

List of Publications

Journal Publications

1. Saithalavi Anas, **Chechattil Sarika**, Rani Rajan, K. V. Radhakrishnan. A facile synthesis of novel triazabicyclic molecules as potential bicyclic templates for pharmaceutical ligands by the ring opening metathesis-cross metathesis of triazatricyclo[3.2.1.0^{2,6}]dec-8-ene-3,5-diones. *Indian Journal of Chemistry B*, 47:1063-1070, 2008.
2. **C Sarika**, K Rekha and B Narasimha Murthy. Laccase based amperometric biosensor for industrial waste waters: A comparative study on covalent immobilization methods on gold electrode, *IOSR Journal of Applied Chemistry*, 7:20-27, 2014. IF-1.327
3. **C Sarika**, K Rekha and B Narasimha Murthy. Studies on enhancing operational stability of a reusable laccase-based biosensor probe for detection of ortho-substituted phenolic derivatives. *3 Biotech*, 5:1-14, 2015. IF-1.497
4. **C Sarika**, K Rekha and B Narasimha Murthy. Immobilized laccase-based biosensor for the detection of disubstituted methyl and methoxy phenols – application of Box–Behnken design with response surface methodology for modeling and optimization of performance parameters. *Artificial Cells, Nanomedicine, and Biotechnology*, 44:1741-52, 2016. IF-5.605
5. **C Sarika**, M S Shivakumar, C Shivakumara, G Krishnamurthy, B Narasimha Murthy and I C Lekshmi. A novel amperometric catechol biosensor based on α -Fe₂O₃ nanocrystals-modified carbon paste electrode. *Artificial Cells, Nanomedicine, and Biotechnology*, 45:625-634, 2017.
6. **C. Sarika**, M. S. Shivakumar, Lakhirupa Devi, K. Rekha, B. Narasimhamurthy, Sabu Thomas, Nandakumar Kalarikkal and I. C. Lekshmi. A comparative study on NiO nanocrystal modified graphite and Au electrode matrices as immobilization supports for laccase enzyme in amperometric biosensing for catechol detection. *Advanced Materials Proceedings*, 3(5), 304-311, 2018.
7. I.C. Lekshmi, I. Rudra, R. Pillai, **C. Sarika**, M.S. Shivakumar, C. Shivakumara, S.B. Konwar, B. Narasimhamurthy. Enhanced catechol biosensing on metal oxide nanocrystal sensitized graphite nanoelectrodes through preferential molecular adsorption. *Journal of Electroanalytical Chemistry*. Volume 867, 15 June 2020, 114190.

Conference Publications

1. **C Sarika**, K Rekha and B Narasimha Murthy. A simple laccase based amperometric biosensor for detection of phenolic compounds-A comparative study on different membranes as immobilization supports. Presented at Indian Technology Congress (ITC-2015), an International Conference held at Nimhans Convention centre, Bangaluru during 29 and 30 July 2015.
2. **C Sarika**, M S Shivakumar, K Rekha, G Krishnamurthy, B Narasimha Murthy and I C Lekshmi. A comparative study on different electrode matrices as immobilization supports for laccase enzyme in amperometric biosensors for catechol detection. Presented at Second International Conference on Advanced Materials for Power Engineering (ICAMPE-2016), held at Mahatma Gandhi University, Kottayam, Kerala during 11, 12 and 13 November 2016.
3. **C Sarika**, K Rekha and B Narasimha Murthy. Isolation and partial purification of polyphenol oxidase from banana for biosensor applications. Presented at One day National Conference on “Imperative Ideas in Engineering and Science for a Paradigm Shift” held at Gopalan College of Engineering & Management, Bangaluru during 17th August 2018.
4. **C Sarika**, K Rekha and B Narasimha Murthy. Mushroom Tissue Based Biosensor For Detecting Catechol. Presented at First International Conference on “Emerging Trends and Challenges in Applied Science, Engineering and Technology (ICECAET-2020)” held at Gopalan College of Engineering & Management, Bangaluru during 10th and 11th March 2020.