ranjithkumar</u>, Soumya Pandit, Somya Sinha, Vijay Kumar Thakur. Synthesis and Characterization of Novel Fe<sub>3</sub>O<sub>4</sub>/PVA/Egg-shell Hybrid nanocomposite for photodegradation and antibacterial activity. *Journal of Composite Science*, 5 267, (2021), [SCI, IF 3.3]
- 68. Suresh Kumar, V. Shanmugam, Senthilkumar P, Sudhagar Band <u>R. Ranjithkumar</u>. Assessment of free radical scavenging activity and inhibitory properties of aqueous extract of Cymodocea serrulata segrass towards α- glucosidase and α –amylase enzyme. *J. Uni. Shanghai Sci. Technol*, 23(12), 339-360, (2021). [Scopus]

69. Senthilkumar. P, S. Kalaivani, B. Lerince godrina, A. Janani, G. Aganiya, B. Sudhagar, <u>R. Ranjithkumar</u> and Piyush Kumar Gupta. Synthesis and Characterization of PCU@C-Ag/AgCl Nanoparticles as An Antimicrobial Material for Respiratory Tract Infection. *Nanofabrication*, 6, 68-78, (2021). [SCI]

- 70. Shaily. C, Noura Al-Dayan, Rohit. K, Mohit Sahni, <u>R. Ranjithkumar</u>, Piyush KG. Synthesis and Characterization of Novel Bimetallic-Semi-Aromatic Polyester Nanocomposite for Possible Biomedical Use. *Materials Letters*, 306, 130943, (2022). [SCI, IF 3]
- Bharathi. D, T. Nandagopal J. G.<u>R. Ranjithkumar</u>, Soumya P, Deepak. K, Bhasker. P, Sadanand. P and Piyush Kumar Gupta. Enhanced Photocatalytic Activity of St-ZnO Nanorods for Methylene Blue Dye Degradation. *Materials Letters*, 311, 131637, (2022). [SCI, IF - 3]
- 72. Piyush K. G, D. Karthik Kumar, M. Thaveena, S. Pandit, S. Sinha, <u>R. Ranjithkumar</u>, Walla. F. Alsanie, Vijay Kumar Thakur. Synthesis, Characterization and Remedial Action of Biogenic Silver Nanoparticles and Chitosan-Silver Nanoparticles against Bacterial Pathogens. *Journal of Renewable Materials*, 1-14, (2022).[SCI, IF - 2.1]
- 73. Bharathi. D, T. N. Jaya Ganesh, <u>R. Ranjithkumar</u>, P. K. Gupta, Sinouvassane Djearamane. Microbial approaches for sustainable remediation of dye contaminated wastewater: A review. *Achieves of Microbiology*, 204: 169, (2022). [SCI, IF 2.8]
- 74. D. Moorthy, S. Santhoshkumar, Narendhirakannan R. T, <u>R. Ranjithkumar</u>, L. S. Wong, Sinouvassane D, T. S. M. Saleem. Antibacterial effect of green synthesized silver nanoparticles using *Cineraria maritima*. *JEPAS* 10, 1044-1052, (2022). [Scopus]
- 75. Devaraj. B, <u>Ranjithkumar. R</u>, Belay Z.S. Soumya Pandey, Sharad Agrawal, Neeraj Mishra, Mohit Sahni, Vijay Kumar Thakur. Biogenic Preparation, Characterization, and Biomedical Applications of Chitosan Functionalized Iron Oxide Nanocomposite. *Journal of Composite Science*, 6(5), 1-11, (2022). [SCI, IF 3.3]
- 76. Sinouvassane. D, Z. C. Loh, J. J. Lee, L. S. Wong, <u>Ranjithkumar. R</u>, P. A. Luque, P. K. Gupta, S. X. T. Liang. Remedial Aspect of Zinc Oxide Nanoparticles (ZnO NPs) against *Serratia marcescens* and *Enterococcus faecalis*. *Frontiers in Pharmacology*. 13:891304, (2022). [SCI, IF 5.9]
- 77. L.S. Niranjana, M. Mathankumar, D. Karthikkumar, <u>R. Ranjithkumar</u>, B. Chandar Shekar, Ling Shing Wongand Sinouvassane Djearamane. Preparation and characterization of calcium phosphate chitosan nanocomposite as plant growth promoter. *Journal of Experimental Biology and Agricultural Sciences*, 10(3), 567-574, (2022). [Scopus]
- 78. Devaraj B, Mohamad S. A, Sandhanasamy D, Jaya Ganesh T. N, Woong Kim, <u>Ranjithkumar. R</u>. Photocatalytic degradation of Rhodamine B using green synthesized ZnO nanoparticles from *sechium edule* polysaccharides. *Applied Nanoscience*, 12, 2477-2487, (2022). [SCI, IF - 3.8]

- 79. Karthikkumar. D, B. Divya, <u>R. Ranjithkumar</u>, B. Chandar Shekar, L. S. Wong and S. Djearamane. Synthesis and characterization of magnesium doped ferric sulphate (Mg-Fe<sub>2</sub>SO<sub>3</sub>NPs) nanoparticles for agriculture applications. *Journal of Experimental Biology and Agricultural Sciences*, 10(4), 733-780, (2022). [Scopus]
- Raveenderan Sithambaram, Sinouvassane Djearamane, Sharolynne Xiao Tong Liang, Ling Shing Wong, <u>R. Ranjithkumar</u>, Senthilkumar Balasubramanian and Christopher Amalraj. Impact of metallic nanoparticles on the nutritional values of *spirulina*. *Journal of Experimental Biology and Agricultural Sciences*, 10(5), 978-989, (2022). [Scopus]
- S. Djearamane, L.J. Xiu, L. S. Wong, <u>Ranjithkumar. R</u>, D. Bharathi, S. Kayarohanam,
   A. E. D. Cruz, L. H. Tey, A. K. Janakiraman, M. Aminuzzaman and S. Selvaraj,
   Antifungal Properties of Zinc Oxide Nanoparticles on *Candida albicans*. *Coatings*, 12, (1864), 1-15, (2022). [SCI, IF 3.4]
- Lee Jun Jie, Loh Zhe Chi, Ling Shing Wong, <u>R. Ranjithkumar</u>, Sinouvassane Djearamane. Antibacterial efficacy of Zinc Oxide Nanoparticle against *Serratia marcescens* (ATCC 43862) and *Enterococcus faecalis* (ATCC 29121). *Journal of Experimental Biology and Agricultural Sciences*, 10(5), 1069 1075, (2022). [Scopus]
- 83. Eng P.T, Sinouvassane D, Ling S. W, <u>R. Ranjithkumar</u>, Anto C.T.A, Suresh Kumar S, Ashok Kumar J, Mohammod A, Vetriselvan S, Mahendran S and Siddharthan S. An *in Vitro* Study of the Antifungal Efficacy of Zinc Oxide Nanoparticles against *Saccharomyces Cerevisiae*. *Coatings*, 12, 1988, 1-12, (2022). [SCI, IF 3.4]

- 84. <u>R. Ranjithkumar</u>, Chi Van Nguyen, Ling Shing Wong, T. N. Jaya Ganesh, Sinouvassane Djearamane, Govindasamy Palanisamy, Devaraj Bharathi, Jintae Lee. Chitosan functionalized bismuthoxychloride/zinc oxide nanocomposite for enhanced photocatalytic degradation of Cango red. *International Journal of Biological Macromolecules*, 225, 103-111, (2023). [SCI, IF – 8.2]
- 85. Devaraj Bharathi, S. Dhanasekaran, R. Varshini, S. Bhuvaneswari, Govindasami Periyasami, Saravanan Pandiaraj, Jintae Lee, <u>R. Ranjithkumar</u>. Preparation of gallotannin loaded chitosan/zinc oxide nanocomposite for photocatalytic degradation of organic dye and antibacterial applications. *International Journal of Biological Macromolecules*, 243, 125052, (2023). [SCI, IF – 8.2]
- 86. Devaraj Bharathi, T. N. Jaya Ganesh, Jintae Lee, <u>R. Ranjithkumar</u>. Facile synthesis and characterization of chitosan functionalized silver nanoparticles for antibacterial and anti-lung cancer applications. *Polymers*, 15, 2700, (2023). [SCI, IF 5.0]
- 87. Sarkar S.M, Dhar B.K, Fahlevi M, Ahmed S, Hossain M.J, Rahman M.M, Gazi M.A.I, <u>R. Ranjithkumar</u>. Climate change and ageing healthy in developing countries, *Global Challenges*, 2200246, 1-8, (2023) [SCI, IF 5.135]

- 88. Devaraj Bharathi, <u>R. Ranjithkumar</u>, Jaya Ganesh T. N., Sinouvassane Djearamane, Jintae Lee, Ling Shing Wong. Green synthesis of chitosan/silver nanocomposite using kaempferol for triple negative breast cancer therapy and antibacterial activity. *Environmental Research*, 238, 117109, (2023) [SCI, IF – 8.3]
- 89. K. Sunitha Kumara, S.N. Padma Devi, <u>R. Ranjithkumar</u>, Sinouvassane Djearamane Lai-Hock Tey, Ling Shing Wong, Saminathan Kayarohanam, Natarajan Arumugam, Abdulrahman I. A, Karthikeyan Perumal. Organic Remobilization of zinc and phosphorus availability to plants by application of mineral solubilizing bacteria *Pseudomonas aeruginosa*. *Heliyon*, 9(11), E22128. (2023) [SCI, IF - 4.0]
- <u>R. Ranjithkumar</u>, Indumathi K, Srimathi P, Praveena G, Ling Shing Wong, Sinouvassane D. Structure and Reactivity of Halogenated GC PNA Base Pairs – A DFT Approach. *Journal of Experimental Biology and Agricultural Sciences*, 11(5), 800-808, (2023). [Scopus]

- 91. S. Niranjana. S. Heena. D. Karthikkumar B. K. Dhar, V. H. Cong, L. S. Wong, <u>R. Ranjithkumar</u>. Mitigating Global Challenges: Harnessing Green Synthesized Nanomaterials for Sustainable Crop Production Systems. *Global Challenges*, 8(1), 2300187, (2024) [SCI, IF – 5.135]
- 92. A. Thenarasu, M. K. Chai, Y. H. Tan, L. S. Wong, <u>R. Ranjithkumar</u>, S. Djearamane. Study of *Chlorella vulgaris* from Different Growth Phase as Biosensor for Detection of Titanium and Silver Nanoparticles in Water". *Natural Environmental and Pollution Technology*. [Accepted for Publications]

#### Editorial

- 1. <u>**R** Ranjithkumar</u>, et al. "Nanotechnology in Farming Sustainability". *Acta Scientific Applied Physics*, 2(9), 01-02, (2022).
- 2. <u>**R** Ranjithkumar</u>, et al. "Sustainable Green Synthesis of Nanoparticles". *Acta Scientific Applied Physics*, 2(10), 01-02 (2022).

Book	<b>Chapter Publication</b>	
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Name of the Book	: Microbial Biodiversity	
ISBN number	: ISBN (10): 1-5275-4818-X; ISBN (13):978-1-5275-4818-3	
Chapter Eight (Title)	: The Role of Microorganisms in Green synthesis of	
	Nanoparticles. (Pp 102-112).	
Authors	: R. Ranjithkumar et al,	
Publisher and Year	: Cambridge Scholar Published, 2020	
Web link	:https://www.cambridgescholars.com/microbial-biodiversity	
Paper published in conference proceeding with ISBN		

 <u>Ranjithkumar, R.</u>, K. Selvam, R.P. Senthil Kumar, J. Manikantan, C.K. Senthilkumaran and B. Chandrasekhar. *Antibiofilm action of silver nanoparticles coated intravascular Catheter* (AgNPs-IVC) *against clinically isolated Human Pathogens*, National Conference on Developing Scenario in Applied Science and Communicative English (**PRAYAF-2016**) on 21<sup>st</sup> & 22<sup>nd</sup> April 2016 organized by Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India. **ISBN: 978-93-85477-83-6.** Pp. 162-166 (2016).

- <u>Ranjithkumar, R</u>., K. Selvam, R.P. Senthil Kumar, J. Manikantan, C.K. Senthil Kumaran and B. Chandarshekar. *Green synthesized silver nanoparticles coated fabric: Antibacterial Textile Finishing*, National Conference on Developing Scenario in Applied Science and Communicative English (PRAYAF-2016) on 21<sup>st</sup>& 22<sup>nd</sup> April 2016 organized by Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India. ISBN: 978-93-85477-83-6. Pp. 167-170 (2016).
- <u>Ranjithkumar, R</u>., S. Sathish, R. Sengodan, C.K. Senthil Kumaran and B. Chandar Shekar. *Antibacterial properties of Indium Titanium Oxide Nanoparticles*, National Conference on Developing Scenario in Applied Science and Communicative English (PRAYAF-2016) on 21<sup>st</sup> & 22<sup>nd</sup> April 2016 organized by Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India. ISBN: 978-93-85477-83-6. Pp. 158-161 (2016).
- Senthilkumar, R. P., V. Bhuvaneshwari, S. Sathyavimal, Minu Venugopal P. Sagadevan, V. Malayaman and <u>R. Ranjithkumar</u>. *Green chemistry approach silver nanoparticles via Sidar hombifolia L as antibacterial material*, National Conference on Developing Scenario in Applied Science and Communicative English (PRAYAF-2016) on 21<sup>st</sup>& 22<sup>nd</sup> April 2016 organized by Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India. ISBN: 978-93-85477-83-6. Pp. 145-148 (2016).

## **Entrepreneurship Course Completed**

Successfully completed the training conducted under Agri-Clinics and Agri-Business Centres (AC&ABC) Scheme of Government of India (Ministry of Agriculture and Farmers Welfare) from 06-04-2022 to 20-05-2022 at PSGRKCW (Nodal Office), Tamil Nadu, India.

## Paper Presented in International Conference

- <u>Ranjithkumar R.</u>, "Disease in plant response to apoptosis" at "International Conference on Biotechnology promise and realities" held on 14<sup>th</sup> and 15<sup>th</sup> July 2006 in P.S.G.R. Krishnammal College for Women, Coimbatore, Tamil Nadu, India.
- 2) <u>Ranjithkumar R.</u>, "Green synthesis of silver nanoparticles for Antibacterial Textile Finishing" at an international level conference on "Bioscience: State-Of-The-Arts Advancements" organized by Society for Education & Scientific Research (SESR) at Kumarakom, Kerala, India during 11<sup>th</sup> and 12<sup>th</sup> September 2014.
- 3) <u>Ranjithkumar R.,</u> "Betel Nut Mediated Silver Nanoparticles Coated Fabric (BN-AgNPs) A Potential Antibacterial Material" in International Conference on "Bioscience Elixir of Life (BSEL-2016)" organized by Department of Microbiology & Biotechnology, Sri Ganesh College of Arts and Science, Salem, Tamilnadu, India on 5th Feb, 2016.

- 4) <u>Ranjithkumar R.,</u> "Impact Assessment of hybrid Chitosan-Calcium Phosphate Nanoparticles in Plant Growth" in International Conference on "Bio Science and Industrial Applications" organized by Department of Biochemistry and Microbiology, Sri Ramakrishna College of Arts and Science for Women, Coimbatore, Tamilnadu, India on 16th February 2018.
- 5) <u>Ranjithkumar R.</u>, "Hybrid Nanoparticles in Biological Applications" in International Conference on "Nutraceuticals and its applications" organized by Department of Biochemistry, Kongunadu Arts and Science College, Coimbatore, Tamilnadu, India, sponsored by India Science Congress Association, Coimbatore Chapter on 6th March 2018.
- <u>Ranjithkumar R</u>., "Prospective antimicrobial properties of Hybrid Chitosan -Silver Nanomaterials" in International Conference Series on "Food Safely" held during November 27<sup>th</sup>, 2020, Dubai (Online mode).

## Paper Presented in National Conference & Seminar

- <u>Ranjithkumar R</u>., "Stem cell in Sugar Syndrome" at a national seminar on Stem cells and clinical applications, at Centre for Biotechnology, Acharya Nagarjuna University, A.P. India held on December 15-16<sup>th</sup>, 2006.
- <u>Ranjithkumar R.</u>, "Role of Biotechnology in Health Care Sector" at a "National seminar on Advance trends in Biotechnology "at Dr.N.G.P. Arts and Science College, Coimbatore-21, Tamilnadu, India held on 19th& 20th December 2008.
- 3) <u>Ranjithkumar R.</u>, "Nanoparticles and its medical application" at a two-day National level conference on Perspectives of Biotechnology for Healthcare Development at Dr.N.G.P. Arts and Science College, Coimbatore-21 held on 29<sup>th</sup> & 30<sup>th</sup> December 2011.
- 4) <u>Ranjithkumar R.</u>, "Nanotechnology in Agriculture Application" at a national conference on "Biotechnology - Present and Future" at Dr.N.G.P. Arts and Science College, Coimbatore-21 sponsored by Kovai Medical Center and Hospital, Tamil Nadu, held on 26th& 27th September-2013.
- 5) <u>Ranjithkumar R.</u>, "Nanotechnology and Sustainability" at a National Level Seminar on "Current Trends in Biodiversity Conservation and Forest Management (CTBCFM-2014)" held on 6<sup>th</sup>-7<sup>th</sup> January 2014 at Centre for Biodiversity and forest Studies, Periyar University, Salem-11, Tamil Nadu.
- 6) <u>Ranjithkumar R.</u>, "Vateria Indica" plant in the National Level Symposium and Plant Products held on 23<sup>rd</sup> January, 2014 at PG and Research Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu.
- 7) <u>Ranjithkumar R.,</u> "Green Synthesis of silver nanoparticles via plant and its biological application" at a National Conference on "Recent strategies in Biodiversity Conservation" held at Sree Narayana Guru College, Coimbatore, Tamil Nadu organized by Department of Biotechnology on 22<sup>nd</sup> Jan-2014.
- 8) <u>Ranjithkumar R</u>., "Production and Purification of *TaqI*, *BstI* from *Thermus aquaticus* and *Bacillus stearothermophilus* and mapping its restriction site" at a

national seminar on "*Recent advances in Biotechnology and Applied Microbiology*" held at Department of Microbiology, **Kanchi Shri Krishna College of Arts and Science**, **Kanchipuram**, Tamil Nadu, Sponsored by **Department of Biotechnology**, **Ministry of Science and Technology**, **Government of India** on 3<sup>rd</sup>& 4<sup>th</sup> March-2014.

- 9) <u>Ranjithkumar R.</u>, "Biomimetic etiquette for room temperature synthesis of silver nanoparticles via orange peel aqueous extract in minutes: An Antibacterial Material" at a National Conference on "Medical Plants and Health Care" organized by PG and Research Department of Biotechnology, Kongunadu Arts and Science College, Tamil Nadu, on 17<sup>th</sup> March 2015.
- 10) <u>Ranjithkumar R.,</u> "Traditional Medicinal Plants Nilgiris" in a National Seminar on "Biodiversity Products and Industrial Application (BPIA-2015)" organized by Center for Biodiversity and Forest Studies (CBFS), Periyar University, Salem, Tamil Nadu on 28th & 29th September, 2015.
- 11) <u>Ranjithkumar R.,</u> "Mangosteen Peel Mediated PVA Coated Zinc Oxide Nanoparticles (MPS-PVA-ZNO NPS) - Catalytic Degradation of Hazardous Dye" in a National Seminar on "Ecobiological Sciences and its Applications" organized by School of Life Science, Periyar University, Salem, Tamil Nadu, India on 17th&18th March, 2016.
- 12) <u>Ranjithkumar R.</u>, "Antibiofilm action of silver nanoparticles coated intravascular Catheter (AgNPs-IVC) against clinically isolated Human Pathogens" in National Conference on "Developing Scenario in Applied Science and Communicative English (PRAYAF-2016)" on 21<sup>st</sup>& 22<sup>nd</sup> April 2016 organized by Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India.
- 13) <u>Ranjithkumar R.,</u> "Nanotechnology how can small science have big impact in agriculture sector?" in National level conference on 'Reaching the unreached through science and technology' concepts, principles and application of science and technology for nation building" on 9<sup>th</sup> to 11<sup>th</sup> October, 2017 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India Sponsored by Indian Science Congress.

## Short Term Training Program

- Participated and successfully completed the online short-term course in "Biodiversity-Status, Services & Management Practices," organized by the Department of Botany, PG Diploma in Biodiversity, Kongunadu Arts and Science College, Coimbatore, Tamilnadu from 01.09.2020 to 10.09.2020.
- 2) Participated and successfully completed AICTE Quality Improvement Scheme (AQIS) Short Term Training Program (STTP) through online mode on "Smart Materials and Systems Emerging Research Areas" conducted by Department of Mechanical Engineering, C V Raman Global University, Bhubaneswar, Odisha from 02.11.2020 to 07.11.2020.

## Certificate in Extra Curriculum Activities

 Completed voluntary service in our School's Junior Red Cross from 1997 to 1998 conducted by INDIAN RED CROSS SOCIETY TAMILNADU BRANCH, The Nilgiris, at Government Higher Secondary School, Nanjanad, The Nilgiris, Tamil Nadu, India.

- Completed Combined Special Annual Camp 2000-2001 conducted by Directorate of School Education, Tamil Nadu, National Service Scheme, The Nilgiris District from 22<sup>nd</sup> Feb to 3<sup>rd</sup> March 2001.
- Completed three-month computer certificated course in titled "Bharathi" from 25-12-2000 to 28-02-2001 at Everonn Computer Centre, Tamil Nadu, India.
- Completed certificate course in DATA Analysis (using SPSS) conducted by Centre for Research, Dr.N.G.P. Arts and Science College, Coimbatore-48, Tamil Nadu, India.

## Faculty Development Program Attended

- Participated in Two Day Faculty Development Program on "Teaching Techniques" held on 16th -17th July 2018 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India organized by ICT Academy.
- Participated in One Day National Level Workshop on "NAAC-Revised Accreditation Framework (RAF) and Road Map to Higher Education Institutions" Conducted by Internal Quality Assurance Cell, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India, held on 28th September 2018.
- Participated in IQAC sponsored One Day Faculty Development Programme (FDP) on "Testing and Evaluation" at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India, held on 26th Feb, 2019.
- Participate in Five Days Virtual Faculty Development Programme on "Recent Trends in Biomedical Engineering - Research Perspective" organized by Department of Biomedical Engineering, Dr.N.G.P. Institute of Technology, Tamil Nadu, during 26<sup>th</sup>to 30<sup>th</sup> April, 2020.
- Participated in One Week National Level Online Faculty Development Program on Innovation to Academicians conducted from 11<sup>th</sup> May to 16<sup>th</sup> May 2020, organized by Ramachandra College of Engineering, Eluru, India.
- Participated in One Week National Level Online FDP for trainer on "Mastering the Arts of Handling Post COVID-19 Challenges for Sustainable Development" organized by Faculty of Humanities and Science & Industry Institute Planning Cell, Dr. M.G. R. Education and Research Institute, Chennai, Tamil Nadu, India from 19th May to 23rd May 2020.
- Participated in AICTE Training and Learning (ATAL) Academy online Faculty Development Program on "Blended Learning and Flipped Classroom" from 24-08-2020 to 28-08-2020 at JIC College of Engineering, West Bangal, India.
- Participated & successfully completed five days Faculty Development Program on "Research and Career" held from 19<sup>th</sup> to 23<sup>rd</sup> October 2020, organized by Vimala College, Thrissur, Kerala supported by DBT-STAR College Scheme, Government of India.

## **Certification of Appreciation**

- First prize in "Tamil debit" in School Annual Day & Sports Day Celebration (2001-2002) organized by Government Higher Secondary School, The Nilgiris, Tamil Nadu, India.
- Attended in the "Inter Collegiate Trekking Programme" conducted on 12.02.2003 from Maruthamalai to Anuvavi Subramanisaswamy Temple, Periya Thadagam jointly organized by *Youth Red Cross Zone*, Bharathiar University and Dr.N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India.
- Attended one day World Hepatitis Day even "HEP-2013-Attempt to Guinness Records Event" held on 28<sup>th</sup> July 2013 under the auspices of World Hepatitis Alliance in Coimbatore, Tamil Nadu, India.
- First Prize in Science Exhibition organized by SNMV College of Arts and Science, Coimbatore, Tamil Nadu, India, held on 15<sup>th</sup> March 2005.
- Third Prize in Poster Presentation "Biosubmit- 2018" organized by Hindusthan College of Arts and Science, Coimbatore, Tamil Nadu, India, held on 3<sup>rd</sup> February 2018.
- Attended in a "World Environmental Day 2014" organized by The Nilgiris Education and Research Foundation, Tamil Nadu associated with UNEP on 5<sup>th</sup> June 2014.

## Seminar and Conference Attended National & International

- 1. Participated in National level Seminar on "Advancement Biosciences" held on 3<sup>rd</sup> and 4<sup>th</sup> Oct 2003, at SNMV College of Arts and Science, Tamil Nadu.
- 2. Participated in National level Symposium on "**Modern Biological Sciences**" at SNMV College of Arts and Science, Tamil Nadu, held on 8th& 9th Oct 2004.
- Participated in3<sup>rd</sup> National Symposium on "Modern Biological Sciences" at SNMV College of Arts and Science, Tamil Nadu, held on 15<sup>th</sup>& 16<sup>th</sup> Feb 2006.
- Participated in Popular Lectures on "Current Trends in Biotechnology and Bioinformatics" held at Research Department of Botany, Nirmala College for Woman, Tamil Nadu, Sponsored by Department of Biotechnology, New Delhi, on March 2<sup>nd</sup>, 2012.
- Participated in National level Conference on "Emerging Trends in Herbal Research and Cancer Therapy" held at KMCH College of Pharmacy, Tamil Nadu, on 26<sup>th</sup> June 2012.
- Participated in National level Conference on "Bio-Medical Waste Management" held at Dr.N.G.P. Arts and Science College, Tamil Nadu, organized by Department of Hospital Administration in associate with Confederation of Indian Industry, on 28th September 2012.

- Participated in a Seminar on "Understanding our Wildlife" organized by OSAI and Department of Zoology, Kongunadu Arts and Science College, Tamil Nadu on 10<sup>th</sup> Oct 2014.
- Participated in National conference on "Advance Functional Materials" (NCAFM-2014) organized by Department of Physics, Bharathiar University, Tamil Nadu, during 30<sup>th</sup> and 31<sup>st</sup> January, 2014.
- Participated in "State Level Search for the Wizards of Bioscience" organized by Department of Biotechnology, Kongunadu Arts and Science College, Tamil Nadu, held on 18th Feb-2015.
- Participated in National Conference on "Biodiversity Products and Industrial Applications" (BPIA-2015) organized by Centre for Biodiversity and Forest Studies, Periyar University, Salem, Tamil Nadu, held on 28th - 29th September, 2015.
- Participated in one day seminar on "Applications of Light in Science and Technology (IYL-15)" organized by Department of Science and Humanities, Kumaraguru College of Technology, Coimbatore, Tamil Nadu, India on 4th Dec 2015.
- Participated in "11<sup>th</sup> Asia Pacific Chitin and Chitosan Symposium & 5<sup>th</sup> Indian Chitin and Chitosan Society Symposium" organized by Indian Chitin and Chitosan Society at IMA Hall, Kochi, Kerala, India held from 28<sup>th</sup> to 30<sup>th</sup> September, 2016.
- Participated in two-day International Conference on "Current Trends in Advanced Biomedical Technology" (CTAB -2018), organized by Nehru Arts and Science College, Coimbatore, held on 24th 25th January, 2018.
- 14. Participated in "One Day International Seminar on Advances in Genomics and Proteomics" organized by Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India sponsored by Indian Science Congress Association (ISCA), Coimbatore Chapter held on 07th August 2018.
- 15. Participate in **"One Day Seminar on Advanced Separation and Detection"** organized by Agilent Technologies" India held on 6<sup>th</sup> September 2018.
- 16. Participate in International Symposium on **"Trends in Solar Cell Research"** organized by Department of Physics & Department of Chemistry Kongunadu Arts and Science College, Coimbatore, Tamilnadu, India sponsored by Indian Science Congress Association (ISCA), Coimbatore Chapter held on 03<sup>rd</sup> October 2018.
- 17. Participate in **106<sup>th</sup> India Science Congress Meet** in **Lovely Professional University**, Punjab, India held on 03<sup>rd</sup>Jan 7<sup>th</sup> Jan, 2019.
- Participate in National Seminar on "Astrophysics Exploring the Universe" organized by Department of Physics, Kongunadu Arts and Science, Coimbatore, Tamil Nadu, India on 21st February, 2019.
- Participate in National Conference on "Ecolife-Revolutionary Rise of Women" organized by Women Empowerment Cell & Eco Club, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India on 15th March 2019.

- 20. Participate in National Conference on "Science and Technology for Insect Diversity Conservation and Agricultural Progressive" organized by Department of Zoology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India on 29<sup>th</sup>July, 2019.
- 21. Participate in National Conference on **"Frontiers in Biotechnology 2019"** organized by PG and Research Department of Biotechnology, Nandha Arts and Science College, Erode, Tamil Nadu, India on 9<sup>th</sup> August 2019.
- 22. Participate in National Seminar on **"Basic and Beauty of Quantum Mechanics"** organized by **TESLA FEST 2020** organised by the Department of Physics, Kongunadu Arts and Science College, Tamil Nadu, held on 26<sup>th</sup> February, 2020.
- 23. Participate in Two days international e-Conference on **"Materials Processing & Characterization (ICMP-C-2020)"** on 18<sup>th</sup> and 19<sup>th</sup> September 2020 organized by Chaitan Bharathi institution of Technology, Hyderabad, Telangana, India.
- 24. Participate in one International Webinar on **"Advanced Scanning & Transmission Electron Microscopy 2021(i-WASTEM-2021)"** on 04<sup>th</sup> September 2021, organised by Faculty of Science, Universiti Tunku Abdul Rahman, Kampar, Malaysia.
- 25. Participate in Two days **"1st International Conference on Green Sustainable Technology and Management ICGSTM-2022"**, on 10 & 11<sup>th</sup> June 2022, organized by **INTI International University**, Malaysia.

## Professional Workshop Attended National & International

- Participated in the Orientation programme cum workshop on "Techniques on Nucleic Acid Biology" organized by the Department of Biotechnology & Research, SNMV College of Arts & Science, Tamil Nadu and Bangalore Genei Ltd, Bangalore, during 22<sup>nd</sup> to 25<sup>th</sup> November 2006.
- Participated in Tow Day Hands on workshop on "Down Stream Processing and its applications" organized by Dr. N.G.P Arts and Science College and Centre for Bioscience and Nanoscience Research (CBNR), held at Department of Biotechnology, Dr.N.G.P. Arts and Science College, Tamil Nadu from 15<sup>th</sup> to 16<sup>th</sup> February, 2013.
- Participated in One Day workshop on "Tamil Learning and Teaching Via Computer Technology" organized by Dr.N.G.P. Arts and Science College & Dr.N.G.P. College for Education, Tamil Nadu on 11th March 2013.
- 4. Participated in UGC funded one day State Level Workshop on "Advanced Techniques in Biology" organized by PG & Research Department of Botany and Department of Zoology, Vellalar College for Women (Autonomous), Tamil Nadu, on 18th September 2013.
- Participated in one day National Level Workshop entitle "Biosafety, Bioethics and Calculations in Biological Science" organized by PG and Research Department of Biotechnology, Kongunadu Arts and Science College, Tamil Nadu, held on 16<sup>th</sup> December 2013.

- 6. Participated two-day workshop on "Advanced Instrumental Methods for Engineering Materials (AIMEM-2014)" organized by the Department of Physical Science during 18th& 19th October 2014 at Bannari Amman Institute of Technology, Sathyamangalam, Tamil Nadu, India
- 7. Participated one day national workshop on **"Excellence in youth Leadership"** organized by the PG and Research Department of Commerce entrepreneurship development cell on 31.12.2014 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- Participated UGC sponsored state level workshop on "Applications of statistical tools using SPSS-hands on experience" held at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India from 11.02.2016 to 12.02.20016.
- Participated two-day Science Academics Lecture workshop on "Innovations in Bioscience" on 22<sup>nd</sup> and 23<sup>rd</sup> Feb-2016 organized by Department of Biochemistry, Bharathiar University, Coimbatore, Tamil Nadu, India.
- Participated one day National level hands on Training on "Comet Assay" held on 24<sup>th</sup> Feb-2016 at PG & Research Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 11. Participated one day National Level Workshop on "Spawn Production and Mushroom Cultivation" under DBT-STAR COLLEGE SCHEME held on 1st July 2016 at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 12. Participated in the one week-short term course on **"Advances in Biological systems and Material Science in Nano World"** at Department of Chemistry, Coimbatore Institute of Technology, Coimbatore, Tamil Nadu, INDIA **Sponsored by AICTE.**
- 13. Participated in the one-day national level workshop on **"HPLC Analytical Technique"** held on 5<sup>th</sup> Sept 2017at Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- Participated in the one-day training programme on "Mushroom Cultivation" held on 26<sup>th</sup> October, 2017 at Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 15. Participated in the two-day national level workshop on "Next Generation Sequencing Data Analysis" held on 21<sup>st</sup> and 22<sup>nd</sup>December 2017at Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India.
- 16. Participated in the one-day national level hands-on-training on "Homology Modelling and Molecular Docking" held on 27<sup>th</sup> January 2018 at Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamilnadu, India. Sponsored by Indian Science Congress Association, Kolkata, India.
- 17. Participated in the one-day international workshop on "Materials for Energy, Environment and Biological Applications" to be held on 05th April, 2018 at Kongunadu Arts and Science College, Tamil Nadu, in collaboration with University

**of Exeter,** Environment and Sustainability Institute, University of Exeter, United Kingdom, sponsored by **Dr. M. Aruchami Research Foundation**.

- 18. Participated in "International Workshop on Approaches in Basic and Applied Research in Science and Technology" organized by Department of Zoology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India sponsored by Indian Science Congress Association (ISCA), Coimbatore Chapter held on 10<sup>th</sup> August 2018.
- 19. Participated in "One Day National Level Training Programme on HPLC Technique" organized by Department of Botany, Kongunadu Arts and Science College, Coimbatore, Tamilnadu, India sponsored by Indian Science Congress Association (ISCA), Coimbatore Chapter, Tamil Nadu, held on 20th September 2018.
- 20. Participate in **"Gene expression analysis using real time PCR"** organized by Department of Biotechnology, Kongunadu Arts and Science College, Tamil Nadu, held on 04<sup>th</sup> September, 2018.
- 21. Participated in one day workshop on "DNA Taxonomy and Phylogeny" sponsored by Indian Science Congress Association (ISCA), Coimbatore chapter organized by Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India on 5<sup>th</sup> October 2018.
- 22. Participated in one day workshop on **"Bio Statistical Analysis through SPSS Software Package"** sponsored by Indian Science Congress Association (ISCA), Coimbatore chapter organized by Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India on 8<sup>th</sup> October 2018.
- 23. Participated one day training programme on **"Field Emission Scanning Electron Microscope (FESEM)"** sponsored by DST-CURIE organized by Avinashilingam Institute for Home Science and Higher Education for Woman, Coimbatore, Tamil Nadu, India on 15<sup>th</sup> December, 2018.
- 24. Participated in "India-UK workshop on Knowledge Transfer on the sustainability of innovative water quality Monitoring Technologies to India-III: Circular Economy, Graphene related technologies" held at Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India on 13th March, 2019.
- 25. Participated in one day hands-on-training on **"Transfer of plant tissue culture technology to the stakeholder of farming community"** sponsored by Indian Science Congress Association (ISCA), Coimbatore chapter organized by Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, India on 27<sup>th</sup> August 2019.
- 26. Participated in one-day State Level Workshop on "Biostatistical tools for Biological and Publics health Research" sponsored by Indian Science Congress Association (ISCA), Coimbatore chapter organized by Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu, on 1st February 2020.

27. Participated in the "Two Days Regional Level Workshop on Entrepreneurial Scope in Medicinal Plants Cultivation and Extraction" organized by Entrepreneurship Development Cell, AURCC, Coimbatore sponsored by National Medicinal Plant Board (NMBP), New Delhi, India on 25th & 26th 2022.

#### Research Collaborators - National & International

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Research Gate: Total citation: 1377h-index: 19

Google Scholar ID: <u>https://scholar.google.co.in/citations?user=2GfrQJ0AAAAJ&hl=en</u>

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**CUMULATIVE IMPACT FACTOR: 185.3** 

Yours sincerely

(R. RANJITH KUMAR)