

RVCE-BT-G-Vijayakumar

Dr. G Vijaya Kumar, Associate Professor, Associate Dean (PG Studies)		
Educational Qualification	BE (Chemical Engg), M.E (Chemical Engg), MIChE, MISTE, Ph.D.(Biotechnology)	
Experience	Teaching	20 Years
	Research (along with teaching)	12 Years
Area of Interest	Bioprocess technology, Downstream Processing, Design of bio process equipments and Separation techniques	
Date of joining RVCE	23-01-2007	
Email ID	vijayakg@rvce.edu.in	



Project Guided:

Number of UG projects guided: 20

Number of PG projects guided: 05

Publications:

National Conferences: 06

National Journals: 04

International Journals: 12

International Conferences: 05

National Conference:

1. Presented a paper on “Understanding Critical Thinking (CT) To Create Better Healthcare professional” in a National conference on “Critical Thinking (CT)”: at RVCE, Oct 2021.
2. Naseera Syed Arif, Neha Hatangadi, Soujanya.S Trilokchandran B, Kumar G and **Thippareddy K.S.**, Yeast Cell Broth Clarification By Crossflow Filtration Technology., Chemical Engineering and Biotechnology, SIT are organizing a National Level Biotechnology and Chemical Engineering Student’s Seminar Bio-ChESS’19 on 12th March 2019.
3. Alisha S Rodrigues, Ananya .B, Keerthi Reddy, Naseera Sayed Arif, Trilokchandran.B, Vijayakumar G & Thippa Reddy “Determination of binding capacity of a nano-resin for protein Purification” Chemical Engineering Department is organizing National Level Techno-cultural fest “REACT 19” on the 29th and 30th of March 2019 of the Chemical Engineering

4. B. S. Satyanarayana, B L Shivakumar, V Anantharam, **G Vijaya Kumar** and G Shobha. A cost effective, efficient and sustainable water management through retrofitting and also preventing the pollution of water table. Presented in Indian sustainability congress – 2014.
5. Pooja P Rao, Kavitha Appaya, Saranya Ravi, P Ambresh, Lingayya Hiremath, Pushpa Agrawal and **Vijaya kumar**. Bioremediation of E-waste by live A-niger at National conference NIT, Trichy (TN) on 27th Feb-2010
6. **Vijaya kumar**, Pushpa Agrawal, Lingayya Hiremath, Pooja P Rao, Kavitha Appaya and Saranya Ravi. "Adsorption of industrial dye using neem power" in National conference on go green, held at Dept. of Biotechnology, R V College of engineering on 14th November, 2009.

National Journals:

1. **G Vijaya Kumar**, Pushpa Agrawal, Thippa Reddy, and Trilokchandran B, Nano structured alumina Theoretical Analysis for Separation of Coagulant Proteins from Moringa Oleifera using Nano Structured Alumina, RV Journal for science technology engineering arts and management, 1(2), 78 – 88, 2020.
2. Alisha S Rodrigues, Ananya B, **G Vijaya Kumar**, Trilok Chandran B. The control of Bacterial Blight of pomegranate using the methanolic extracts of indian bael and leucas aspera. Innovare journal of life sciences, 8 (2), 1-11, 2020.
3. **G. Vijaya Kumar**, V. Krishna, Vidya V Rao, Sushma, Sukumar Roy and Pushpa Agrawal. Un-steady state adsorption column studies and design of fixed bed adsorption column for adsorption of proteins using nano-structured ceramic particles. *Journal of Chemical Engineering and Research*, 2 (1), 35- 41, 2014.
4. S. Mahesh, **G.Vijay Kumar** and Pushpa Agrawal, “Studies on the utility of plant cellulose waste for the bioadsorption of crystal violet dye pollutant,” *Journal of Environmental Biology*, Vol. 31, 2010.

International Journals:

1. Jahnvi G Bhat & Sarvesha Babu M Trilokchandran B, Vijayakumar G, Thippareddy KS, Ashly Binoy, Dhriti Bhat, “ALGAL BIOPLASTICS: A REVIEW”, *YMER*, 21, 6, 71-89, 2022.
2. Anushaa A , Pushpa Agrawal, Vijaya Kumar G and Thippareddy KS, “Green synthesis of non-cytotoxic silver nanoparticles using Solanum nigrum leaves extract with antibacterial properties”, *GSC Biological and Pharmaceutical Sciences*, 15(03), 262–271, 2021.
3. G. Vijaya Kumar*, Lingayya Hiremath, Agrawal Pushpa, Trilok Chandran, **Thippa reddy**, Mruthyunjaya1 and Prakash A. “Microbial sewage treatment using sequencing continuous batch reactor (sbr). *Journal of Environmental Research And Development.*, Vol. 13 No. 03, January-March 2019., pp-244-249., ISSN 0973 – 6921 ; E – ISSN 2319 – 5983.
4. **Thippareddy**, G. Vijaya Kumar and Trilok Chandran, Formulation and evaluation of cosmetic cream and cabbage extract., *Research journal of Pharma and Technology.*, Volume 12(8) 2019., pp.3589-3594 (Scopus indexed).
5. Lingayya Hiremath, Narendra Kumar, **Vijaya Kumar G** and Gordon Blache, “Green synthesis of Magnetite Nano particles for treatment of polluted water” *Asian Jr. of Microbiol. Biotech. Env. Sc.* Vol. 17 (2), 129-136, 2017.
6. Lingayya Hiremath, **Vijaya Kumar G** and Satyanarayana B.S, “Exploitation of live fungus (*Aspergillus niger* RV-11) for Bioremediation of Heavy metals from E-waste” *International Journal of Chemical and Environmental Engineering*, Vol. 6 (3), 184 -189, 2015.

7. **G. Vijaya Kumar**, V. Krishna, Sukumar Roy and Pushpa Agrawal. Purification of coagulant Proteins from *Moringa oleifera* using Nanostructured Zirconium as a bioadsorbent. *International Journal of Innovative Research in Science, Engineering and Technology*, 2014, Vol. 3 (5), 1333-1339.
8. **G Vijay Kumar**, Pushpa Agrawal, V Krishna and Sukumar Roy, "Purification of α -amylase from *Tinospora cardifolia* (gudachi) using nano ceramic materials as a bio adsorbent." *International Journal of Chemical Engineering Research*. Vol. 6, (1), 11-18, 2014.
9. **G Vijaya Kumar**, V Krishna, Sukumar Roy and Pushpa Agrawal. "Design of continuous fixed bed column for adsorption of Bovine Serum Albumin on nanostructured alumina based on Batch adsorption studies," *International Journal of Advanced Research*, Vol. 2 (5), 729-737, 2014.
10. **G Vijaya Kumar**, V Krishna, Sukumar Roy and Pushpa Agrawal. "Purification of coagulant proteins from *moringa oleifera* using nanostructured zirconium as a bioadsorbent," *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 3 (5), 12702-12708, May 2014.
11. **G. Vijaya Kumar**, Pushpa Agrawal and Lingayya Hiremath, "Utility of plant cellulose waste for the bioadsorption of brilliant green dye pollutant," *International Journal of Chem Tech Res*, Vol. 4, (1), 319-323, Mar.2012. **(Scopus Indexed)**.
12. Suresh, Lingayya Hiremath and **Vijaya Kumar** "Application of Ultrasound technique and microbe for the treatment of biomass effluent", *Journal of applied sciences in environmental sanitation*, October, 2010, 1-13.

International Conference:

1. **G Vijaya Kumar***, Trilok Chandran, Pushpa Agrawal and Thippa Reddy KS,. Thermodynamic analysis of *Saccharomyces cerevisiae* catalysed fermentation of sugarcane juice., ICER-19, 10th International Congress of Environmental Research, 19-21 December, 2019, Organized by, Journal of Environmental Research And Development, In collaboration with: Adi Shankara Institute of Engineering & Technology, Ernakulam - 683574, Kerala, India
2. **Vijaya Kumar G**, Trilokchandran. B*, Pushpa Agrawal & Thippareddy KS, "Antimicrobial effect of combined crude leaf extracts on selected pathogens" ICER-19, 10th International Congress of Environmental Research, 19-21 December, 2019, Organized by, Journal of Environmental Research And Development, In collaboration with: Adi Shankara Institute of Engineering & Technology, Ernakulam - 683574, Kerala, India
3. **Trilokchandran. B***, Vijayakumar.G, Sathya Suman & Thippareddy KS Binding capacity of A Nano resin for protein purification applications Bangalore tech summit at Bangalore palace, 18th to 20th November 2019
4. G Vijaya Kumar, Puspha Agrawal. Attended and presented a paper at the 8th International congress of Environmental Research conference during 25-27 th December, 2014 held at RVCE Campus, Bangalore.
5. G. Vijaya Kumar, S Mahesh. Attended and presented a paper at the Chemcon 2011 held on 27-29, December, 2011 held at MSRIT, Bengaluru and presented Presented a paper entitled "Bioadsorption of heavy metals using live *Aspergillus niger*."

Book Chapters:

1. Co-authored a Book on Bio inspired engineering a review, JERAD Publishers, ISBN 978-93-5627-781-6, June 2022.
2. **G Vijay Kumar**, Pushpa Agrawal, V Krishna and Sukumar Roy. Nano Alumina as a potential adsorbent for purification of amylase from Gudachi. Book entitled **Advances in Chemistry and**

Chemical Engineering, Chapter 19, 222 – 234. **International Edition**. RPI publisher, NewDelhi, 2017. ISBN: 978-81-935729-6-2.

3. **G Vijay Kumar**, Pushpa Agrawal, V Krishna and Sukumar Roy. Purification of coagulant protein from Moringa Oleifera by using Nanoceramic Material. Book entitled **Advances in Nanotechnology and cryogenics**, Chapter 8, 34 – 40. National Edition. World education publisher, NewDelhi, 2010. ISBN: 978-81-909873-0-1.

Interaction with outside world:

1. Interacted with BHEL/EPD for the research work and published research papers and book chapters.
2. Interacted with Kuvempu University for the research work and published research papers and book chapters.

Funded Projects:

1. Working as a promoter for the project entitled “Development of nano magnetic based adsorbent for the purification of pharmaceutical waste water” funded by KCTU (55.0 L).
2. Worked as a promoter for the project entitled “Sewage treatment using Biological Batch reactor” funded by K-Pack systems (10.0 L).
3. Worked as a Co-Investigator for the project entitled “Bio-conversion of coal to clean fuels” funded by CMPDI (47.55 L).
4. Worked as a Principle guide for the project entitled “Green electricity using MFC” funded by KSCST, 0.075.

Consultancy Projects:

1. Worked as a promoter for the project entitled “Sewage treatment using Biological Batch reactor” funded by K-Pack systems (10.0 L).

Awards:

1. Honored for Acquiring Ph.D degree in Biotechnology by RSST, 2016.
2. Honored for Acquiring Ph.D degree in Biotechnology by ISTE chapter, RVCE, 2016.
3. Honored by IChE for working as organizing committee member for CHEMCON- 2011, in the year 2012.
4. Honored for Academic Excellence in academic by RSST, 2010.
5. **BEST TEACHER** award from MVJCE in 2002 and 2005.

Achievements:

1. Worked as Exam co-ordinator for the Jan 2016 RVCE, Autonomous examinations
2. Worked as Library co-ordinator in the year 2015.
3. **3 years NBA accreditation** for the Dept in the year 2015 as a NBA Co-ordinator.
4. Working as AICTE co-ordinator since from 2010 and uploaded all the documents related to the students and faculty.
5. Audited Research Centre of RVCE in year 2009.
6. **5 years NBA accreditation** for the Dept in the year 2008 as a NBA Co-ordinator.
7. Collaborative project with K-Pack systems.
8. **Co designed a 100 liters fermenter** as a part of the funded project.
9. MOU with K-Pack systems and Satva Health care.

10. Counseling a group of students regularly and interact with their parents related to their academic.