

Name of Faculty **Dr C. Nagendranatha Reddy**  
 Designation Assistant Professor  
 Nature of Job/Appointment Regular  
 Date of Joining 30th August 2019



E-mail [Nagendranath\\_biotech@cbit.ac.in](mailto:Nagendranath_biotech@cbit.ac.in)

Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Environmental Engineering and Biology)	First Class
PG	M. Tech Biotechnology	First Class
UG	B. Tech Biotechnology	Distinction

Work Experience	
Teaching	4 Years 3 months
Research	6 Years 5 months
Industry	--
Others	--

Area of Specialization Environmental Engineering; Biofuel; Bioremediation and Integrated strategies

- Professional Memberships
- Life Member of "The Biotech Research Society (BRSI), India" with LM No: 1455
  - Life member of "Institute of science, Engineering & Technology Research, with membership ID: 2022010109
  - Membership of World Research Council for the year 2019-2020 with Accreditation number WRC-RRF-IND-1068

- Responsibilities held at Institution Level
- Representing teacher for Internal Quality Assurance Cell (IQAC) from 15-06-2020
  - Member- NAAC Accreditation
  - Member-Disciplinary Committee for Shruthi 2020
  - Member-Hospitality Committee (SHRUTHI 2022 & 2023)

- Responsibilities held at Department Level
- Convenor- Departmental Research Committee
  - Departmental Research Coordinator
  - Member, Program Assessment Committee (PAC)
  - Member, Course Expert Group (CEG)
  - Member, Program Content Committee (PCC)
  - Member- Academic audit committee
  - Special Invitee (Member) - Board of Studies
  - Academic Council Coordinator- Board of Studies
  - Co-ordinator-Honors degree (2019 admitted batch)
  - Member- Antiragging Committee
  - Member-Squad & Disciplinary Committee
  - Department Mentor for T Tribe program
  - ACIC Mentor
  - Coordinator- SUDHEE 2021
  - Coordinator & Organizing committee member for Neozion 2022
  - Evaluator for Biobedate in Neozion 2022

**Guided B.Tech students on their final year projects**

- Research Guidance
- Sphoorthy Nadimpally (2020-21). Compact design approach for household wastewater treatment
  - Shalini Raj, Rishisree G and Rupali M (2020-21). Enhancement of polythene biodegradation by various integration strategies
  - Akhil J, Harshini, D (2021-22). Botanical infusion of Kombucha for enhanced nutritional composition

4. Rithika G, Himavarshini P and Aishwarya P (2021-22). Nutritional profile and detection mechanisms of artificially and naturally ripened fruits
5. Sourab M (2021-22). Downstream processing of monoclonal antibodies using chromatographic columns
6. Sumeet C, Shivani H (2022-23). Integrated approach of adsorption and bioremediation for complete removal of textile dyes using Microbial Fuel cell

Awards Received

1. Featured (as **best scientist in Natural sciences and Biological sciences in University or Institution**) in AD Scientific index (CBIT and Indian Ranking) for the years 2022 and 2023
2. **Won First Prize for e-poster** presentation on Biotechnological approaches for wastewater treatment organized by Lovely professional university, Punjab on 10.04.2021
3. **"Innovative Researcher in Environmental Engineering"** conferred upon by RULA Awards & World Research Council on 26 February, 2019
4. **"Best PhD Thesis Award 2017"** conferred upon in the 1st ISEES International Conference on "Sustainable Energy and Environmental Challenges (SEEC-2017)" by International Society for Energy, Environment and Sustainability (ISEES) at Center of Innovative and Applied Bioprocessing (CIAB), Mohali, India on 26-28th February, 2017
5. **"BIORESTEC 2018 Impactful research award"** for highest citations from the Journal of Bioresource Technology for the review paper "Waste biorefinery models towards sustainable circular Bioeconomy: Critical review and future perspective"
6. **Best poster award** for the topic "Resource Management, Recovery and its applications" at International conference "Asia Pacific conference on Biotechnology for Waste Conversion (BioWC 2016)" jointly organized by Sino-Forest Applied Research Centre for Pearl River Delta Environment (ARCPE) and Hong Kong Baptist University, Hong Kong on 6-8 December 2016.
7. **"Outstanding Contribution in Reviewing"** for December 2017 from Bioresource Technology (IF: 5.651)
8. **Highest number of votes** to video titled "Novel Integrated PDBR-BET system for the remediation of textile dye based wastewater" in **"Young Scientist Competition-2015"** organized by Indo-European Project (Indigo Projects) (Semi-finalist). ([https://www.facebook.com/IndigoProjects/app\\_349313058487732](https://www.facebook.com/IndigoProjects/app_349313058487732))
9. **"CSIR-Senior Research Fellowship (CSIR-SRF)"** award with ACK No: 181006/2K9/1on 15/02/2012 from Council of Scientific and Industrial Research (CSIR), India
10. **Cover Page Article in the journal "Bioresource Technology"** (Impact factor -11.889): Figure 1 of publication "Induction of anoxic microenvironment in multi-phase metabolic shift strategy during periodic discontinuous batch mode operation enhances treatment of azo dye wastewater" has been selected as Cover Page Article for Special Issues: Challenges in Environmental Science and Engineering (CSE-2013) and International Conference on Advances in Biotechnology and Bioinformatics (ICABB- 2013) of the issue no 165 (2014)
11. **First prize for Oral presentation** on "Nano medicine for Human Welfare", at National conference 'Biovision 08' organized by Bharath University, Chennai on 25th January 2008.
12. **First Prize in "Intra-Departmental Quiz"** competition organized by The Department of Biotechnology, Sathyabama University, Chennai on 18th march 2008
13. **Appreciation Prize for Oral presentation** on "Nanowires induced in Blood vessel for stimulating Neurons" at Audisankara College of Engg. And Technology, Gudur

Courses Handled  
at Under  
Graduate / Post  
Graduate Level.

1. Environmental Biotechnology
2. Phytochemicals and Herbal Products
3. Nanobiotechnology
4. Basics of Biology (For CSE)
5. Industrial Biotechnology

6. Environmental Science
7. Enzyme Technology lab
8. Plant Biotechnology Lab
9. Fermentation Technology Laboratory
10. Project Part I and II

No. of Papers Published	National Journals – 03	International Journals – 21
	National Conference – 08	International Conference – 15
Projects Carried out	--	
Patents	--	
Technology Transfer	--	

- Invited Speaker
1. Delivered a guest lecture on “Biorefineries - current prospects and future perspectives & Microbial biofuels” in AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program “Waste to Wealth: Emerging Trends in Green Energy for Sustainable Development” (ETGESD – 2022)” from 05th – 16th December, 2022 organized by Department of Biotechnology and Department of Chemical Engineering Vel Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering College, Avadi, Chennai – 62., Tamilnadu , India on Dec 8th 2022.
  2. Invited talk on “Downstream Processing” in Certificate Course on Fermentation Technology organized by Institute of Innovations, Tamil Nadu on 03.01.2022
  3. Invited talk on “A Comprehensive view on Sustainable Management of Petroleum Industry Effluents” in 15 days internship on “Petroleum Industry Waste Management” organized by Institute of Innovations, Tamil Nadu during 16-30 November, 2021 (17.11.2021)
  4. Invited talk on “Bioremediation of petroleum industry effluents for sustainable waste management” in 15 days internship on “Petroleum Industry Waste Management” organized by Institute of Innovations, Tamil Nadu during 16-30 November, 2020
  5. Invited talk on “Potential applications of nanomaterials in Biofuel Production” in 10 Days Internship Program on “Nanotechnology” organized by Institute of Innovations, Tamil Nadu during 13-23 July, 2020
  6. Invited Plenary Lecture Talk on “Waste Biorefinery Models towards Sustainable Circular Bioeconomy: Current Prospects and Future Perspectives” in “Online Colloquium on Prospects in Bioenergy Research” organized by Institute of Innovations, Tamil Nadu on 4th July, 2020

**Total : 14**

- No. of Books/Chapter Published with details
1. Reddy, S. D. M., Deepika, N., Droopathi, M. R., Vishwanutha, S., Daaman, J. D., **C. Nagendranatha Reddy**, & Yadavalli, R. (2023). Factors affecting the microalgal biomass productivity in photobioreactors. In: Ranjna Sirohi, Ashok Pandey, S.J. Sim, J-S. Chang, D-J. Lee (eds) Current Developments in Biotechnology and Bioengineering: Photobioreactors: Design and Applications, Elsevier, ISBN: 978-0-323-99911-3
  2. Aishwarya, C.V.S., Caleb Joel Raj, J., Mandal, S.K., **C. Nagendranatha Reddy**, Mishra, B. (2023). Smart Health Care by Harnessing the Internet of Things (IoT): Applications, Challenges, and Future Aspects. In: Sindhwani, N., Anand, R., Niranjnamurthy, M., Chander Verma, D., Valentina, E.B. (eds) IoT Based Smart Applications. EAI/Springer Innovations in Communication and Computing. Springer, Cham. [https://doi.org/10.1007/978-3-031-04524-0\\_3](https://doi.org/10.1007/978-3-031-04524-0_3)
  3. Aruna, V., Chada, N., Tejaswini Reddy, M., Geethikalal, V., Dornala, K., **Nagendranatha Reddy, C\***. (2022). Plant Synthesized Nanoparticles for Dye Degradation. In: Shah, M.P., Roy, A. (eds) Phytonanotechnology. Springer, Singapore. [https://doi.org/10.1007/978-981-19-4811-4\\_1](https://doi.org/10.1007/978-981-19-4811-4_1)
  4. **C. Nagendranatha Reddy\***, Y. Vineetha, A. Priyanka, A. Shalini, B.Mishra, Y. Rajasri, V. Swapna (2022). Techno-economic and environmental impact analysis of biofuels produced from microalgal biomass. Elsevier. Baskar Gurunathan (Eds) Biofuels and Bioenergy. DOI: <https://doi.org/10.1016/B978-0-323-90040-9.00006-0>

5. Sanath Kondaveeti, Aarti Bisht, Raviteja Pagolu, **C. Nagendranatha Reddy**, K. Chandrasekhar, Jung-Kul Lee (July 2022). An Overview on Low-Cost Anode Materials and Their Modifications in Microbial Fuel Cells (MFCs) towards Enhancement in Performance. CRC Press. Kuppam Chandrasekhar, Satya Eswari Jujjavarapu (eds.) Bio-Electrochemical Systems: Waste Valorization and Waste Biorefinery, <https://doi.org/10.1201/9781003225430>
6. Arvind Bangaru, Kamasani Aarya Sree, Chandana Kruthiventi, Meenakshi Banala, Vadapalli Shreya, Y. Vineetha, A. Shalini, Bishwambhar Mishra, Rajasri Yadavalli, K. Chandrasekhar & **C. Nagendranatha Reddy\*** (May 2022). Role of Enzymes in Biofuel Production: Recent Developments and Challenges. In: Chowdhary, P., Khanna, N., Pandit, S., Kumar, R. (eds) Bio-Clean Energy Technologies: Volume 1. Clean Energy Production Technologies. Springer, Singapore. [https://doi.org/10.1007/978-981-16-8090-8\\_4](https://doi.org/10.1007/978-981-16-8090-8_4)
7. **C. Nagendranatha Reddy**, B.Mishra, S.K. Mandal, D.C. Agrawal, C. Kruthiventi (2021). An Insight into Pullulan and Its Potential Applications. Springer Nature Switzerland AG 2021, J. Oliveira et al. (eds.), Polysaccharides of Microbial Origin, [https://doi.org/10.1007/978-3-030-35734-4\\_15-1](https://doi.org/10.1007/978-3-030-35734-4_15-1)
8. Bishwambhar Mishra, Rajasri Yadavalli, Y. Vineetha, **C. Nagendranatha Reddy\*** (2021). Recent advancements and challenges of nanomaterials application in biofuel production in "Nanomaterials Application in Biofuels and Bioenergy Production Systems" Elsevier. R. Praveen Kumar et al. (eds.), Accepted (ISBN:978-0-12-822401-4)
9. **C. Nagendranatha Reddy**, Sanjeet Mehariya, Kavitha, R. Yukesh Kanna, K. Jayaprakash, Rajasri Yadavalli, Rajesh Banu, Obulisamy Parthiba Karthikeyan (2020). Electro-Fermentation of Biomass for High-Value Organic Acids. In: Verma P. (eds) Biorefineries: A Step Towards Renewable and Clean Energy. Clean Energy Production Technologies. Springer, Singapore. pp 417-436, [https://doi.org/10.1007/978-981-15-9593-6\\_16](https://doi.org/10.1007/978-981-15-9593-6_16)
10. **C. Nagendranatha Reddy**, B.Min (2019). Biological conversion of food waste to value addition in Microbial Fuel Cell in 'Waste to Sustainable Energy: MFCs-Prospects through Prognosis'. CRC Press. L. Singh. et al. (eds.), ISBN: 9781138328211
11. **C. Nagendranatha Reddy**, K.Ramesh, B.Min (2019). Algal biocathodes in 'Microbial Electrochemical Technology: Platform for Fuels, Chemicals and Remediation'. Biomass, Biofuels and Biochemicals. Elsevier. S. Venkata Mohan. et al. (eds.), <https://doi.org/10.1016/B978-0-444-64052-9.00021-2>
12. **C. Nagendranatha Reddy**, M.P. Sudhakar, B. Min, P. Shanmugam (2018). Future perspectives on cost-effective Microbial Fuel Cells in rural areas. Springer International Publishing AG, part of Springer Nature 2018, V. Sivasankar et al. (eds.), Microbial Fuel Cell Technology for Bioelectricity. [https://doi.org/10.1007/978-3-319-92904-0\\_14](https://doi.org/10.1007/978-3-319-92904-0_14)
13. **C. Nagendranatha Reddy**, J.A. Modestra, A.N. Kumar, S. Venkata Mohan (2016). Waste Remediation Integrating with Value Addition: Biorefinery Approach Towards Sustainable Bio-based Technologies. Springer India.231-256. V.C. Kalia (ed.), Microbial Factories, Biofuels, Waste treatment: Volume 1. DOI 10.1007/978-81-322-2598-0\_14
14. M.V. Rohit, P. Chiranjeevi, **C. Nagendranatha Reddy**, S. Venkata Mohan (2016). Photobioreactors for Microalgal Cultivation and Influence of Operational parameters. Biofuels Production and future perspectives. Taylor & Francis. R.S. Singh et al. (eds.) (Print ISBN: 978-1-4987-2359-6)

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings (Attended and/or Organized).

#### **Conference Proceedings**

1. C. Nagendranatha Reddy. 2021. An article on comparative study of waste water treatment methods in International Conference on Biotechnology and Interdisciplinary Technologies (iCBIT 21) organized by CBIT in association with FABA Academy during 08-12 November 2021
2. C. Nagendranatha Reddy 2021. Design of a compact, efficient and economical treatment approach for household wastewater treatment" in 5th International conference on bioenergy, environment and sustainable technologies held during 29-30 January 2021 at Arunai Engineering

College, Tamil Nadu

3. C. Nagendranatha Reddy 2021. Presented a poster on "Microbial electrochemical system for biomethane generation: Inorganic carbon as sustainable feed stock" in Biotechnological Approaches for wastewater treatment organized by Lovely professional university, Punjab on 10.04.2021
4. C. Nagendranatha Reddy, Y. Rajasri, B. Mishra, Y. Vineetha, A. Shalini., 2020. Oral presentation entitled "Conductive Granular Graphite As Alternate Electrode Material For Efficient Bioelectricity Generation In Microbial Fuel Cells" at International e-Conference on Materials Processing & Characterization – 2020 (ICMP&C - 2020) organized by Chaitanya Bharathi Institute of technology, Hyderabad during September 18 & 19th
5. C. Nagendranatha Reddy, Booki Min and S. Venkata Mohan., 2019. Oral presentation entitled "Lipid recovery from dye based effluent using two stage integrated microalgae cultivation strategy" at international conference on "New Horizons in Biotechnology (NHBT 2019)" organized by CSIR-National Institute for Interdisciplinary Science and Technology, Kerala and the Biotech Research Society of India (BRSI) at Trivandrum, Kerala during November 20-24 2019
6. C. Nagendranatha Reddy and Booki Min., 2018. Oral presentation entitled "Bioelectromethanogenesis from inorganic carbon in Microbial electrochemical systems: Influence of trace metals on conversion efficiency" at "International conference on Biotechnological research and innovation for sustainable development (BioSD 2018)" organized at Indian Institute of Chemical technology, Hyderabad on Nov 22-25, 2018.
7. C. Nagendranatha Reddy and Booki Min., 2018. Oral presentation entitled "Influence of trace metals on methane formation from inorganic carbon in microbial electrochemical systems" at "Second International conference on Sustainable energy and environmental challenges (SEEC 2018)" organized at Indian Institute of Science, Bangalore on Dec 31, 2017 to Jan 3, 2018.
8. C. Nagendranatha Reddy and Booki Min., 2017. Poster presentation entitled "Bioelectromethanogenesis for Biomethane Generation in a Single Chambered Microbial Electrolysis Cell" at "International conference on Alternative Fuel & Energy" (ICAFE 2017) held at Daegu, South Korea on 23-25 October 2017.
9. C. Nagendranatha Reddy and J.W.C. Wong., 2016. Oral presentation entitled "A MFC-MEC integration for biogas upgradation from the UASB leachate of food waste anaerobic digestion" at "Indo-EU workshop on microbial electrochemical technologies for sustainability: Fuels, chemicals and Remediation (metSUS-2017)" organized by CSIR-Indian Institute of Chemical Technology, Hyderabad, India on 28th February, 2017.
10. C. Nagendranatha Reddy and S. Venkata Mohan., 2016. Poster presentation entitled "Bioremediation of azo dye based wastewater in Bioelectrochemical treatment (BET): Influence of air exposed and air cathode configurations on the treatment efficiency" at International conference "Asia Pacific conference on Biotechnology for Waste Conversion (BioWC 2016)" jointly organized by Sino-Forest Applied Research Centre for Pearl River Delta Environment (ARCPE) and Hong Kong Baptist University, Hong Kong on 6-8 December 2016 (ISBN 978-988-19988-3-5).
11. C. Nagendranatha Reddy, M.V. Rohit, A.N. Kumar and S. Venkata Mohan., 2016. Poster presentation entitled "Nutrient Recovery Based Opportunities for Valorization of Microalgae Biomass to Value Added Products" at International conference "Asia Pacific conference on Biotechnology for Waste Conversion (BioWC 2016)" jointly organized by Sino-Forest Applied Research Centre for Pearl River Delta Environment (ARCPE) and Hong Kong Baptist University, Hong Kong on 6-8 December 2016.
12. C. Nagendranatha Reddy, R. Karthikeyan, K.Y. Cheng, D.J. Ravindar, A. Selvam and J.W.C. Wong., 2016. Poster presentation entitled "Upgradation of biogas in a Biorefinery approach: Integrative strategy for simultaneous waste remediation and bioenergy generation" at International conference "Asia Pacific conference on Biotechnology for Waste

- Conversion (BioWC 2016)" jointly organized by Sino-Forest Applied Research Centre for Pearl River Delta Environment (ARCPE) and Hong Kong Baptist University, Hong Kong on 6-8 December 2016.
13. C. Nagendranatha Reddy and S. Venkata Mohan., 2015. Poster presentation entitled "Recovery of nitrogen and metals from industrial wastewater using Microbial Electrochemical Technology" in the international conference on New Horizons in Biotechnology (NHBT 2015) jointly organized by the Biotech Research Society, India and CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram during 22-25 November 2015
  14. C. Nagendranatha Reddy and S. Venkata Mohan., 2015. Poster presentation entitled "Evaluation of Metabolic shift of Biocatalyst During microenvironment Variation (multiphase) in Periodic Discontinuous Batch Reactor (PDBR) in Response to Azo-Dye based Wastewater Treatment" in the national seminar on "Recent Advances in Food Biotechnology" organized by Bhavan's Vivekananda College, Hyderabad during 17th & 18th February 2016
  15. C. Nagendranatha Reddy et al., 2014. Oral presentation entitled "Effect of nitrogen flux in treating azo dye based wastewater by dual chambered microbial fuel cell" in International Conference on Environment and Energy (ICEE 2014) organized by JNTUH College of Hyderabad, Hyderabad on 15-17th December 2014
  16. C. Nagendranatha Reddy et al., 2014. Poster entitled "Sequential integration of anaerobic and aerobic microenvironments in anode and cathode chambers of Bioelectrochemical treatment system to enhance treatment of azo dye based wastewater " in APAS golden Jubilee Science Congress organized by APAS, IICT and CCMB on 13-15 November 2014
  17. Participated in one day seminar on "Green Cities" on the occasion of World Earth Day held at Institution of Engineers (India), AP State Centre on 22nd April 2014 as delegate
  18. C. Nagendranatha Reddy et al., 2013. Poster entitled 'Evaluation of Metabolic shift of Biocatalyst During microenvironment variation (multiphase) in Periodic Discontinuous Batch Reactor (PDBR) in Response to Azo-Dye based Wastewater Treatment, at International Conference on Advances in Biotechnology & Bioinformatics (ICABB-2013), 25-27 Nov 2013, Pune, India
  19. C. Nagendranatha Reddy et al., 2013. Oral presentation entitled 'Increasing the Bacterial Membrane Potential by regulating the Anode Potential in Microbial Fuel Cell for Effective Bioelectricity Generation' in Environmental Sustainability and Society: The Growing Paradigm Shift (EES-2013) held at Jaypee University of Engineering & Technology, Raghogarh (Madhya Pradesh) on 30-31 March 2013
  20. Participated in International Conference 'International Conference on Biohydrogen Production and its Applications (ICBHPA-2012)', held at JNTUH, Hyderabad in October 2012
  21. C. Nagendranatha Reddy et al., 2008. Poster entitled "Nanotechnology-A promise towards biology and medicine" at National seminar cum workshop on Nanotechnology and Nanobiotechnology organized by Sathyabama University on 14-16th February 2008
  22. Participated in International Conference and Workshop on Recent Advances in Bioengineering at SRM University, Chennai from 7-9th February 2008
  23. C. Nagendranatha Reddy et al., 2008. Oral presentation entitled " Nano medicine for Human Welfare " at National conference 'Biovision 08' organized by Bharath University, Chennai on 25th January 2008
  24. C. Nagendranatha Reddy et al., 2008. Oral presentation entitled "Nanowires induced in Blood vessel for stimulating Neurons" at 'Bravura 07' National conference organized by Audisankara College of Engg. And Technology, Gudur on 20th December 2007
  25. Participated in International Conference and Workshop on Total Engineering, Analysis and Manufacturing Technologies at Indian Institute of Science, Bangalore from 4-6th October 2007

26. C. Nagendranatha Reddy et al., 2007. Poster on "Stem cells - Boon or bane?" at "Gene Revolution (GATC '07)" organized by SRM University on 17-18 Oct 2007.
27. Participated in National conference "Bioconscientia" organized by D.G.Vaishnav College on 27-28th September 2007

#### **Trainings, Workshops and Faculty Development Programs (FDPs)**

28. Short term course on 2D Nanomaterials: Potentials and applications through ICT organized by Applied Science Department, NITTTR during 17-21 October 2022
29. Lecture series on "A 3 Day Popular Lecture Series on Marine Biotechnological Advancements" organized by Department of Biotechnology, Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College during 10-19 October 2022
30. A 3-day virtual popular lecture series on Antimicrobial resistance organized by Veltech Hightech Dr Rangarajan Dr Sakuntala Engineering College, Chennai during 26-29 September 2022
31. A 5 day online FDP on "Enhancing research ecosystem on the campus" organized by mallareddy engg college, Hyderabad during 22-26 August 2022
32. One week professional development program on "Avenues of Biotechnology" organized by Department of Biotechnology, SRMIST, Chennai during 20-26 June 2022
33. Faculty Inhouse training program on Internal Quality Assurance Cell (IQAC) organized by CBIT, Hyderabad during 23 & 30 April 2022
34. A 3 day FDP on Establishment and management of Business Incubators organized by ni-MSME, Hyd during 10-12 March 2022
35. One week FDP on "Recent Trends on smart materials and their applications" organized by Vardhaman College of Engineering, Hyderabad during 07-11 February 2022
36. Attended International webinar on "Computer aided Drug design" organized by Institute of Innovations, Tiruvannamalai on 23 January 2022
37. Attended International e-lecture workshop on Innovation in Biotechnology and Inauguration of Nano and Biomaterials Association (NBA) organized by School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, India in association with the Biotech Research Society, India (BRSI) during 19-20 January 2022
38. Attended Second International Conference series on 3R's Research & Progress "Advances in Animal models and Cutting Edge Research in Alternatives" Jointly organized by University of Hyderabad, ASPIRE BioNEST, OncoSeek Bio and FABA during 18-19 November 2021
39. One week International Faculty Development Programme ( Virtual) "Recent Trends in Transforming Life-Sciences: Focus on Academia & Industry Symbiosis" organized by Department of biotechnology, Nizam College(A), Osmania University, Hyderabad in association with two prestigious autonomous Colleges i.e., Government City College, Hyderabad and Loyola Academy, Hyderabad during 13-18 September 2021
40. 5 day online FDP on "Waste to Bioenergy: A Sustainable Solution" organized by Department of Biotechnology, National Institute of Technology Andhra Pradesh, Tadepalligudem during 13-17 September 2021
41. Attended online webinar on "NANOTECHNOLOGY APPLICATION IN FOOD PACKAGING AND ENVIRONMENTAL REMEDIATION" organized by Sathyabama Institute of Science and Technology, Chennai on 29.07.2021
42. Attended hands on workshop on "Patents, Trademarks and Copyrights" organized by Institute Innovation Cell (IIC) - CBIT, Chaitanya Bharathi Institute of Technology (Autonomous) on 17.07.2021
43. Attended a live webinar on "IPR Strategy and Cleantech Innovation" organized by Turnip Innovations on 16.07.2021
44. A 5 day online workshop on "Value Added Workshop: Nano Era: Nanotechnology for Global Sustainability" organized by AMITY

- UNIVERSITY UTTAR PRADESH, NOIDA, during 07-11 June 2021
45. A 5 day online FDP on "Online FDP on "Modern trends in engineering technology" organized by HKBKCollege of Engineering, Bangalore during 04-08 June 2021
  46. One week online FDP on "IPR & Patent Prosecution" organized by Department of CS&E, MVSREC, Hyd in association with IIC during 24-28 May 2021
  47. Attended a 2 week comprehensive online patent information course by Turnip Innovations Pvt Ltd during 22 April to 06 May 2021
  48. Attended a online webinar on Agri-Biotechnology:Scientific and Industrial Perspective organized by FABA on 07.04.2021
  49. Participated in "International Virtual Conference on Sustainable Biotechnology" organized by Kristu Jayanti College, Bangalore during 18-19 March 2021
  50. A five day online FDP cum webinar series on "Latest trends and future prospects of Biotechnology" organized by National Institute of Technology, Andhra Pradesh during 06-10 July 2020
  51. 10 Days Internship Program on "Nanotechnology" organized by Institute of Innovations, Tiruvannamalai during 13-23 July, 2020
  52. Five Day Online Faculty Development Program on "Latest Trends and Future Prospects of Biotechnology" organized by Department of Biotechnology, National Institute of technology, Andhra Pradesh during 6-10 July 2020
  53. One Week online Faculty Development Program on "Waste to Bioenergy" organized by Sharda University, NCR and Maharashtra Institute of Technology, Aurangabad during 28 June to 4 July, 2020
  54. Attended online webinar on "Effect of automotive pollution on Environment" organized by MEA Engineering college, Kerala on 05.06.2020
  55. Participated in one day internal webinar on "Flexible energy storage devices" organized by IST, JNTU, Hyderabad and Dayalbagh Educational Institutem, Agra on 20.06.2020 under DST SERB and TEQIP III:Mentoring/Twinning system
  56. Completed online "E- Quiz on Awareness on Genetics and Evolution" organized by the P.G. Research Department of Zoology, Rajah Serfoji Government College (Autonomous), Thanjavur - 613 005, Tamil Nadu
  57. Completed and secured 80% in the national level E-Quiz on "Environmental Pollutuion & remediation" conducted by Heredity Life sciences pvt ltd from 25-30 June 2020
  58. Five Days International Symposium on "Recent Advances in Electrochemical Sciences for Energy and Environment" organized by School of Science and Humanities and Department of Chemistry of Sathyabama Institute of Science and Technology during 15-19 June 2020
  59. One Week Tequip-III sponsored short term course on "Trends and Prospects in Biorefinery" organized by Dr B.R. Ambedkar National Institute of Technology, Jalandhar during 10-14 June 2020
  60. Organized a One Week webinar cum FDP Series on "Current Progress and Future Prospects of Biotechnology" organized by Department of Biotechnology, Chaitanya Bharathi Institute of Technology (A), Hyderabad in association with Andhra Pradesh Akademi of Sciences during 8-13 June 2020
  61. Five Day Faculty Development Program on "Biofuels & its applications in IC Engines" organized by MEA Engineering College, Perinthalmanna during 1-5 June 2020
  62. One week Online faculty Development Program on "Outcome Based Education (OBE) and NBA Accreditation Process (UG) organized by Chaitanya Bharathi Institute of Technology (A), Hyderabad
  63. Five Day national Level Online Faculty Development Program on "Artificial Intelligence" organized by Department of CSE, IT and MCA in collaboration with Brain-O-Vision India Pvt. Ltd. During 22-26 May 2020
  64. participated in webinar on "Publishing Research Articles in Scopus Indexed Journals" conducted by CBIT - School of Management Studies on 24th June, 20



65. Participated in IIC online sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi during 28 April to 22 May 2020
66. One Day Workshop on "Anaerobic digestion and Plant operations" an International workshop jointly organized by Sino-Forest Applied Research Centre for Pearl River Delta Environment (ARCPE) and Hong Kong Baptist University, Hong Kong on 8 December 2016
67. Two Days International Workshop "Strengthening networking on biomass research and biowaste conversion-biotechnology for Europe India integration (SAHYOG)" on "Biomass Production, Conversion and Utilization : Indian Context" 2014 organized by Appropriate Rural Technology Institute (ARTI) and Vaikunth Mehta National Institute of Cooperative Management, Pune on 22-23 May 2014
68. Twelve Days Short Term Training on Advanced Research Techniques (START -2013), held at National Facility for Marine Cyanobacteria, Bharathidasan University, from 8-19 April 2013
69. Two Days First Aid Training Program conducted by St. John Ambulance Association organized at Indian Institute of Chemical Technology, Hyderabad on 23 & 24th August 2012.
70. Five Days Workshop on "Wetland Ecology and Restoration" Sponsored by TNSCST and organized by Madras Christian College, Chennai from 1-5th Sep 2010
71. One Month Inplant training on "Environmental Monitoring in Bio Pharmaceutical Industry" at Shantha BioTechnics Limited, Hyderabad; during May 4th -June 4th, 2007.
72. Four Months German Language course for Beginners conducted by Sathyabama University, from January to April 2006

#### **Trainings and Workshops CONDUCTED**

73. Convenor and Faculty Organizer- International Conference on Biotechnology and Interdisciplinary Technologies (iCBIT-2021) held during 8-12 November 2021
74. Faculty Co-ordinator- Five Day Online Faculty Development Program on "Latest Trends and Future Prospects of Biotechnology" organized by Department of Biotechnology, CBIT, Hyderabad during 6-10 July 2020
75. Organizing Member- "Biotechnicas-2020" (One week hands on Workshop on "Techniques of Biotechnology" organized by Department of Biotechnology, Chaitanya Bharathi Institute of Technology (Autonomous), Gandipet, Hyderabad during 16-21 March, 2020

Details of Journal Publications/ Conferences (**National and International**)

#### **International Publications:**

1. Alisha, C., Deepak Mohan Reddy, S., Jahanavi, M., **Nagendranatha Reddy, C.**, (2022). Gut-Brain Axis, Neurodegeneration and Mental Health: A personalized medicine perspective. Indian Journal of Microbiology. <https://doi.org/10.1007/s12088-022-01033-w> (IF: 2.461)
2. **C. Nagendranatha Reddy**, S. Kondaveeti, G.M. Krishna, B. Min (2022). Application of bioelectrochemical systems to regulate and accelerate the anaerobic digestion processes. Chemosphere. 287, 132299 (IF: 8.943)
3. **C. Nagendranatha Reddy**, Sanath Kondaveeti, Booki Min (2021). Influence of Trace Metals concentration on Methane generation using Microbial Electrochemical Systems. Process Biochemistry. 102, 213-219 (IF: 4.885)
4. Rajasri Y, Hariprasad R, John Reddy P, **C. Nagendranatha Reddy**, Chandrasekhar K (2021). Simultaneous Production of Astaxanthin and Lipids from Chlorella Sorokiniana in the presence of Reactive Oxygen Species: A Biorefinery Approach. Biomass Conversion and Biorefinery. <https://doi.org/10.1007/s13399-021-01276-5> (IF: 4.050)
5. Y. Rajasri, R. Hariprasad, M. Snehasri, **C. Nagendranatha Reddy**, V. Ashok Kumar, K. Chandrasekhar (2020). Simultaneous production of flavonoids and lipids from the Chlorella Vulgaris and Chlorella Pyrenoidosa. Biomass Conversion and Biorefinery. <https://doi.org/10.1007/s13399-020-01044-x> (IF: 4.050)
6. J.A. Modestra, **C. Nagendranatha Reddy**, K.V Krishna, B. Min, S. Venkata Mohan (2020). Regulated surface potential impacts bioelectrogenic activity, interfacial electron transfer and microbial dynamics in microbial fuel cell. Renewable Energy. 149, 424-434. (IF: 8.634)

7. **C. Nagendranatha Reddy**, S. Bae, B. Min (2019). Biological removal of H<sub>2</sub>S gas in a semi-pilot scale biotrickling filter: Optimization of various parameters for efficient removal at high loading rates and low pH conditions. *Bioresource Technology*. 285, 121328. (IF: 11.889)
8. **C. Nagendranatha Reddy**, H.T.H. Nguyen, M.T. Noori, B. Min (2019). Potential applications of algae in the cathode of microbial fuel cells for enhanced electricity generation with simultaneous nutrient removal and algae biorefinery: Current status and future perspectives. *Bioresource Technology*. 292, 122010. (IF: 11.889)
9. F. Carla, **C. Nagendranatha Reddy**, B. Min (2019). Enhanced methane production from acetate intermediate by bioelectrochemical anaerobic digestion at optimal applied voltages. *Biomass & Bioenergy*. 127, 105261 (IF: 5.774)
10. J. Gavilanes, **C. Nagendranatha Reddy**, B. Min (2019). Microbial electrosynthesis of bio-alcohols through reduction of high concentrations of volatile fatty acids. *Energy & Fuels*. 33, 4264-4271 (IF: 4.654)
11. M. Lee, **C. Nagendranatha Reddy**, B. Min (2019). In situ integration of microbial electrochemical systems into anaerobic digestion to improve methane fermentation at different substrate concentrations. *International Journal of Hydrogen Energy*. 44, 2380-2389 (IF: 7.139).
12. **C. Nagendranatha Reddy**, A.N. Kumar, S. Venkata Mohan (2018). Metabolic phasing of anoxic-PDBR for high rate treatment of azo dye wastewater. *Journal of Hazardous Materials*. 343, 49-58. (IF: 14.224)
13. **C. Nagendranatha Reddy**, S. Venkata Mohan (2016). Integrated bio-electrogenic process for bioelectricity production and cathodic nutrient recovery from azo dye wastewater. *Renewable Energy*. 98, 188-196 (IF: 8.634)
14. S.Venkata Mohan, G.N. Nikhil, P.Chiranjeevi, **C. Nagendranatha Reddy**, M.V. Rohit, A.N. Kumar, O. Sarkar (2016). Waste Biorefinery Models towards Sustainable Bioeconomy: Critical Review and Future Perspectives. *Bioresource Technology*. 215, 2-12. (IF: 11.889)
15. **C. Nagendranatha Reddy**, A.N. Kumar, J.A. Modestra, S. Venkata Mohan (2014). Induction of anoxic microenvironment in multi-phase metabolic shift strategy during periodic discontinuous batch mode operation enhances treatment of azo dye wastewater. *Bioresource Technology*. 165, 241-249 (IF: 11.889)
16. S. Venkata Mohan, **C. Nagendranatha Reddy**, A.N. Kumar, J.A. Modestra (2013). Relative performance of biofilm configuration over suspended growth operation on azo dye based wastewater treatment in periodic discontinuous batch mode operation. *Bioresource Technology*. 147, 424-433. (IF: 11.889)
17. S. Sreelatha, G. Velvizhi, **C. Nagendranatha Reddy**, J.A. Modestra, S. Venkata Mohan (2015). Solid Electron Acceptor Effect on Biocatalyst Activity in Treating Azo dye Based Wastewater. *RSC Advances*. 5, 95926-95938. (IF: 4.036)
18. S. Sreelatha, **C. Nagendranatha Reddy**, G. Velvizhi, S. Venkata Mohan (2015). Reductive behaviour of acid azo dye based wastewater: Biocatalyst activity in conjunction with enzymatic and bio-electro catalytic evaluation. *Bioresource Technology*. 188, 2-8. (IF: 11.889)
19. A.N. Kumar, **C. Nagendranatha Reddy**, S. Venkata Mohan (2015). Biomineralization of azo dye bearing wastewater in periodic discontinuous batch reactor: Effect of microaerophilic conditions on treatment efficiency. *Bioresource Technology*. 188, 56-64. (IF: 11.889)
20. A.N. Kumar, **C. Nagendranatha Reddy**, R.H. Prasad, S. Venkata Mohan (2014). Azo dye load-shock on relative behavior of biofilm and suspended growth configured periodic discontinuous batch mode operations: Critical evaluation with enzymatic and bio-electrocatalytic analysis. *Water Research*. 60,182-196. (IF: 13.4)
21. S.V. Raghavulu, J.A. Modestra, K. Amulya, **C. Nagendranatha Reddy**, S. Venkata Mohan (2013). Relative effect of bio-augmentation with electrochemically active and non-active bacteria on bioelectrogenesis in microbial fuel cell. *Bioresource Technology*. 146, 696-703. (IF: 11.889)

#### National Journals

1. **C. Nagendranatha Reddy**, K. Arunasri, Y.D. Kumar, K.V. Krishna, S. Venkata Mohan (2016). Qualitative in vitro evaluation of Plant Growth Promoting Activity of Electrogenic Bacteria from Biohydrogen producing Microbial Electrolysis Cell towards Biofertilizer Application. *Journal of Energy and Environmental Sustainability*. 1, 47-51.
2. S. Venkata Mohan, S. Dahiya, G. Velvizhi, **C. Nagendranatha Reddy** (2016). Eco-Villages: Holistic Approach towards Sustainable Rural Development. *Journal of Energy and Environmental Sustainability*. 2, 55-63
3. S. Venkata Mohan, K. Amulya, J.A. Modestra, O. Sarkar, A.N. Kumar, M.V. Rohith, **C.**

**Nagendranatha Reddy** (2014). Bioenergy from waste remediation: Recent Advances towards Environmental Biorefinery- Invited article for inaugural of JUET Research journal of Science and Technology. 1, 73-84

