

	Name of Faculty	<b>Dr.Rajasri Yadavalli</b>	
	Designation	Associate Professor, Department of Biotechnology	
	Nature of Job/Appointment	Contract	
	Date of Joining	30-05-2019	
	E-mail	rajasriy_biotech@cbit.ac.in	
	Education Qualifications	Name of the Degree	Class
	Ph. D	Doctor of Philosophy (Biotechnology)	Awarded
	PG	M. Tech. (Chemical engineering)	First
	UG	B.Tech (Chemical engineering)	First with Distinction
	Work Experience	Total 21 yr 4months	
	Teaching	21 yr 4months	
	Research	16 years(along with teaching)	
	Industry	--	
	Others	--	
	Area of Specialization	Bioprocess engineering, Microalgal Biotechnology, Alternate Biofuels	
	Professional Memberships	<ol style="list-style-type: none"> <li>1. The Biotech Research Society India</li> <li>2. Indgiants Association if Educators &amp; Professional Trainers</li> <li>3. Association of Food Scientists &amp; Technologists, India</li> <li>4. European federation of Biotechnology</li> <li>5. Bharatiya shikshan mandal</li> <li>6. Asian Phytopathological Society</li> </ol>	
	Responsibilities held at Institution Level	<ul style="list-style-type: none"> <li>• Head Department of Biotech from Oct 2024 to Oct 2025</li> <li>• Common BoS Meeting member at College level (till Oct 2025)</li> <li>• I/C Head, Department of Biotechnology, 06-06-2019 to till 28-02-2023</li> <li>• Co Chairman-Green Audit Committee</li> <li>• Regulatory and Core committee member from 2<sup>nd</sup> April 2020 to Oct 2025</li> <li>• Academic council member from 16-05-2020 to Feb 2023</li> <li>• STRIDE,UGC quality mandate implementation member from 8-04-2020 to Feb 2023</li> <li>• Anti Ragging Squad member from 25-02-2020 to Feb 2023 and from Oct 2024 to Oct 2025</li> <li>• Disciplinary committee member from 25-02-2020 to Feb 2023 and from Oct 2024 to Oct 2025</li> <li>• Institute Innovation cell member from 25-02-2020 to till date</li> <li>• Career development cell, member from 25-02-2020 to Feb 2023</li> <li>• Member in drafting IPR and Innovation policies for institute</li> <li>• NIRF innovation Overall coordinator</li> </ul>	
	Responsibilities held at Department Level	<ul style="list-style-type: none"> <li>• Chairman Board of Studies, till Feb 2023 and from Oct 2024 to Oct 2025</li> <li>• Chairman, Performance Assessment Committee till Feb 2023 and from Oct 2024 to Oct 2025</li> <li>• Chairman, Department Advisory Board till Feb 2023 and from Oct 2024 to Oct 2025</li> <li>• Chairman, Course Expert Group till date</li> </ul>	

Research Guidance	<ul style="list-style-type: none"> <li>• Trained an IIT Tirupati PhD candidate In algal culturing techniques for a period of 10days in June 2024</li> <li>• Guided more than 37 B.Tech student projects and Internships from 2005 to 2022</li> <li>• Co supervised two students Jeremiah Paul and D Navya sree in successfully completing project entitled "Transesterification of CNSL (Cashew Nut Shell Liquid)" assigned by University of South Africa along with Prof V Vasudeva rao,Professor, Mechanical Engg department from July 2021 to September 2021.</li> <li>• Co Supervised Ms K. Manjusha , Research Scientist, R &amp;D ,UPES ,Dehradun for completion of her Ph.D thesis on "Algal based waste water treatment and biofuels production" from 2016 to 2018</li> <li>• Guided M.Tech Biotechnology student on "Treatment of Dairy Effluent using microalgae in open and closed pond systems with simultaneous studies on the algal biomass compositions" for submission of his Mtech Thesis in Sreenidhi Institute of Science and Technology, Hyderabad from August 2012 to August 2013</li> </ul> <p><b>Listed as panel of PhD examiner by</b></p> <ul style="list-style-type: none"> <li>• University of South Africa, South Africa</li> <li>• Manipal Institute of Technology, MAHE,Manipal University,India</li> <li>• Kamaraj College, Thoothukudi,Tamilnadu,India</li> <li>• Cochin University</li> </ul>
Awards Received	<ul style="list-style-type: none"> <li>• Selected as Top 100 teams and Youtube star award (Third place) for our "Bioplastic products from seaweeds" at All India level out of 15000 teams in the SBI College Youth Ideathon 2025 organised by ThinkStartup ,IIT Delhi and MEPSC from April 5-6, 2025.</li> <li>• Successfully completed 12 weeks course on Patent Law and Global Public Health ["PatentX"], offered jointly by the World Intellectual Property Organization (WIPO) in Geneva, Switzerland, and the Harvard Law School (HLS), in Cambridge, Massachusetts, United States of America in May 2025.</li> <li>• Successfully completed the "Foundations of GMP" a 10 module training program offered by US Pharmacopeia Education Portal in July 2024</li> <li>• Received a sanction of Rs 26,000/- for the BRSI Biotechnology popularization and skill development program for school children from BRSI, India conducted from 4th to 5th October 2024</li> <li>• The idea of "developing sustainable biopackaging films from seaweeds " has won two first prizes in Grand Finale of Women Hackathon 2.0 conducted by National Institute for Micro, Small and Medium Enterprises (ni-msme), on March 7, 2024 and 9th International Food Convention Organised by ASSOCIATION OF FOOD SCIENTISTS &amp; TECHNOLOGISTS, Mysuru in Dec 2023 respectively.</li> <li>• Selected for 4-days leadership training program under the Women in Space and Allied Science Leadership Program (WisLP) of Department of Science and Technology, Govt. of India. New Delhi in collaboration with British Council at IIT Indore, 18-21st Feb 2025.</li> <li>• Dr Y Rajasri is invited as Review Editor on the Editorial Board of Bioenergy and Biofuels (specialty section of Frontiers in Energy Research and Frontiers in Bioengineering and Biotechnology).</li> <li>• Guest Editor of the Special Issue "Sustainable Biotechnologies For Food, Fuel And Environment" for Energy Nexus published by Elsevier Ltd</li> <li>• Dr.Y Rajasri has been invited to review reputed journals of Frontiers in Microbiology ,Environmental Progress, Frontiers in Microbiology ,Environmental Progress</li> <li>• Nominated as Advisory member for implementation of Skill Vigyan Program,DBT,GOI at state level by Telangana State Council of Science and Technology(TSCOST)</li> <li>• Travel Grant by DST-SERB and UGC, Government of India</li> </ul>

		<p>of worth Rs 1.5 lakhs for research paper presentation " 8th Asian-Oceanian Symposium on Plant Lipids (ASPL2019)" organized by The Commonwealth Scientific and Industrial Research Organization (CSIRO), Canberra, Australia from 19th Nov to 22nd Nov 2019</p> <ul style="list-style-type: none"><li>• Travel Grant by UGC, Government of India of worth Rs 2 lakhs for research paper presentation on "Integrated approach for treating dairy effluent using Chlorella pyrenoidosa and energy-efficient production of biomass in an internally illuminated bubble column photobioreactor" at the 4th International Conference on Algal Biomass,Biofuels and Bioproducts-2014,held at Santa Fe,New Mexico, United States of America organized by Elsevier Inc.from June 15th-18th 2014</li><li>• Young Engineers Award 2013-14 in Chemical Engineering discipline awarded by Institute of Engineers, India</li><li>• Recognition and Appreciation for Research for three consecutive years 2013,2014 and 2015 from Sreenidhi Institute of Science and Technology</li><li>• Won Best Teacher Award in 2014,2015 from Sreenidhi Institute of Science and Technology.</li><li>• Best Merit Student award in B.Tech from 1998-2002.</li><li>• Nagarjuna University VIII Rank in B.Tech Chemical Engineering in 2002</li></ul>				
	Courses Handled at Under Graduate / Post Graduate Level.	Bioprocess engineering, downstream Processing, Bioprocess dynamics and control, Process principles and reaction engineering				
	No. of Papers Published	<table><tr><td>National Journals – 03</td><td>International Journals – 19</td></tr><tr><td>National Conferences – 00</td><td>International Conferences – 02</td></tr></table>	National Journals – 03	International Journals – 19	National Conferences – 00	International Conferences – 02
National Journals – 03	International Journals – 19					
National Conferences – 00	International Conferences – 02					
	Projects	<ul style="list-style-type: none"><li>• “Establishment of Atal Community Innovation Center at CBIT for encouraging startups” Project Coordinator/SPOC: Dr. Rajasri Yadavalli Sponsoring agency: Atal Innovation Mission Budget: Rs 2 .25 crores Duration: March 2021 to March 2026</li><li>• “Microalgal Biomass Production in Energy Efficient Internally Illuminated Bubble Column Photobioreactor (IIBCPBR) For Biodiesel Production” Principal Investigator: Dr. Rajasri Yadavalli Co-Principal Investigator: Dr C S Rao &amp; Dr. Ramgopal Rao Sponsoring Agency: DBT, Govt of India Budget: 33.82 lakhs Duration: Sept 2016-Aug 2018</li></ul>				
	Consultancy	<p><b>Title:</b> A device to absorb Carbon Dioxide from the atmosphere <b>Budget:</b> Rs 75,000/- <b>Company:</b> Neonflake Enterprises (OPC) Pvt Ltd <b>Duration:</b> Sept 2022 to March 2023</p>				
	Patents	<ul style="list-style-type: none"><li>• “Swellable Hydrogel Films Incorporated With Quaternary Ammonium Compounds” by Inventors K. Dharmalingam, Rajasri Yadavalli, G. Vijaya Laxmi Kiran Yellappa Vajanthri with Application Number-202341034437, Publication Date-30/06/2023 at Indian Patent Office</li><li>• “A Method For Development Of Sustainable Packaging From Seaweeds And Biodegradable Composition Thereof” by Inventors Rajasri Y, K. Dharmalingam, Nitin Ratnam Badhe, Banalla Shreya, with Indian Patent Application No. 202441044350, Publication date: June 14, 2024.</li><li>• “Nonsteroidal Anti-Inflammatory Drug (Nsad) Loaded Hydrogel Films” by Inventors K. Dharmalingam, Rajasri Yadavalli, G. Vijaya Laxmi, Kiran Yellappa Vajanthri, Aishwarya CVS, Vaishnavi Mokkaleti, Kansoth Abhishek Naik with Indian Patent Application No. 202441094199A, Publication date: December 13, 2024.</li><li>• “Antibacterial Swellable Nanocomposite Polymeric Films” by Inventors K. Dharmalingam, Rajasri Yadavalli, Sai Hari Hara Sudheshna Chunduru, Sharvani Pokala with Indian Patent Application No. 202441097799, Publication date: December 20, 2024.</li></ul>				

	Technology Transfer	--
	Invited Speaker	<ul style="list-style-type: none"> <li>Delivered an invited talk as Distinguished Speaker on Seaweed-Based Bioplastics: A Sustainable Alternative for Packaging Applications – Opportunities and Challenges at the 2nd International Symposium on Advances in Algal Research (AAR 2024) , 17-18 DEC 2024 in Hyderabad organized by Indian Institute of Technology (IIT), Guwahati, India and CSIR-IICT.</li> <li>Delivered a guest lecture on “IPR and Startups” in one week National e-Workshop on Innovation and Intellectual Property Rights (NeW IPR-2022) organized by CSIR-Institute of Minerals and Materials Technology (IMMT) , Bhubaneswar, India from June 13-18, 2022.</li> <li>Will deliver an invited talk in International Conference on Biotechnology for Sustainable Bioresources and Bioeconomy (BSBB-2022) and the XIX Convention of the Biotech Research Society, India (BRSI) which will be held during December 7-11, 2022 at Indian Institute of Technology (IIT), Guwahati, India.</li> <li>Delivered a guest lecture on “Motivation towards Entrepreneurship” at Vignan 's Institute of Management and Technology For Women, Telangana on 20th Dec 2021</li> <li>Organized an online International Conference On Biotechnology and Interdisciplinary Technologies (iCBIT'21) as Conference Organizing secretary in association with FABA academy and ACIC-CBIT from 8-12 November 2021</li> <li>Delivered an online guest lecture on “Microalgal biotechnology” during FDP in Emerging trends in Biotechnology organized by Genesin of educational Impressions, Uttarakhand, on 26th April 2021</li> <li>Delivered a guest lecture on “Biofuels” at Oakridge International School as a part of #Oak inspireon program to inculcate the culture of research in children on 5th Feb 2019</li> <li>Delivered an Invited lecture on “Optimization of microalgal cultivation for biodiesel and value added products in a bio refinery approach” at International conference International Conference on Biotechnological Research and Innovation for Sustainable Development, XV BRSI Convention jointly organised by CSIR-IICT and BRSI from Nov 22nd to 25th 2018</li> </ul>
	No. of Books/Chapter Published with details:15	<ul style="list-style-type: none"> <li>Advait, R., Bhoomika, D., Aditya, S., Mishra, B., Rajasri, Y., Sanjeeb Kumar, M., Nagendranatha Reddy., C., 2026. Production and Characterization of a Biofloculant Produced by Marine-Based Microbes and Its Applications in Wastewater Treatment. In: Mandal, S.K., Mishra, B., Shah, M.P. (eds) Biofloculants for Wastewater Treatment. Advances in Wastewater Research. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-96-9764-9_16">https://doi.org/10.1007/978-981-96-9764-9_16</a></li> <li>Bhavana, P., Dhruthi, D., Disha, P., Laya, V., Rajasri, Y., Mishra, B., Nagendranatha Reddy, C., 2026. State of the Art and Multifaceted Applications of Biofloculants for the Remediation of Petroleum Refinery Wastewater. In: Mandal, S.K., Mishra, B., Shah, M.P. (eds) Biofloculants for Wastewater Treatment. Advances in Wastewater Research. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-96-9764-9_9">https://doi.org/10.1007/978-981-96-9764-9_9</a></li> <li>Vanga Sri Varsha, Tanmayi Boreda, Sanjana Reddy Pailla, Yashasvi Kambhampati, T Gourav, Rajasri Yadavalli, G Vijaya Laxmi, Sphoorthy Nadimpalli, C Nagendranatha Reddy (2025). Nanotechnology and Microbes: Revolutionizing Water Management. In: Mohanta, Y.K., Mishra, B., Pudake, R.N. (eds) Nano-microbiology for Sustainable Development. Springer, Cham. <a href="https://doi.org/10.1007/978-3-031-78845-1_12">https://doi.org/10.1007/978-3-031-78845-1_12</a></li> <li>Sanjeeb Kumar Mandal, Rishivika Shruthi Vankadara, Bhavya Thanda, Chikitha Andela, Ruthika Rasala, Bishwambhar Mishra, B. Sumithra, C. Nagendranatha Reddy &amp; Rajasri Yadavalli . Exploring Plants and Microbes</li> </ul>



		<p>for Bioremediation of Industrial Wastewater. In: Shah, M.P. (eds) Microbial Remediation of Hazardous Chemicals from Water &amp; Industrial Wastewater Treatment Plant. Environmental Science and Engineering. Springer, Cham. <a href="https://doi.org/10.1007/978-3-031-62898-6_7">https://doi.org/10.1007/978-3-031-62898-6_7</a></p> <ul style="list-style-type: none"> <li>• Sanjeeb Kumar Mandal, Jyothika Meenakshi Kambhampati, V. Shreya Sharma, Valluru Sai Leela Sirisha, Pokala Sharvani, C. Nagendranatha Reddy, Rajasri Yadavalli, Bishwambhar Mishra, Chapter 4 - Gene prediction through metagenomics, Editor(s): Maulin P. Shah, In Development in Wastewater Treatment Research and Processes, Microbial Metagenomics in Effluent Treatment Plant, Elsevier, May 2024, Pages 63-92, ISBN 9780443135316, <a href="https://doi.org/10.1016/B978-0-443-13531-6.00013-6">https://doi.org/10.1016/B978-0-443-13531-6.00013-6</a>.</li> <li>• Rajasri Yadavalli, Ch S H Sudheshna, Kolluru Naga Venkata Sujatha, Peri Shreenija, C Nagendranatha Reddy, Bishwambhar Mishra, Sanjeeb Kumar Mandal Recent advances in reactor design for treatment In: Aerobic and Anaerobic Microbial Treatment of Industrial Wastewater of industrial wastewater. CRC Press. ISBN: 978-1-032-46358-2 (In Press)</li> <li>• C Nagendranatha Reddy, Divyanshu S, Charan MCK, Pravalila R, Hamshini K, Kavaya P, Rajasri Yadavalli, Bishwambhar Mishra, Sanjeeb Kumar Mandal. Aerobic and anaerobic digestion of Textile waste water, In: Aerobic and Anaerobic Microbial Treatment of Industrial Wastewater of industrial wastewater. CRC Press. ISBN: 978-1-032-46358-2 ,2024</li> <li>• Rajasri Yadavalli, C. Nagendranatha Reddy, Bishwambhar Mishra, Chandrasekhar K, Vineetha Y, A Shalini, Potential applications of Microalgae and its derivatives in various industries: A Future Bioeconomy In: Algal Biotechnology: Current Trends, Challenges and Future Prospects for a Sustainable Environment (1st ed.). CRC Press. <a href="https://doi.org/10.1201/9781003219156">https://doi.org/10.1201/9781003219156</a> (In Press)</li> <li>• Balaji Doolam, Divyamshu Surabhi, Chandan Kumar Gautam, Rajasri Yadavalli, Naru Rakesh Reddy, Aishwarya Kulkarni, Karthikeya S V Gottimukkala, Sanjeeb Kumar Mandal, Bishwambhar Mishra , Role of different types of carbon nanotubes in food sciences and food sensing applications, In: Carbon-Based Nanomaterials in Biosystems. <a href="https://doi.org/10.1016/B978-0-443-15508-6.00005-1">https://doi.org/10.1016/B978-0-443-15508-6.00005-1</a> (In Press)</li> <li>• S. Deepak Mohan Reddy, N. Deepika, Meghana Reddy Dropathi, Vishwanutha S, J Dhanish Daaman, C. Nagendranatha Reddy, Rajasri Yadavalli* (Jan 2023). Factors affecting the Microalgal productivity in Photobioreactors. In Ranjna Sirohi, Ashok Pandey , Sang Jun Sim , Jo-Shu Chang, Duu-Jong Lee (Eds.), Current Developments in Biotechnology and Bioengineering: Photobioreactors: Design and Applications Elsevier. ISBN: 9780323999113</li> <li>• C. Nagendranatha Reddy, Y. Vineetha, A. Priyanka, A. Shalini, Bishwambhar Mishra, Y. Rajasri, V. Swapna, Chapter 29 - Techno-economic and environmental impact analysis of biofuels produced from microalgal biomass, Editor(s): Baskar Gurunathan, Renganathan Sahadevan, Biofuels and Bioenergy, Elsevier, 2022, Pages 687-712, ISBN 9780323900409, <a href="https://doi.org/10.1016/B978-0-323-90040-9.00006-0">https://doi.org/10.1016/B978-0-323-90040-9.00006-0</a>.</li> <li>• Arvind Bangaru, Kamasani Aarya Sree, Chandana Kruthiventi, Meenakshi Banala, Vadapalli Shreya, Y Vineetha, A Shalini, Bishwambhar Mishra, Rajasri Yadavalli, K Chandrasekhar, C Nagendranatha Reddy (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. <a href="https://doi.org/10.1007/978-981-16-8090-8_4">https://doi.org/10.1007/978-981-16-8090-8_4</a></li> </ul>
--	--	--

		<ul style="list-style-type: none"> <li>Bishwambhar Mishra, Rajasri Yadavalli, Y. Vineetha, C. Nagendranatha Reddy* (2020). Recent advancements and challenges of nanomaterials application in biofuel production. In "Praveen Kumar R et al. (Eds.) Nanomaterials Application in Biofuels and Bioenergy Production Systems (pp. 7-43) United Kingdom:Elsevier, ISBN: 978-012-82-2401-4.</li> <li>Sunita Varjani, Bishwambhar Mishra*, Rajasri Yadavalli, Xuan-Thanh Bui, Mohammad J. Taherzadeh, Dinesh Chand Agrawal, Siming You, Jo-Shu Chang (2020).Petroleum waste biorefinery: A way towards a circular economy. In Thallada Bhaskar et al. (Eds.), Waste Biorefinery,(pp. 375-385):Elsevier, ISBN: 9780128218792</li> <li>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 (Ed.), Biorefineries: A Step Towards Renewable and Clean Energy. Clean Energy Production Technologies. (pp. 417-436).Singapore:Springer</li> </ul>
	Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other Trainings ( <b>Attended and/or Organized</b> ).	<ul style="list-style-type: none"> <li>Organized One Week Faculty Development Program (FDP) On "Current Science &amp; Development in Nanobiotechnology" by Department of Biotechnology, Chaitanya Bharathi Institute of Technology (A), Hyderabad in association with MBSI, India during 29-01-2024 to 02-02-2024</li> <li>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 from 28th May to 5th June 2020</li> <li>Attended Interactive hands on Effective online teaching workshop organized by IIT, Bombay on 16-05-2020</li> <li>NATE course of 12 weeks offered by NATE in June 2020</li> <li>Attended five days hands on workshop on "patent searching, drafting and filing" (online mode) from 29-05-2020 to 02-06-2020</li> <li>Attended 4-days Online Course on Examination Reforms conducted during organized by AICTE 22-25 April, 2020</li> <li>Attended webinar on Importance of communication skills in Borderless community organized by Prometric on 28-04-2020</li> <li>Attended Webinar on Research workflows, Research Metrics and Excellence in Academic Institutes organized by AICTE and Elsevier on 14-05-2020</li> <li>Attended Webinar on Strengthening Research capabilities remotely Empowering Indian Research on COVID-19 organized by DBT &amp;Elsevier on 22-05-2020</li> <li>Attended Webinar on Outcome based education software organized by Vmedulife on 11-06-2020</li> <li>Attended Webinar on Innovation, Incubation &amp; Entrepreneurship organized by ESCI on 26 June 2020</li> <li>Attended Webinar on Achievements of women in Military IIC MHRD, Leadership talk on 02-05-2020</li> <li>Attended Webinars on Innovation and Incubation organized by ACIC ,AIM from 1st April to 29th May 2020</li> <li>Attended Webinars on Innovation and Incubation and Entrepreneurship organized by IIC MHRD sessions 29th April to 22nd May 2020</li> </ul>
	Details of Journal Publications/ Conferences ( <b>National and International</b> )	Total Journal Publications: 22 Papers presented at National conferences: 10 Papers presented at International conferences: 20
	<b>Peer Reviewed Publications</b>	

- Mishra, B., Kallem, P., Yadavalli, R. et al. Industrial wastewater treatment using extracellular polymer substances/biofloculants: a review. *Appl Water Sci* 15, 58 (2025). <https://doi.org/10.1007/s13201-025-02401-9>
- Bishwambhar Mishra, Awdhesh Kumar Mishra, Yugal Kishore Mohanta, Rajasri Yadavalli; Dinesh Chand Agrawal, Himavarshini Parvath Reddy, Rithika Gorrepati, Chintakunta Nagendranatha Reddy, Sanjeeb Kumar Mandal; Mohammad Zaki Shamim, Jibanjyoti Panda. Postbiotics: the new horizons of microbial functional bioactive compounds in food preservation and security. *Food Prod Process and Nutr* 6, 28 (2024). <https://doi.org/10.1186/s43014-023-00200-w>
- Lakshmayya NSV, Panday Ashoutosh, Yadavalli Rajasri, Reddy Nagenrdanatha C, Mandal Kumar Sanjeeb, Agrawal Chand Dinesh and Mishra Bishwambhar\*, Food Contamination with Micro-plastics: Occurrences, Bioavailability, Human Vulnerability, and Prevention, *Current Nutrition & Food Science* 2023; 19. <https://dx.doi.org/10.2174/1573401319666230915164116> (Scopus,Q3 Journal)
- C. Nagendranatha Reddy, Parashuram Kallem, K.V.S.S.N. Mounika, Abdul Muqet, J Caleb Joel Raj, C.V.S. Aishwarya, Rakesh Kumar Gupta, Veerababu Poliseti, Bishwambhar Mishra, Y. Rajasri, Sanjeeb Kumar Mandal, Mikael S. Hedenqvist, Fawzi Banat, Review of microplastic degradation: Understanding metagenomic approaches for microplastic degrading organisms, *Polymer Testing*, 2023, 108223, ISSN 0142-9418, <https://doi.org/10.1016/j.polymertesting.2023.108223>. (SCI; Thomson reuters Impact Factor: 5.1)
- Bishwambhar Mishra, Yugal Kishore Mohanta, C. Nagendranatha Reddy, S. Deepak Mohan Reddy, Sanjeeb Kumar Mandal, Rajasri Yadavalli, Hemen Sarma, Valorization of agro-industrial biowaste to biomaterials: An innovative circular bioeconomy approach, *Circular Economy*, Volume 2, Issue 3, 2023, 100050, ISSN 2773-1677, <https://doi.org/10.1016/j.cec.2023.100050>
- Rajasri Yadavalli\*, Praharshita Valluru, Roshni Raj, Nagendranatha Reddy C, Bishwambhar Mishra. Biological Detoxification of Mycotoxins: Emphasis on role of Algae. *Algal Research* Volume 71, 2023, 103039, ISSN 2211-9264, <https://doi.org/10.1016/j.algal.2023.103039> (Scopus, SCI, IF:5.276)
- Anitha Mogilicharla, V. Swapna, Rajasri Yadavalli\*. Effect of semi batch and fed batch addition of glucose on alkaline protease production: A Multi-objective optimization approach. *International Journal of Engineering Systems Modelling and Simulation*, Vol. 14, No. 4, 2023 (Online publication date: Fri, 06-Oct-2023). (SCOPUS Indexed) DOI: 10.1504/IJESMS.2022.10046792
- Yadavalli, R., Ratnapuram, H., Peasari, J.R. et al. Simultaneous production of astaxanthin and lipids from *Chlorella sorokiniana* in the presence of reactive oxygen species: a biorefinery approach. *Biomass Conv. Bioref.* (2021). <https://doi.org/10.1007/s13399-021-01276-5>(SCI, IF:4.05)
- Yadavalli, R., Ratnapuram, H., Motamarry, S. et al. Simultaneous production of flavonoids and lipids from *Chlorella vulgaris* and *Chlorella pyrenoidosa*. *Biomass Conv. Bioref.* (2020). <https://doi.org/10.1007/s13399-020-01044-x>(SCI, IF:4.05)
- Manoj Kumar Enamala, Swapnika Enamala, Murthy Chavali, Jagadish Donepudi, Rajasri Yadavalli, Bhulakshmi Kolapalli, Tirumala Vasu Aradhyula, Jeevitha Velpuri, Chandrasekhar Kupam "Production of biofuels from microalgae - A review on cultivation, harvesting, lipid extraction, and numerous applications of microalgae" *Renewable and Sustainable Energy Reviews* 94, 2018, 49–68(SCI; Thomson reuters Impact Factor: 8.050)
- Rajasri Yadavalli, John Reddy Peasari, Priyadarshini Mamindla, Praveenkumar, Sri Mounika, Jayasree Ganugapati "Phytochemical screening and in silico studies of flavonoids from *Chlorella pyrenoidosa*" *Informatics in Medicine Unlocked*(Elsevier Publ.)Volume 10, 2018, Pages 89–99(SCOPUS Indexed)
- Hariprasad Ratnapuram, SS Vutukuru, Rajasri Yadavalli "Mixotrophic transition induced lipid productivity in *Chlorella pyrenoidosa* under Stress Conditions for biodiesel production" *Heliyon* Elsevier publication Volume 4(1), 2018 (SCI)
- Yadavalli, R; Ratnapuram, Hariprasad. A novel approach to study the metabolomics of a facultative microalgae *Chlorella sorokiniana* with transition in trophic mode by two stage operation in comparison with in silico studies *Phycologia*, Suppl. Supplement; Abingdon Vol. 56, Iss. 4, (Aug 2017): 201.
- Mounika Asuthkar, Yamini Ganti, Ramgopal Rao S, C S Rao, Rajasri Yadavalli. "Effect of Different Wavelengths of Light on the Growth of *Chlorella Pyrenoidosa*". *International Journal of Pharmaceutical Sciences and Research* (2016), Vol. 7(2): 847-851 (SCOPUS Indexed)
- Rajasri Yadavalli, Ramgopal Rao S, C S Rao "Lipid Productivity in *Chlorella Pyrenoidosa* Under Nitrogen Starvation: Energy Evaluation of An Internally Illuminated Bubble Column Photo Bioreactor" *Asian Jr. of Microbiol. Biotech. Env. Sc.* Vol. 16, No. (1): 245-251, 2014(SCOPUS Indexed; H Index : 10& NAAS Rating - 2.6
- Yadavalli, R., Rao, C. S., Rao, R. S. and Potumarthi, R. (2014), "Dairy effluent treatment and lipids production by *Chlorella pyrenoidosa* and *Euglena gracilis*: study on open and closed systems". *Asia-Pacific Jnl of Chem. Eng.* 9: 368–373. doi: 10.1002/apj.1805 (SCI; Impact Factor :0.797)
- Rajasri Yadavalli and Gowtham Rao H R V N "Two Stage Treatment of Dairy Effluent Using Immobilized *Chlorella pyrenoidosa*" *J Environ Health Science Eng.* 11: 36, 2013. (SCI; Impact Factor :1.23)
- Rajasri Yadavalli, Ramgopal Rao S and C. S. Rao, "Lipid Productivity of *Chlorella Pyrenoidosa* In A Customized Lab Scale Photobioreactor Under Stress Conditions" *International Journal of Chem Tech Research* Vol 5(2), 719-726, 2013. (SCOPUS Indexed; IC Value :4.91)
- Rajasri Yadavalli, Ramgopal Rao S and C. S. Rao, "Response Surface Methodological Approach to Optimize Process Parameters for The Biomass Production of *Chlorella Pyrenoidosa*" *International Journal of Bio-Technology and Research* Vol 3 (1), 37-48, 2013. (Impact Factor JCC: 1.2579).



- Rajasri Yadavalli and SS. Vutukuru "Growth responses of Chlorella pyrenoidosa in different media in the presence of an algacide "Water Health (M119)". Asian Jr. of Microbiol. Biotech. Env. Sc. Vol. 14(4): 497-500, 2012. (SCOPUS Indexed;H Index :9&NAAS Rating - 2.6)
- Rajasri.Y, S. Ramgopal Rao, C.S. Rao, "Lipid Accumulation Studies in Chlorella Pyrenoidosa Using Customized Photobioreactor- Effect of Nitrogen Source, Light Intensity and Mode of operation" International Journal of Engineering Research and Applications Vol 2(3), 2446-2453 ,2012. (SCOPUS Indexed)
- Rajasri Y, C.S. Rao, S. Ramgopal Rao, D. Chandrakanth Reddy and KSR Siva Sai "Effect of different culture media & light intensities on cell concentrations of Chlorella pyrenoidosa in photoautotrophic growth conditions" International Journal of Natural and Engineering Sciences Vol 4 (3), 53-57 ,2010. NAAS Rating - 2.6

#### Conference Publications

- Yadavalli, R. and Ratnapuram, H., 2017, August. A Novel Approach To Study The Metabolomics Of A Facultative Microalgae Chlorella sorokiniana With Transition In Trophic Mode By Two Stage Operation In Comparison With In Silico Studies. In PHYCOLOGIA (Vol. 56, No. 4, pp. 201-201). NEW BUSINESS OFFICE, PO BOX 1897, LAWRENCE, KS 66044-8897 USA: INT PHYCOLOGICAL SOC.

#### Papers Presented At International Conferences

- B Mishra, C Nagendranatha Reddy, Y Rajasri, Sanjeeb Kumar mandal has won 2nd prize in poster presentation entitled "Groundnut Oil Cake: Useful nutrient for Pullulan production by Staphylococcus lugdunensis" at the international Symposium on Progress Advancements and Research Knowledge (SPARK 2024) in biotechnology conducted by PG and Research dept of Biotechnology, Bishop Heber College, Tiruchirapalli, Tamilnadu on 23/2/2024
- Nitin Ratnam Badhe, Shreya Banalla, Dharmalingam K, Rajasri Yadavalli\* on "Advancements in Enhancing Alginate and Carrageenan-Based Bioplastics for Sustainable and Eco-Friendly Food Packaging Solutions" at 9th International Food Convention Organized by ASSOCIATION OF FOOD SCIENTISTS & TECHNOLOGISTS (INDIA), CSIR-CFTRI Campus, Mysuru - 570 020, Karnataka, India from 7-10 December 2023 and won best poster award in Green preservation and sustainable food packaging solutions category
- Nitin Ratnam Badhe, Shreya Banalla, Dharmalingam K, Rajasri Yadavalli\* on "Bioplastic From Algae: A Sustainable Approach For Eco Friendly Materials" at 6th International Conference Bioenergy, Environment And Sustainable Technologies By Arunai Engineering College, Thiruvannamalai, Tamilnadu In Association With BRSI, India And IFIBIOP From 13-20 October 2023
- Mahitha Pyla, Sanjana Kankipati, Kiran Yellappa Vajanthri, Rajasri Yadavalli, K. Dharmalingam, "Development and Evaluation of Stimuli-Responsive Hydrogel Films Containing Carboxymethyl Cellulose, Soy Protein Isolate and Grapefruit Seed Extract for Potential Application in Treating Atopic Dermatitis" in 4th International Conference on "Challenges in Chemical and Biochemical Engineering for Sustainable Development (CBSD)", organized by Department of Chemical Engineering, Annamalai University, Tamil Nadu from 23/03/2022 to 24/03/2022 with ISBN: 978-81-951299-3-5(Won best paper)
- Chunduru Sai Hari Hara Sudheshna, Rajasri Yadavalli, K. Dharmalingam, "A Review on Soy Protein Isolates as an Alternative Meat Source" in 4th International Conference on "Challenges in Chemical and Biochemical Engineering for Sustainable Development (CBSD)", organized by Department of Chemical Engineering, Annamalai University, Tamil Nadu from 23/03/2022 to 24/03/2022 with ISBN: 978-81-951299-3-5
- C. Nagendranatha Reddy, Y. Rajasri, B. Mishra, Y. Vineetha, A. Shalini, Conductive Granular Graphite As Alternate Electrode Material For Efficient Bioelectricity Generation In Microbial Fuel Cells, International e-Conference on Materials Processing & Characterization – 2020 (ICMP&C - 2020) 18-19 September, 2020
- Rajasri Yadavalli\* and R. Hari Prasad "Simultaneous Production Of Astaxanthin And Lipids From Chlorella Sorokiniana In Presence Of Reactive Oxygen Species" at 8th Asian Oceanian symposium on Plant Lipids organized by CSIRO, Canberra, Australia from Nov 19th to 22nd 2019
- Rajasri Yadavalli\* and R. Hari Prasad "Optimization of microalgal cultivation for biodiesel and value added products in a bio refinery approach" at International Conference on Biotechnological Research and Innovation for Sustainable Development, XV BRSI Convention jointly organised by CSIR-IICT and BRSI from Nov 22nd to 25th 2018
- Snehasri Motamarri, Mirza Narjis Fathima, Hariprasad Ratnapuram, Rajasri Yadavalli\*. "Comparative study of production and extraction of Flavonoids from Chlorella vulgaris and Chlorella pyrenoidosa" at International conference International Conference on Biotechnological Research and Innovation for Sustainable Development, XV BRSI Convention jointly organised by CSIR-IICT and BRSI from Nov 22nd to 25th 2018
- Sharanya Dhawalagiri, Sushmita Sama, Hariprasad Ratnapuram, Rajasri Yadavalli\*. "Growth of Chlorella Sorokiniana in Small Scale Race Way Pond Using Grape Pomace as Nutrient Source in Fed Batch Mode For Bioethanol and Lipid Production" at International conference International



Conference on Biotechnological Research and Innovation for Sustainable Development, XV BRSI Convention jointly organised by CSIR-IICT and BRSI from Nov 22nd to 25th 2018

- "R.Hari Prasad, Pruthvi Rao K, Y.Rajasri". Comparative studies on simultaneous production of lipids and astaxanthin from *Chlorella sorokiniana* in two stage operated photobioreactors" at International conference on Emerging trends in Biotechnology for waste conversion under DBT sponsored project organized by CSI-NEERI and BRSI from 8-10 October 2017 (Won second Prize in Biorefineries and Bioenergy Theme)
- Y.Rajasri\*, John Reddy P, Vinoshna Sama, Jayasree Ganugapati "Phytochemical Screening and Insilico studies of Flavonoids from *Chlorella pyrenoidosa*" at International conference on Emerging trends in Biotechnology for waste conversion" under DBT sponsored project organized by CSIR-NEERI and BRSI from 8-10 October 2017
- Sneha Sri Motamarri, Mirza Fathima Narjis, Hariprasad Ratnapuram, Rajasri Yadavalli\* "Optimization of stress conditions in *Chlorella sorokiniana* for enhanced lipid and PUFA content" at International conference on Emerging trends in Biotechnology for waste conversion under DBT sponsored project organized by CSI-NEERI and BRSI from 8-10 October, 2017.
- Yadavalli, R. and Ratnapuram, H., 2017, August. A Novel Approach to Study the Metabolomics of a Facultative Microalgae *Chlorella sorokiniana* With Transition in Trophic Mode by Two Stage Operation in Comparison with In Silico Studies. In *Phycologia* (Vol. 56, No. 4, pp. 201-201). new business office, po box 1897, Lawrence, KS 66044-8897 USA: int phycological soc.
- R. Hari Prasad and Y.Rajasri\*, "A Novel Approach to Study the Metabolomics of a Facultative Microalgae *Chlorella* species with Transition in Trophic Modes by Two Stage Operation along with Insilco Studies" at VI Congress of ISAP NANTES - France from 18-23 June 2017 .(Hariprasad won Young Researcher award)
- T. Sree Sowmya, Ch. Venkata Avinash, K. Pruthvi Rao, R. Hari Prasad and Y.Rajasri\* "An integrated approach for bioactive compounds production from *Chlorella sorokiniana* using synthetic active biotransformation (via photo systems) and simultaneous treatment of dairy effluent" at International conference on Biotechnology and Bioengineering trends ICBT -2017 organized by JNTU, Hyderabad from 23-25 March 2017

#### Papers Presented At National Conferences

- Bishwambhar Mishra, Spoorthi Sada, Rajasri Yadavalli, C. Nagendranatha Reddy, Jibanjyoti Panda, Sanjeeb Kumar Mandal, Amilia Nongbet, Bibhu Prasad Panda, Yugal Kishore Mohanta .Metagenomics: Unlocking Microbial Potential in Bioremediation , National conference on "Research and Innovation in Industrial and Marine Biotechnology: A Circular Economy 2024" , at SoA University, Bhubaneswar , Date: 4th Nov, 2024
- Rajasri Yadavalli, K. Dharmalingam, Presented a product presentation "Algae-Based Bioplastics for Sustainable Packaging" in 6th Research Day 2024 , CBIT held on 13th to 14th Dec 2024 and won 2nd best product display award
- C. Nagendranatha Reddy, Rajasri Yadavalli, K. Dharmalingam, Bishwambhar Mishra, Sanjeeb kumar Mandal. Presented a oral (online) presentation "Integrated approach of bioremediation for complete removal of textile dyes using microbial fuel cells" in the National conference on "Recent trends in Biotechnology research" held on 22.03.2024 at Arunai Engineering College, Tamil Nadu
- Our team "Biowrap innovations" Dr Y Rajasri, Dr Dharmalingam, Mr Nitin B, Ms Shreya B, Mr Purushotham rao P has won first prize in Grand Finale of Women Hackathon 2.0 conducted by National Institute for Micro, Small and Medium Enterprises (ni-msme), scheduled along with the celebration of International Women's Day on March 7, 2024
- Motamary Sneha Sri, Mirza Narjis Fathima, Vinoshna Sama, R.Hariprasad, Y.Rajasri, "Treatment of 'Uppal Nallacheruvu Lake' Water using *Chlorella sorokiniana* in Continuous Stirred Tank Reactor (CSTR)" presented an oral presentation at Emerging Environmental Challenges-An engineering approach , A National symposium organized by CSIR-NEERI and Dept of Chemical Engineering BITS, Hyderabad on 16th Feb 2018.(Won consolation prize)
- S.Sushmitha, P.John reddy, D.Sharanya reddy, R.Hariprasad, Y.Rajasri, "Growth of *Chlorella sorokiniana* in Small Scale Race Way Pond Using Grape Pomace as Nutrient Source in Fed Batch Mode for Biodiesel Production" presented a poster at Emerging Environmental Challenges-An engineering approach , A National symposium organized by CSIR-NEERI and Dept of Chemical Engineering BITS, Hyderabad on 16th Feb 2018.(Won consolation prize)
- R. Hari Prasad and Y. Rajasri, "Microalgae biomass and value-added products "presented a poster at DBT stall in Bioenergy Urja Ustav - 2017 organized by MoPNG at Pune on July 7-8, 2017.
- C.Venkata Avinash, T.Sree Sowmya, K.Prudhvi Rao, Rajasri Yadavalli " Integrated approach for treatment of dairy effluent and lipid production from microalgae in open pond systems" National Seminar on Advances in Bioprocess Engineering -Practical approach for today's bioprocess challenges at Kasturba Gandhi Degree and PG College for Women, Secunderabad ,Catalyzed and Supported by Department of Biotechnology(DBT-CTEP)from November 24-25, 2016
- K.S.R.Siva sai and Y.Rajasri "Intellectual property Rights". In Proceedings of National Conclave – cum-Exhibition on Igniting the spirit of Innovation, Jan 23-24, 2014.
- Rajasri, Y "Modern Applications of Bioprocess Engineering: A Case study of pharmaceutical Product "In Proceedings of two-day seminar series on "Bioprocess Engineering" (under TEQIP II – World bank assistance) at SNIST from 23rd to 24th January 2013

- S.Ramgopal rao, Y.Rajasri, M.Venkata Ramana and C.S.Rao "Potential of Microalgae for Energy and other applications" In Proceedings of the Refresher course on "Current Research trends in Biotechnology" 18-22nd December 2012.
- P Purushotham Rao and Y.Rajasri "Types of Patent Search". Three Day Workshop on "Patent Searching in Biotechnology & Bioinformatics applications" from 8th to 10th July 2010.
- Rajasri, Y "Oxygen transfer in Bioreactors" in National Frontiers in Biotechnology -2005, a National level seminar organized by Sreenidhi Institute of Science and technology, Hyderabad 2005.
- Presented a paper on "Fluidized Catalytic Cracking" in BECTAGON (2001), a National level symposium organized by Department of Chemical Engineering, Bapatla Engineering College, Bapatla 2001.

