Prof. (Dr.) Prakash Kumar B.



Academic Profile

Educational Qualification:

Ph.D, from Sree Chithira Tirunal Institute for Medical Sciences and Technology for the work on `Biochemical correlates of cardiac fibrogenesis in response to Magnesium deficiency and Cerium`. Ph.D awarded in June 1997.
Master's degree in Biochemistry from Department of Biochemistry University of Kerala in 1991 with first class (71%).
Bachelor's Degree in Chemistry from University of Kerala in 1989 with distinction (87%).

Research Publications

- Sincy George, Sunny Kuriakose, Prakash Kumar B & Tessymol Mathew. Synthesis, Characterization and Antibacterial applications of water soluble Silver nanoparticle encapsulated cyclodextrin. J. Supramolecular Chemistry (Accepted in Press)
- Sincy George, Sunny Kuriakose, Prakash Kumar B & Tessymol Mathew. Synthesis, Characterization and Antimicrobial activity of water soluble Silver nanoparticle dispersed hyperbranched polyglcerol. J. Microbiology Immunology and Infection. (Accepted under revision)
- Prakash Kumar, B., Sunita D` Souza, L., Shivakumar, K., Rathinam, K. 1995.
 Cerium stimulates protein biosynthesis in rat heart in vivo. Biological Trace Element Research. Vol: 50, 237-242.

- Prakash Kumar, B., Shivakumar, K., Kartha, C. C., Rathinam, K. 1996. Magnesium deficiency and Cerium promotes fibro genesis in rat heart. Bull. Environ. Contam. Toxicol. Vol: 57, 517-524.
- Prakash Kumar, B., Shivakumar, K., Kartha, C. C. 1997. Magnesium deficiency related changes in lipid per oxidation and collagen metabolism in vivo in rat heart. Int. J. Biochem. Cell Biol. Vol: 29 (1), 129-134.
- Prakash Kumar, B., Shivakumar, K.1998. Alterations in collagen metabolism and increased fibro proliferation in Cerium treated rats: implications for pathogenesis of endomyocardial fibrosis. Bull. Environ. Contam. Toxicol. Vol: 63, 73-79.
- Prakash Kumar, B., Shivakumar, K.1997.Depressed antioxidant defense in rat heart in experimental Magnesium deficiency- Implications for pathogenesis of myocardial lesion. Biological Trace Element Research. Vol: 60,139-144.
- Shivakumar, K., Prakash Kumar, B. 1997. Magnesium deficiency enhances oxidative stress and collagen synthesis in vivo in the aorta of rats. Int. J. Biochem. Cell Biol. Vol: 29 (11) 1273-1278.
- Jenny Jacob, Sabine Ittoop. Prakash Kumar B. 2008. Cuminum Cyminum, Vernonia Anthemintica, Carum Carvi: Comparitive Evaluation of Anti-bacterial Activity. STARS Vol 2 No 2 129- 133.
- Anagha.S., Meenu. Maria Geroge., Prakash Kumar B. 2010. Dry cell powder of Azotobacter elicits phenolic compound production in callus suspension cultures of Ocimum basilicum. Accepted for publication in Proceedings of 22nd KERALA SCIENCE CONGRESS Peechi, Thrissur. 28-31 January 2010.
 Details of Academic Seminars/Conferences attended National
- 97th Indian Science congress held at University of Kerala from 3rd -7th January 2010. Also Chaired the Symposium on Biochemistry I in the section of Medical Sciences (including physiology)
- 36th National Conference of Association of Clinical Biochemists of India from 5th -7th November 2009 held at Amrita Institute of Medical Sciences and research center, Kochi.
- Nineteenth midyear meeting of the Indian Academy of Sciences held in Indian Institute of Sciences as a teacher participant from 3-5 July 2008

- Workshop on DNA Finger printing techniques organized by at NBFGR Cochin Unit held at CMFRI campus Cochin during 06 – 16 March 2006.
- Resource generation Camp for innovative teaching and research in Chemistry organized by Homi Bhabha center for Science education and Indian Association of Chemistry teachers at St.Thomas College from 6-7 January 2007.
- UGC Sponsored National Workshop on "Advanced Techniques in Biotechnology" organized by the Department of Plant Biology and Plant Biotechnology, Holy Cross College, Nagercoil from 26th to 28th March 2005.
- National Symposium on Tropical Diseases and Aids held at Thiruvananthapuram on 22nd & 23rd March 1995
 State level
- 22nd Kerala Science Congress held at Kerala Forest Research Institute from 28th
 31st January 2010.
- 20th Kerala Science Congress held at Thiruvananthapuram during 28 to 31 January 2008
- UGC Sponsored Seminar on Nutrigenomics: An innovative solution to lifestyle disorders organized by Department of Industrial Microbiology, Government College, Thiruvananthapuram from 24th to 26th September 2008
- Lecture workshop on Current topics in Chemistry organized by Department of Biochemistry, St.Thomas College, Pala and sponsored by Indian Academy of Sciences, Bangalore, Indian National Science academy, New Delhi and The National Academiy of Sciences, Allahabad on 10 and 11 April 2008
- UGC Sponsored Refresher Course organized by Department of Marine Biology Microbiology & Biochemistry, Cochin University of Science and Technology from 1-12-2004 to 21-12-2004.
- UGC Sponsored Refresher Course in Life Sciences organized by Academic Staff College, University of Kerala from 8-3-2000 to 29-3-2000.
- UGC Sponsored Orientation Course in Multidiscipline organized by Academic Staff College, University of Kerala from 21-1-1999 to 24-2-1999.
 Area of Research
- Isolation and characterization of Inhibitors for Lipoxygenase / Cycloxygenase pathway which play an important role in process of inflammatory response.

- Mechanism of action of anti-inflammatory molecules on regulation of inflammatory response associated with Cardiovascular diseases
- Utilization of Plant tissue culture for production of secondary Metabolites
 Funded Projects
- Screening of Medicinal Plants For Dual Inhibition of Lipoxygenase (LOX) And Cyclooxygenase (COX).
 Group Members

1. Jenny Jacob:

Ph.D Student who is presently working on screening of medicinal plant for identification of dual inhibitors of Lipoxygenase and Cyclooxygenases.