Curriculum Vitae

- 1. Name and full correspondence address: <u>GUJJALA LOHIT KUMAR SRINIVAS</u>

 <u>Room 210, Biotechnology and Medical Engineering Department, NIT Rourkela, Sector 1, Rourkela, Odisha 769008, India.</u>
- **2. Email(s) and contact number(s):** srinivasg@nitrkl.ac.in;; lohit.gujjala@gmail.com;; +91-8509024654
- **Research** interest(s): Biorefinery development; Waste valorization; Technoeconomic analysis; Life-cycle assessment; Scaling up of bio-process ventures.

4. Academic Qualification

	Quannication	1	1	1
Sl. No.	Degree	Year	Subject	University/Institution
1.	B. Tech.	2010	Biotechnology	NIT Durgapur
2.	M. S.	2015	Bioenergy	IIT Kharagpur
			(Advanced	
			Technology	
			Development	
			Centre)	
3.	Ph.D.	2021	Bioenergy	IIT Kharagpur
			(Advanced	
			Technology	
			Development	
			Centre)	

5. Work experience

Sl. No.	Positions held	Name of the Institute	From	То
	neiu	Histitute		
1	Assistant	NIT Rourkela	May 2023	Till date
	Professor Grade		·	
	II			
2	Postdoctoral	Kyung Hee	November	April 2023
	Researcher	University, South	2021	_
		Korea		
3	Senior Project	National	April 2021	September 2021
	Associate	Environmental		
		Engineering		
		Research Institute		
		Nagpur		
4	Project assistant	National	November	June 2012
		Environmental	2010	
		Engineering		
		Research Institute		
		Kolkata Zonal		
		Laboratory		

6. Professional Recognition

S.No	Name of Award	Awarding Agency	Year
1	Best Oral Presentation Award	International Conference on	2022
		Biotechnology for Sustainable	
		Bioresources and Bioeconomy	
		(BSBB-2022), Organised at IIT	
		Guwahati, 7-11 December 2022.	
2	Visiting research scholar	Aalto University, Finland	May 2018
3	Travel assistance for presenting	IIT Kharagpur	2019
	research work at Asian Congress on		
	Biotechnology 2019, Taiwan		
4	Institute fellowship during Ph.D. @	MHRD	2015-2020
	IIT Kharagpur		
5	JRF and SRF in a DBT sponsored	DBT	2012-2015
	project @ IIT Kharagpur		

7. Publications

Sl. No.	Author(s)	Title	Name of Journal	Volume/ DOI	Page	Year
1	Gujjala, L.K.S., Won, W.,	System-level integrative analysis for production of Lignin hydrogels	Green Chemistry	24	9579-9594	2022
2	Gujjala, L.K.S., Won, W.,	Process Development, Techno-economic Analysis and Life- Cycle Assessment for laccase catalyzed synthesis of lignin hydrogel.	Bioresource Technology	364	128028	2022
3	Gujjala, L.K.S., Bandyopadhyay, T.K., Banerjee, R.	Production of biodiesel utilizing laccase pretreated lignocellulosic waste liquor: An attempt towards cleaner production process.	Energy Conversion Management	196	979-987	2019
4	Gujjala, L.K.S., Bandyopadhyay, T.K., Banerjee, R.	Kinetic Modelling for Laccase Mediated Delignification of Lantana camara.	Bioresource Technology	212	47-54	2016
5	Kumar, S.P., Garlapati, V.K., Gujjala, L.K.S., Banerjee, R.	Bioconversion of waste glycerol for enhanced lipid accumulation in Trichosporon shinodae.	Biomass Conversion and Biorefinery	https://doi.org /10.1007/s133 99-021- 01799-x	1-12	2021
6	Kumar, S., Gujjala, L.K.S., Banerjee, R.	Simultaneous pretreatment and saccharification of bamboo for biobutanol production.	Industrial crops and products	101	21-28	2017
7	Althuri, A.,	Partially consolidated	Bioresource	245	530-539	2017

	Gujjala, L.K.S., Banerjee, R.	bioprocessing of mixed lignocellulosic feedstocks for ethanol production	technology			
8	Kumar, S., Das, A., Srinivas, G.L., Dhar, H., Ojha, V.K., Wong, J.	Effect of calcium chloride in abating inhibition due to volatile fatty acids during the start-up period in anaerobic digestion of municipal solid waste.	Environmental Technology	37	1501-1509	2016
9	Samuel, J., Kumar, S.G.L., Rintu, B.	Kinetic Modeling of Mixed Culture Process of Anaerobic Co- digestion of Vegetable Wastes with Pistia stratiotes: A Scientific Attempt on Biomethanation.	Journal of Microbial and Biochemical Technology	9	36-48	2017
10	Gujjala, L.K.S., Kim, J. and Won, W.,	Technical lignin to hydrogels: An Eclectic review on suitability, synthesis, applications, challenges and future prospects.	Journal of Cleaner Production	363	132585	2022
11	Gujjala, L.K.S., Dutta, D., Sharma, P., Kundu, D., Vo, D.V.N. and Kumar, S.,	A state-of-the-art review on microbial desalination cells.	Chemosphere	288	132386	2022
12	Gujjala, L.K.S, Kumar, S.J., Talukdar, B., Dash, A., Kumar, S., Sherpa, K. C., Banerjee, R.	Biodiesel from oleaginous microbes: opportunities and challenges.	Biofuels	10	45-59	2017
13	Dutta, D., Rautela, R., Gujjala, L.K.S., Kundu, D., Sharma, P., Tembhare, M. and Kumar, S.,	A review on recovery processes of metals from E-waste: A green perspective.	Science of The Total Environment	859	160391	2023
14	Sharma, P., Srinivas, G.L.K., Varjani, S. and Kumar, S.,	Emerging microalgae- based technologies in biorefinery and risk assessment issues: Bioeconomy for sustainable development.	Science of The Total Environment	813	152417	2021

8. Detail of patent

Sl. No	Patent Title	Name of Applicant(s)	Patent No.	Date	Country	Status
1	Yellow laccase	Banerjee R, Ghangrekar	201631005954	20.02.2016	India	NBA
	mediated	MM, Rajak RC,				Approval
	delignification of	Chintagunta AD, Althuri				awaited
	lignocellulosic	A, Srinivas GLK, Sherpa				
	biomass	KC and Kumar S				

9. Book chapters

Sl.	Title	Author's Name	Publisher	Year of Publication
No		ration 5 rance	T donsiter	rear of rubileation
1	Transition of Biofuels from	Gujjala Lohit Kumar	Taylor and Francis	2023
	the First to the Fourth	Srinivas, Deval Singh,	•	
	Generation	Sunil Kumar		
2	Technologies for oil	Kumar, S.P.J.,	Elsevier	2021
	extraction from oilseeds and	Garlapati, V.K.,		
	oleaginous microbes: A	Gujjala, L.K.S.,		
	Comprehensive review.	Banerjee, R.		
3	Bioalkanes and Bioalkenes:	Gujjala, L.K.S.,	Springer	2018
	An Ecofriendly and Alternate	Kumar, S., Rajak, R.C.,		
	Fuel in Bioenergy Research	Banerjee, R.		
4	Biodiesel Production from	Kumar, S.P., Gujjala,	Wiley-Scrivener	2017
	Lignocellulosic Biomass	L.K.S. , Dash, A.,		
	Using Oleaginous Microbes.	Talukdar, B., Banerjee,		
		R., Sharma, V.		
5	Lignocellulosic Biomass	Kumar, S., Srinivas, G.,	Wiley-Scrivener	2017
	Availability Map: A GIS-	Banerjee, R., Sharma,		
	Based Approach for	V.		
	Assessing Production			
	Statistics of Lignocellulosics			
	and its Application in			
	Biorefinery.			

10. Other Information

Papers Presented at International Conference/symposium/Teaching assistantship/Membership.

- **4 Gujjala L.K.S.,** Won, W. (2022) Chitin microbeads as alternative for fossil derived Exfoliants: Perspectives from the Life Cycle Assessment. International Conference on Biotechnology for Sustainable Bioresources and Bioeconomy (BSBB-2022), IIT Guwahati, December 2022.
- ♣ Gujjala L.K.S., Won, W. (2022) Lignin hydrogels for potential applications to remediate dye contaminated Wastewater: Techno-economic feasibility analysis and Life-Cycle assessment. The Korean Institute of Chemical Engineers, 2022 Fall General Assembly and Conference, Busan, October 2022.
- **♣ Gujjala L.K.S.,** Won, W. (2022) Production of Hydrogel from Kraft Lignin: Technoeconomic Analysis and Lifecycle Assessment. Korea Industrial Chemical Society 2022 Spring General Assembly and Conference, Jeju, May 2022.
- **4 Gujjala L.K.S.,** Banerjee, R. (2019) Development of an Energy Efficient Technique for Microalgae Harvesting through Phyco-Myco Co-cultivation. New Horizons on

- Biotechnology, Trivandrum, Kerela, India, November 2019.
- **4 Gujjala, L.K.S.,** Banerjee, R. (2019) Valorization of Lignocellulosic Hydrolysates for Biodiesel Production Utilizing Oleaginous Fungi. 14th Asian Congress on Biotechnology, Taiwan, July 2019.
- **↓ Gujjala, L.K.S.,** Banerjee, R. (2018) Biodiesel production from Oleaginous Aspergillus awamori utilizing glycerol: A comparative study of batch and fed-batch process. International Conference on Biotechnological Research and Innovation for Sustainable Development, IICT Hyderabad organized by Biotech Research Society of India, December 2018.
- **Biotech Research Society of India** (BRSI) Life member since 2015.
- **Asian Federation of Biotechnology** (AFOB) Life member since 2013.
- ♣ Teaching assistantship for both theory and practical classes at M. Tech and B. Tech levels at IIT Kharagpur
- **Reviewer Energy Journal**, Elsevier.
- **Reviewer Trends in Environmental Analytical Chemistry Journal**, Elsevier.