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## Education

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- Ph.D, Bioprocess Engineering/Industrial Biotechnology & Biofuels, IIT Kharagpur, India.
- M.Tech, Biotechnology, Andhra University, India.
- B.Pharm, Pharmaceutical Sciences, Osmania University, India.

## Appointments

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- ❖ March 1, 2021 – Till date, Associate Professor, Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology, India
- ❖ September 30, 2016 – February 28, 2021, Assistant Professor (Senior Grade), Dept. of Biotechnology & Bioinformatics, Jaypee University of Information Technology, India
- ❖ November 1, 2013 – September 30, 2016, Asst. Professor (Grade-II), Dept. of Biotechnology & Bioinformatics, JUIT, HP, India.
- ❖ October 8, 2013 – October 31, 2016, Asst. Professor (Grade-I), Dept. of Biotechnology & Bioinformatics, JUIT, HP, India.
- ❖ October 6, 2011-October 5, 2013, A4U Postdoctoral Researcher, Dept' de Enginyeria Quimica, Universitat Autònoma de Barcelona, Spain.
- ❖ August 31, 2010- September 21, 2011 Assistant Professor (Grade-I), Dept. of Biotechnology & Bioinformatics, JUIT, HP, India
- ❖ Jan 6, 2006- July 31, 2010, Institute Research Fellow, Microbial Biotechnology & DSP Laboratory, IIT Khargpur, India.
- ❖ June 28, 2005-Decemabr 24, 2005, Lecturer, Dept. of Biotechnology, MIC College of technology, India
- ❖ Dec 1, 2003 –April 11, 2005, Lecturer, Dept. of Biotechnology, Bapatla Engineering college, India
- ❖ November 18, 2000-November 25, 2001, Assistant Manufacturing Chemist, DOMAGK Pharmaceuticals Pvt., Ltd., India.

## Research expertise

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- **Fermentation technology:** Production of industrial enzymes through solid state and submerged fermentations & its scale up studies.
- **Downstream processing:** Purification and characterization of industrial enzymes
- **Immobilization Technology:** Immobilization of enzymes by adsorption, cross linking, covalent, entrapment techniques & its characterization
- **Biocatalysis:** Lipase mediated synthesis of flavor esters
- **Biofuels:** Lipase mediated transesterification of edible, non-edible, waste oils to fatty acid methyl esters (Biodiesel) & its characterization
- **Microalgal Technology:** Production of Industrial Commodities and Phycoremediation.
- **Microbial Fuel Cells:** Studies on utilization of complex carbon sources such as Methanol and Lignocellulosics for MFC's
- **Biodetergents:** Usage of lipase and proteases in Biodetergent formulation
- **Environmental Biotechnology:** Biotechnological approaches for E-waste utilization, Bioremediation
- **Food Biotechnology:** Microbial production of pectinolytic enzymes and its usage in debittering and clarification of fruit juices,
- **Waste Valorization:** Industrial enzymes, Polymers and Pharmaceuticals production.
- **Enhanced Biological Phosphorus Removal:** Pilot plant studies on Modeling of PAO-GAO competition for phosphorus removal using EBPR
- **Statistical packages:** MINITAB, STATISTICA and DESIGN EXPERT
- **Soft computing skills:** Genetic algorithm, Differential evolution, Particle Swarm and Artificial Bee Colony optimization approaches.

## Honours & Fellowships

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- ✓ 2022 & 2021&2020, Listed in "AD Scientific index: World Scientist and University Rankings ".
- ✓ 2022 & 2021 & 2020, Listed in Top 2% World's Scientists by Stanford University Rankings, USA.
- ✓ Serving as an International Advisory Panel Member, Elsevier
- ✓ Serving as an "Associate Editor" in "Frontiers in Energy Research (IF: 4.008)"
- ✓ Serving as a "Review Editor" in "Frontiers in Bioengineering and Biotechnology (IF:5.890)" and "Frontiers in Catalysis"
- ✓ Editorial Board Member in "Bioengineered (IF:3.269)", "BMC Biotechnology (IF:2.563)" and "Journal of Chemistry (IF:2.506)".
- ✓ Serving as a "Reviewer" for Science Direct, Frontiers, RSC and Springer Journals.
- ✓ SERB-ITS Travel Grant, 2017
- ✓ A4U Postdoctoral Fellowship, Spain, 2011 -2013
- ✓ Institute Research Fellowship, IIT Kharagpur, 2006-2010
- ✓ GATE - MHRD Fellowship, 2002-2003

## Patents / Research publications / Book Chapters / Conference papers

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### Patents (Granted)

- Prof. Banerjee R, Kumari A, Mahapatra P and **Garlapati VK**, “Enzymatic transesterification of Jatropha Oil” (IPA No. 1728/KOL/2007/ dated 2007-12-26). (National) (**Patent Number: 291288**)
- Prof. Banerjee R, **Garlapati VK**, Kumari A, Mahapatra P, Kant R and Prof. Das P, “Enzymatic transesterification of simarouba Oil” (IPA No. 1431/KOL/2008 dated 2008-08- 22). (National) (**Patent Number: 405237**)

### Patents (Filed)

- Prof. Banerjee R, Kumari A, Mahapatra P and **Garlapati VK**, “Enzymatic transesterification of Jatropha Oil” (2011, yet to receive PCT No). (International)

### Selected Research Publications in Peer-Reviewed Journals

- Sharma S, Kant A, Sevda S, Ambhinavi T, **Garlapati VK** (2023) Environmental Pollution 316 (1):120530 (**IF: 9.988**)
- Wu P, Chen J, **Garlapati VK**, Zhang XX, Jenario FWV, Li X, Liu W, Chen C, Aminabhavi TM, Zhang X (2022) Chemical Engineering Journal 444:136534 (**IF:16.744**)
- **Garlapati VK**, Parashar SK, Klykov S, Vundavilli PR, Sevda S, Srivastava SK, Taherzadeh MJ (2022) Bioresource Technology 344(B):126254. (**IF: 11.889**)
- Ray RR, Prabhu A, Prasad D, **Garlapati VK**, Mani NK, Aminabhavi TM, Simal-Gandara J (2022) Food Chemistry 390 (1): 133173 (**IF:9.231**)
- Chauhan M, Dutt S, Manjul AS, Singh B, **Garlapati VK** (2022) Chemosphere 299: 134429. (**IF:8.943**)
- Kumar SPJ, **Garlapati VK**, Banerjee R, (2022) Fuel 325 (1):124595. (**IF:8.035**).
- Hemdan B\*, **Garlapati VK\***, Sharma S, Bhadra S, Maddirala S, Varsha K M, Motru V, Goswami P, Sevda S, aminabhavi T (2022) Environmental Research 204(D): 112346 (**IF:8.431**)
- Ruschoni UCM, Mera AEM, Zamudio LHB, Kumar V, Taherzadeh MJ, **Garlapati VK**, Chandel AK (2022) Bioengineered 13(4): 9645-9661 (**IF:6.832**)
- Kuleshova T, Rao A, Bhadra S, **Garlapati VK**, Sharma S, Kaushik A, Goswami P, Sreekirshnan TR , Sevda S (2022) **Biomass and Bioenergy (Accepted, In Press) (IF:5.774)**.
- Chintagunta AD, Zuccaro G, Kumar M, Jeevan Kumar SP, **Garlapati VK**, Postemsky PD, Kumar NSS, Chandel AK, Simal-Gandara J (2021) Frontiers in Microbiology 12:2080 (**IF: 6.063**)
- **Garlapati VK**, Mohapatra SB, Mohanty RC, Das P (2021) Tribology International 153: 106653 (**IF: 5.620**).
- Sharma S and **Garlapati VK** (2021) Environmental Pollution 268 (A): 115837 (**IF: 9.988**).
- Sharma S, Singh A, Sharma S, Kant A, Sevda S, Taherzadeh MJ, **Garlapati VK** (2021) Bioengineered 12(2): 11055-11075. (**IF:6.832**)
- **Garlapati VK**, Chandel AK, Kumar SPJ, Sharma S, Sevda S, Ingle AP, Pant D (2020) Renewable and Sustainable Energy Reviews 130: 109977 (**IF: 16.799**).

- Chandel AK, **Garlapati VK**, Kumar SPJ, Singh AK, Hans M, Kumar S (2020) Biofuels, Bioproducts and Biorefining 14:830–844 (IF: 5.239)
- Banerjee R, Kumar SPJ, Mehendale N, Sevda S, **Garlapati VK\*** (2019) Renewable and Sustainable Energy Reviews 101: 548-558 (IF: 16.799)
- Chandel AK, **Garlapati VK**, Singh AK, Antunes FAF, Silva SSD (2018) Bioresource Technology 264:370-381. (IF: 11.889).
- Gour RS, Bairagi M, **Garlapati VK**, Kant A (2018) Bioengineered 9(1): 98-107. (IF: 6.832)
- Samudrala PJK, **Garlapati VK**, Dash A, Banerjee R, Scholz P (2017) Algal Research 21: 138-147. (IF: 5.276)
- Jha D, Jain V, Sharma B, Garlapati VK (2017) ChemBioEng Reviews 4(4):257-272. (IF: 6.207)
- **Garlapati VK<sup>#</sup>**, Sharma D<sup>#</sup>, Goel G (2016) Bioengineered 7(2): 88-97. (IF: 6.819)
- **Garlapati VK\*** (2016) Renewable and Sustainable Energy Reviews 54:874-881. (IF: 16.799)
- Montpart N, Ribot-Llobet E, **Garlapati VK**, Rago L, Baeza JA, Guisasola A (2014) International Journal of Hydrogen Energy 39 (2): 770-777. (IF: 7.139)
- Tayà C, **Garlapati VK**, Guisasola A, Baeza JA (2013) Chemosphere 93(4):612-618. (IF: 8.943)
- Bhattacharya SS, **Garlapati VK** and Banerjee R (2011) New Biotechnology 28 (1):31-39. (IF: 6.490)
- Mahapatra P, Kumari A, **Garlapati VK**, Banerjee R and Nag A (2009) Journal of Molecular Catalysis B: Enzymatic 60:57–63. (IF: 5.089)
- Kumari A, Mahapatra P, **Garlapati VK** and Banerjee R (2009) Biotechnology for Biofuels 2:1 (IF: 7.670)

**Books** : 01

**Book Chapters** : 25

**Conference papers** : 18

**Invited Talks** : 04

**Dissertation Guided**

- PhD Dissertation - 3 (Completed in Bioprocess Engineering) + 1 (On-going)
- M.Tech /MSc/ DD Dissertation– 9 +2 (On-going) ;B.Tech Dissertation-15 + 2 (On-going)








**Courses Taught /Teaching:**

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|---|---|
| ➤ Bioprocess Engineering                | Bioprocess Plant Design                         |
| ➤ Bioprocess Engineering and Technology | Traditional Bioprocesses and their upscaling    |
| ➤ Industrial Biotechnology              | Industrial Enzymes                              |
| ➤ Food Biotechnology                    | Manufacturing Processes and Industrial Products |
| ➤ Bioenergy and Biofuels                | Sustainable Technologies for Waste Management   |
| ➤ Environmental Sciences                |   |

## Membership in professional societies

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-  Life member in Biotech Research Society of India (BRSI) (LM 1121)
-  Life member in Association of Microbiologists of India (AMI) (3142-2011)
-  Member in World Bioenergy Association (WBA)
-  Member in European Federation of Biotechnology (EFB)
-  Member in Asian Federation of Biotechnology (AFOB)
-  Member in American Chemical Society (ACS) (31174379)
-  Member in Association of Biotechnology Led Enterprises (ABLE)