FACULTY:

Name of the faculty: Dr.R.Kanchana

Qualifications: Ph.D (Biotechnology), Goa University, SET

Email Id: rkr002@chowgules.ac.in

Areas of expertise: Biochemistry, Enzymology, Environmental Biotechnology,

Instrumentation, Genetic Engineering

Awards/Accomplishments: -Field 04 Indian patents on Nov 2018 with Application Number: 201821042540, 201821042538, 201821042539 & 201821042541

Positions Held: 2000-2002 at Carmel College, Nuvem, Goa as lecturer (Lecture basis)

2008-2014 at Chowgule College, Margao, Goa as Asst Professor (contractual) 2014-2015 at Goa University (Dept of Biotechnology) as Asst Prof (contractual) 2016 onwards at Chowgule College, Margao, Goa as Asst Professor (contractual)

Research Projects:

- completed 01 UGC Minor research project

- Under graduate student's projects guided: 13

Post graduate student's projects guided: 04

Papers Published

- 1. R. Kanchana, SanciaVaz, Divya Reddy, Abigail Antao, Trusha Shirodkar and Surthi Ravedar (2020). Sensory Evaluation of Nutritionally Potential High Protein Low Glycemic Index Noodles, Journal of Scientific Research, 64 (2): 131-134.
- 2. Kanchana R., Gracias N S, Patel M, Naik SV, Naik AS & Naik MV (2018). Alternative protein Source for resource sustainability, Journal of Emerging Technologies and Innovative Research, 5 (4):425-427.
- 3. Kanchana, R., and Fernandes, A. (2018). Green synthesis of multifunctional silver nanoparticles, World Journal of Pharmaceutical Research, 7 (8), 1173-1181.
- 4. Kanchana, R. and Zantye, P. (2018). Synthesis, characterization and applications of biogenic iron oxide nanoparticles, International Journal for Research in Applied Science & Engineering Technology, 6 (III), 709-716. [Journal Number on UGC Website: 45842 & 47916.] ISSN: 2321-9653 Thomosn Reuters Researcher ID: N-9681- 2016
- 5. Kanchana, R., Fernandes, F., Barretto, K., Rodrigues, L., Pereira, S., and D'silva, K. (2018). Value added food products from under-utilized soy beans and millets from laboratory to industry, International Journal for Research in Applied Science & Engineering Technology, 6 (III), 2183-2188. ISSN: 2321-9653
- 6. Kanchana, R., and Bhat, B. (2017). Exploring the potentials of marine resources for the synthesis of nanoparticles. World Journal of Pharmaceutical and Medical Research, 3(8), 187-190.
- 7. Kanchana, R., Fernandes, C.E.G., and Porob, D. (2017). Novel applications of crude bacterial biosurfactant. International Journal of Life Sciences and Technology, 10 (4), 38-44.



- 8. Kanchana, R., Chari, A., D'costa, L., Kamat, N., Redkar, N., and Dessai., T. (2016). Production of probiotic soy yoghurt A dairy product for the future. International Journal of Life Sciences, 5 (3), 158-161. [Journal Number on UGC Website, 2017:48951]
- 9. Kanchana, R., and Zantye, P. (2016). Plant-mediated synthesis of silver nanoparticles with diverse applications, Asian Journal of Pharmaceutical and Clinical Research, 9 (1), 159-163. [Scopus indexed; Online ISSN: 2455-3891 | Print ISSN: 0974-2441]
- 10. R.Kanchana, (2014), Traditional knowledge on Screw pine, an underutilized crop in Southwest India, International Journal of life sciences, 3(1):12-14.
- 11. R.Kanchana, Keith Saldanha, Nehal Ajgaonkar, Latifa Shaikh, Prajakta Barve, Yogita Sawant (2014), Potentials of Rhizobium species as plant growth promoters, Journal of international academic research for multidisciplinary, 2 (3): 692-702. IF:1.393
- 12. R. Kanchana and Divakar Mesta, (2013) Native Feather Degradation by a Keratinophilic Fungus, Int.J.ChemTech Res, 5(6) 2947-2954.
- 13. R Kanchana, Apurva Fernandes, Bhargavi Bhat, Saurabhi Budkule, Santeshwari Dessai and Reshma Mohan, (2013), Dyeing Of Textiles With Natural Dyes An Eco-Friendly Approach, Int J Chem Tech Research, 5 (5): 2102-2109
- 14. R.Kanchana, (2013), Utilization of biodegradable keratin containing wastes by enzymatic treatment, Int J Pharm Bio Sci, 4(1): 117 -126. IF: 2.958
- 15. R.Kanchana, (2012), Farm waste recycling through microbial keratinases. J Appl Sci Environ Sanitation, 7 (2): 103-108. IF:1.0759
- 16. R. Kanchana, Sushant Jadhav, Yuti Goletikar and Gautam Manerekar, (2012) Production of Alkaliphilic Protease(s) by *Enterobacter* sp for Application in Bio-detergent Formulation, Ind Biotechnol, , 8 (1): 31-35.
- 17. R. Kanchana, Delcy Correia, Sangeeta Sarkar, Prachi Gawde and Aifa Rodrigues, (2011), Production and partial characterization of cholesterol Oxidase from *Micrococcus* sp. isolated from Goa, India. Int J Appl Biol Pharmaceutical Technol, 2 (2):393-398. IF: 0.9860
- 18. R. Kanchana, Usha Devi Muraleedharan, Seshagiri Raghukumar, (2011), Alkaline lipase activity from the marine protists, thraustochytrids, World J Microbiol Biotechnol, 27 (9):2125-2131. IF:1.262

Book chapters:

- Purnima Singh and **R. Kanchana**, 2019. Biotechnological Potentials of Arctic Fungi' In: Fungi in Polar Regions, 1st Edition, Ed: Masaharu Tsuji, Tamotsu Hoshino, CRC Press, Taylor & Francis Group, UK March
- Vazhakatt Lilly Anne Devasia, **R. Kanchana**, Poonam Vashist and Usha D. Muraleedharan, 2019. Technological advancements in industrial enzyme research, In: Advances in Biological Science Research- A Practical Approach, Ed: Surya Nandan Meena and Milind Mohan Naik, Academic Press, Elsevier, pp 85-102. ISBN: 978-0-12-817497-5.
- Poonam Vashist, R. Kanchana, Vazhakatt Lilly Anne Devasia, Priyanka V. Shirodkar and Usha D. Muraleedharan, 2019. Biotechnological implications of hydrolytic enzymes from marine microbes, In: Advances in Biological Science Research- A Practical Approach, Ed: Surya Nandan Meena and Milind Mohan Naik, Academic Press, Elsevier, pp 103-118. ISBN: 978-0-12-817497-5

Paper Presentations

- Presented a research paper on 'Green Synthesis of multifunctional nanoparticles' International Conference, Karad, Maharashtra 27-26, March 2018.
- presented four research papers in International conference on Agriculture, Science, Technology, Management and Social Science 2016 and National workshop on Soft Computing Modelling and Medical Sciences & a Symposium on Women Empowerment on 'Green synthesis of multifunctional nanoparticles, Value added food products— from laboratory to industry, Potential of a marine bio-resource in the production of industrially important enzymes and Exploring the potentials of marine resources for the synthesis of nanoparticles' held at Carmel College of Arts, Science & Commerce for women, Goa on 10-12th November 2016.
- Presented a poster 'Value added food products through fortification from laboratory to industry' in a National seminar on "Entrepreneurial Opportunities in Bangalore" at Sir M. Visvesvaraya Institute of Technology, Bangalore from 23rd 25th March 2017. The poster bagged third prize.
- Poster presentation titled 'Green synthesis of multi functional nanoparticles' in the National seminar on 'Advances in Microbiology and Marine Microbiology' at Goa University on 13.03.2015 and bagged the first prize.
- Paper presentation titled 'Bio-prospecting of the screw pine, an underutilized crop in southwest India' in the National seminar on Bio-prospecting for today's world at Bharathiar University, Coimbatore from 8th Jan, 2014.
- Two poster presentations titled 'Production of probotic soy yogurt' and 'Study of plant growth promoting factor/s producing microorganisms' in the National symposium on Biotechnology in India: a panoramic view at Dept of Biotechnology, Goa University from 25-26th Feb, 2014.
- Paper presentation titled 'Native feather degradation by a keratinophilic fungus' in the National Symposium on Biogalaxia 13- Glimpses of Innovations in Biotechnology at Bharathiar University, Coimbatore from 3rd Oct, 2013.
- Poster presentation titled 'Dyeing of textiles with natural dyes an eco-friendly approach' in the National Conference on Plant Sciences at Parvatibai Chowgule College of Arts & Science, Goa on 7 & 8th Feb, 2013.
- Paper presentation in the National seminar on Advances in Zoology &Life Processes at Dept of Zoology, Goa University from 9-11th Feb, 2012.
- Paper presentation titled 'Study on a pharmaceutically important enzyme- Cholesterol Oxidase from a bacterial isolate' in the National Symposium on Microbial Diversity and its applications in health, Agriculture and Industry at ICAR Research Complex, Old Goa on 4-5th Mar, 2011.
- Paper presentation titled 'Bio degradation of feather wastes towards cleaner environment' in the International symposium on Environmental risk assessment 2011at Bharathiar University, Coimbatore from 17-19th Oct, 2011.
- Paper presentation titled 'Exploring the potential applications of an alkaline protease from a bacterial species' in National seminar on frontiers in Biotechnology at Changu Kana Thakur Arts, Commerce & Science College, New Panvel, Mumbai on 3-4th Dec, 2010.

POST-DOCTORAL STUDENT

Dr. Purnima Singh has been selected for the award of SERB National Post-Doctoral fellowship by SCIENCE & ENGINEERING RESEARCH BOARD (SERB) Department of Science and Technology, Government of India [File Number: PDF/2016/003707; Sanction Order No PDF/2016/003707]

Title of the project: 'Studies on characterization of most promising substance of biotechnological interest from selected Bacterial strains of extreme environment'.

Period of fellowship: 14.08.2017 to 13.08.2019

Total fellowship sanctioned: Rs.19, 20,000/-

Host Institution where the project is implemented: Parvatibai Chowgule College of Arts and Science, Margao

Mentor: Dr.R.Kanchana, Asst Prof, Dept of Biotechnology, Parvatibai Chowgule College of Arts and Science, Margao

Others:

- Resource person for the short term course on 'Gateway to opportunities in fermented food technology' organised by PES College of Arts, Commerce and Science, Ponda on 4th May, 2018 held from 26th Apr 5th May, 2018.
- Organized DSTE Goa sponsored two days state level workshop on 'Applications of Bioinformatics' at Parvatibai Chowgule College of Arts & Science, Goa on 4 & 5th Jan, 2013
- Worked as an evaluator for the Refresher course in Life Science, conducted by Academic Staff College, Goa University on 14.10.2014
- Treasurer for National conference on 'Current & emerging trends in Life Science' at Parvatibai Chowgule College of Arts & Science, Goa on 16 & 18th Mar, 2014.
- As one of the resource person for two day state level workshop on Animal Cell culture techniques at Parvatibai Chowgule College of Arts & Science, Goa on 4 & 5th Nov, 2009.
