## Dr. Prashantha Naik, Associate Professor



Dr. Prashantha Naik, obtained Masters degree in Applied Zoology and Ph.D in the field of Genetic Toxicology from Mangalore University. Qualified CSIR-UGC NET – JRF (2002). Appointed as Lecturer in 2003, currently working as Associate Professor in the Department of Biosciences. Additional charges, Radiological Safety Officer (Level – I) and Nodal Officer - M.U. - Solid Waste Management Programs. Published 22 Research articles in National and International peer reviewed journals and in proceedings of the conferences, and chapters in text books. Presented 23 research papers in National and International conferences/symposiums so far. Contributed articles in Kannada Vishwakosha (Encyclopaedia in Zoology) published from University of Mysore. Received Best Paper Presentation award in the seminar organized by Karnataka Science Congress in the year 2007. Co-author of the Books 'Genotoxicity of Xenoestrogens and Genoprotection by Ascorbic acid' published by LAP Lambert Academic Publishing, Germany, and 'DNA Damage Studies' published by Nitte Education Trust.

Convener of the seminar and workshops on Cultivation of Biodiesel Plants, Global Warming – Present & Future Scenario, and Community Participation in Biodiversity organized in the year 2009, 2010 and 2011 respectively under auspices of Ministry of Environment and Forests – Government of India. In association with Karnataka Rajya Vijnana Parishat, organized exhibition of nature and wildlife photographs and paintings in 2010 and 2011 as a part of National Environment Awareness Campaign program. Received appreciation letter from United Nations-Environment Programme (UN-EP) for effective organization of World Environment Day (June 5<sup>th</sup>) in the University and schools since 2012. Resource Person in many National and International Conferences and workshops. Delivered radio talks (Mangalore Air) and published academic and science articles in News papers and magazines. Co-investigator of the project on Biodiversity, conservation and bioprospecting of selected flora, fauna and microbes of Kaiga funded by National Power Corporation of India, Ltd. (Completed), and 'Effect of irradiation on some species of mushrooms and toadstools of Western Ghat Forests of Karnataka' funded by Board of Research in Nuclear Sciences.

Participated in refresher course and many training programs/workshops. Guided Post-Graduate students for minor project works and secured awards for their work presented in National and International Conferences. Gave technical support for research based science initiative for high-school and P.U students (IRIS), which got selected and secured the prizes in National and International Science Fair organized by DST, CII and Intel since 2010. 2011 Life Member of Environmental Mutagen Society of India, *Karanatka Rajya Vijnyana Sahithya Parishath*, Asian Environmental Mutagen Society and National Association for Applications of Radioisotopes and Radiation in Industry. Carrying out research in the field Genetic toxicology and Oncology, and currently guiding 6 students for their doctoral degree, including a foreign student.

#### **Publications:**

- Ravikrishnan V., <u>Prashantha Naik</u>, Sanjeev Ganesh and Madaiah Rajashekhar (2015) <u>Amino acid, fatty acid and mineral profile of mushroom Lentinus polychrous Lév. from Western Ghats, Southern India, Internatinoal Journal of Plant, Animal and Environmental Sciences, 5 (1), 278-281.</u>
- Prakash Anil C., J.P. Dasappa, <u>Prashantha Naik</u>, K. Sharath Chandra, B.L. Vishma (2014) Synthesis of Arylfuran Propenones and Study of their Mosquito-Larvicidal and Antibacterial Properties, **International Journal of Scientific Research**, 3 (4), 55-60.
- Prakash Anil C., D. Jagadeesh Prasad, <u>Prashantha Naik</u>, Sharath Chandra K. (2014) Mosquito-Larvicidal, Anti-Bacterial and Anti-Fungal Properties of Novel 2, 4-Disubstituted-[1, 3] Thiazoles, **Indian Journal of Applied Research**, 4 (3), 25-31.
- Rao B., Lakshmeesha, Asha S. Madhukumar R., Latha S., Gowda Mahadeva,; Shetty G. Rajesha, Chandra K. Sharath, <u>Prashantha Naik</u> and Sangappa (2014) Structural, surface wettability and antibacterial properties of HPMC-ZnO nanocomposite, Proceedings of the 58th DAE Solid State Physics, Symposium 2013, **Solid State Physics**, (1591), 807.
- Asha S., <u>Prashantha Naik</u>, K. Sharat Chandra and Ganesh Sanjeev (2014) Microstructural, thermal and antibacterial properties of electron beam irradiated Bombyx mori silk fibroin films, Solid State Physics: Proceedings of the 58th DAE Solid State Physics Symposium 2013, **Solid State Physics**, 1591(1), 219-221.
- Reshma Reshma, G.K. Nagaraja, <u>Prashantha Naik</u> and H. Manjunatha (2014) Synthesis and characterization of novel imidazoquinoline based 2-azetidinones as potent antimicrobial and anticancer agents, Journal of Saudi Chemical Society, <a href="http://dx.doi.org/10.1016/j-jscs.2014.07.003">http://dx.doi.org/10.1016/j-jscs.2014.07.003</a>.
- Castelin P.A., <u>Prashantha Naik</u>, JP Dasappa, RS Sujayraj, KS Chandra (2014) Synthesis of novel thiadiazolotriazin-4-ones and study of their mosquito-larvicidal and antibacterial properties, European journal of medicinal chemistry 84, 194-199
- <u>Prem D'Souza</u>, <u>K.K. Vijayalaxmi</u>, <u>Prashantha Naik</u> (2014) Assessment of genotoxicity of aluminium acetate in bone marrow, male germ cells and fetal liver cells of Swiss albino mice, Mutation Research, 766, 16-22.
- Reshma Kayarmar, G. K. Nagaraja, Manjunath Bhat, Prashantha Naik, K. P. Rajesh, Suchetha Shetty and T. Arulmoli (2014) Synthesis of azabicyclo [4.2. 0] octa-1, 3, 5-trien-8-one analogues of 1H-imidazo [4, 5-c] quinoline and evaluation of their antimicrobial and anticancer activities, Medicinal Chemistry Research, 23(6), 2964-2975.
- Viveka S., <u>Prashantha Naik</u> and G.K. Nagaraja (2014) <u>Synthesis</u>, <u>characterization of new imidazoquinonyl chalcones and pyrazolines as potential anticancer and antioxidant agents</u>, Medicinal Chemistry Research, 23, 4189-4197.

- <u>Prashantha Naik</u>, Hj Din Rozman and Rajeev Bhat (2013) Genoprotective effects of lignin isolated from oil palm black liquor waste, **Environmental Toxicology and Pharmacology**, 36 (1), 135-141.
- Ashwini Prabhu, M. Krishnamoorthy, D. Jagadeesh Prasad and <u>Prashantha Naik</u> (2013) Anticancer activity of friedelin isolated from ethanolic leaf Extract of *Cassia tora* on HeLa and HSC-1 cell lines, **Indian Journal of Applied Research**, 3(10), 1-4.
- Vijay Mala (Grover) Nair, Akhila M., Ganesh Sanjeev, <u>Prashantha Naik</u> and Vikram S. (2013) Electron beam irradiation a potential inducer of sperm abnormalities in Swiss albino mouse, Mus musculus exposed to median lethal dose, **Indian Journal of Applied Research**, 3 (7), 637-639.
- <u>Prashantha Naik</u>, Ashwini Prabhu, K.A.A. Kumar and Guruprasad Kalthur (2011), The Genotoxicity of methyl parathion: A comparative analysis of *In Vivo* and *In Vitro* model systems, **Alternative To Laboratory Animals**, 39.1.
- <u>Prashatha Naik</u> and K.K. Vijayalaxmi (2009) Cytogenetic evaluation for genotoxicity of bisphenol-a in bone marrow cells of Swiss albino mice, **Mutation Research**, 676, 106-112.
- Bhat K.S., Poojary B., Prasad D.J., <u>Naik P.</u> and Holla B.S.(2009) Synthesis and antitumor activity studies of some new fused 1,2,4-triazole derivatives carrying 2,4-dichloro-5-fluorophenyl moiety, *Eur J Med Chem.*, 44, 5066–5070.
- <u>Prashatha Naik</u> and K.K. Vijayalaxmi (2009) Cytogenetic evaluation for genotoxicity of bisphenol-A in bone marrow cells of Swiss albino mice, **Mutation Research**, 676, 106-112.
- <u>Prashantha Naik</u> and K.K. Vijayalaxmi (2008) Modulatory effect of ascorbic acid against the methyl parathion-induced micronucleus in Swiss albino mice, In: Proceedings of International Conference on biomarkers in health and environmental management and Environmental Mutagen Society of India XXXII Annual Meet, pp 40-50.
- Prashantha Naik, Roy U.B., K.K.Vijayalaxmi (2007) Endosulfan induced teratogenicity and protective effect of gooseberry extract against the induction of sperm abnormality, In: Proceedings of 3<sup>rd</sup> Kannada Vijnana Sammelana, organized by Karnataka Science Congress and Kuvempu University, on 15-17 September 2007.
- <u>Prashantha Naik</u> (2009) Antisense Technology A New Dimension in Therapy, In: Biotechnology Concepts and Applications, (Ed: Ravishankar Rai Vittal and Rajeev Bhat, Narosa Publishing House, New Delhi, pp 52-63 (**Book chapter**).

- Vijayalaxmi K.K., VN Fernandes, <u>Prashantha Naik</u> (2002) Indian pests of Mango (*Mangifera indica*) crops A field study in Dakshnina Kannada district, Kuvempu University Journal 2 (1), 47-52.
- <u>Prashanth Naik</u> (2003) Telomeric DNA and ageing, Proceedings of the Seminar on DNA: Past, Present and Future, DVS College, Shimoga, 60-62.

# Participation and paper presentation in the conferences/Symposium:

- Presented a research paper 'Synthesis, Characterization and Assessment of Anticancer Activity of Novel Propenones' in UGC sponsored A National Seminar on Natural vs. Synthetic Drugs A Medicinal Approach, organized by ST. ALOYSIUS COLLEGE, Mangalore on 30.09.2014.
- Presented a research paper Incorporation of Hydroxypropyl Methylcellulose (HPMC) Film with Zinc Oxide Nanoparticle for Bacterial Resistance in UGC & KSTA sponsored Two Day National Conference on Present Scenario of chemical sciences and its Technological Perspectives-2014 on 10-11<sup>th</sup> October 2014.
- Presented a research paper on Protective effect of Gooseberry extract on methyl parathion-induced genotoxicity and sperm abnormality in 10<sup>th</sup> Kannada Vijnana Sammelan" organized organized by Karnataka Science College at Mysore University Mysore to be from 15-17<sup>th</sup> Oct. 2014.
- Presented a research paper 'Exploration and characterization of anticancer agent from *Cassia tora* Linn., in DST Sponsored National Conference on "An Overview of Medicinal Value of Plants" At Sahyadri College, Shimoga on 21st April 2014.
- Presented a Paper 'Synthesis, Characterization and Anticancer Studies of some Novel Triazolothiadiazole Derivatives, in Two Day National Conference on Current Trends in Scientific Research for Engineering Solution, organized by St. Joseph Engineering College, Mangalore on 17-18 July 2014.
- Presented a paper 'Synthesis, Characterization and Assessment of Antibiotic Activity of Novel Propenones', in the National Symposium of Biotechnology– Symbiot'14, organized by Manipal Institute of Technology (MIT), Manipal in association with Defense Research & Development Organization (DRDO) on 11-12<sup>th</sup> April 2014.
- Presented a paper 'Protective Effects of L-Ascorbic Acid and  $\alpha$ -Tocopherol against Mitomycin C-Induced Testicular Toxicity in Swiss Albino Mice A Comparative Study' in Mini Symposium on Testicular Research from Laboratory to Clinic, organized by Kasturba Medical College, Manipal University, Manipal on13<sup>th</sup> April 2013.
- Presented a paper 'Ascorbic acid and alpha-tocopherol against cyclophosphamide induced testicular toxicity in Swiss albino mice A Comparative analysis,' in National Symposium and

Workshop on Best Practices in Clinical Embryology, organized by Kasturba Medical College, Manipal University, Manipal on 1<sup>st</sup> and 2<sup>nd</sup> Dec. 2012.

- Presented a paper 'Anticancer activity of betulinic acid from Prunella vulgaris an in vivo study on human cervical cancer cells', in International symposium on Recent Trends and Advances in Biomedical Research an Integrated Approach' Indian Association of Biomedical Scientists and Nitte University, Mangalore (1<sup>st</sup>-3<sup>rd</sup> Nov 2012).
- Presented a paper 'Health risks in agriculture, the protective effect of Cassia tora extract against pesticides induced genotoxicity in somatic and germline cells' in 4<sup>th</sup> International Conference on: Life Science Research for Rural & Agricultural Development, organized by Central Potato Research Station, Patna and International Consortium of Contemporary Biologists, Ranchi on 27-29<sup>th</sup> Dec 2011.
- Presented a paper 'Spectrophotometric estimation of total antioxidant activity of *Andrographis paniculata*' in  $16^{th}$  National Conference on Aerobiology and National Symposium on Applications of Biotechnology in Environment Management and Medicine, organized by Indian Aerobiological Society Kolkata and Bapuji Inst. of Eng. And Tech, Davanagere on  $19-21^{st}$  Nov 2010.
- Presented a paper 'The Genotoxicity of Methyl Parathion: A Comparative Analysis of *In Vivo* and *In Vitro* Model Systems' in International Symposium on Alternate Animal Models in Biological Research: Present and Future Perspectives in Toxicology organized by Indian Institute of Toxicology Research, Lucknow, 29<sup>th</sup>-31<sup>st</sup> Oct. 2010.
- Presented a paper 'Eco-friendly activities in day-to-day life' in Union Ministry of Environment and Forests sponsored One day Seminar on National Environmental Awareness campaign, Shree Dharmasthala Manjunatheshwara College, Ujire, on 30<sup>th</sup> March 2010).
- Presented a paper 'A comparative study on the efficacy of L-ascorbic acid and Gooseberry extract in minimizing cyclophosphamide induced toxic effects on somatic and germinal cells' in 3<sup>rd</sup> International Conference on Genetic and Molecular Diagnosis in Modern Medicine and Biology 2010 organized by Yenepoya University, Mangalore on 27<sup>th</sup> Feb to 1<sup>st</sup> March 2010.
- Presented a paper 'Pesticides and health risks in agriculture a study on genotoxicity of malathion' in UGC sponsored National Seminar on Relevance of Information and Communication Technologies in Agriculture, organized by Shree Dharmasthala Manjunatheshwara College, Ujire on 20<sup>th</sup> and 21<sup>st</sup> March 2009.
- Presented a paper 'In situ monitoring of aquatic pollution in Mangalore coastal region using fish micronucleus test' in 5<sup>th</sup> Kannada Vijnana Sammelana organized by Karnataka Science Congress at Gulbarga University on 15-17<sup>th</sup> Sept. 2009.
- Presented a paper 'Endosulfan induced teratogenicity and protective effect of gooseberry extract against the induction of sperm abnormality' in 3rd Kannada Vijnana Sammelana, Karnataka Science Congress at Kuvempu University on 15-17<sup>th</sup> Sept. 2007.

- Presented a paper 'A study on the protective effect of Gooseberry extract (*Phyllanthus emblica*) against malathion-induced genotoxicity in Swiss albino mice' in International Symposium on 'Environmental Pollution, Ecology and Human Health, organized by S. V. University in collaboration with US-EPA, USA; DRDE on 25-27<sup>th</sup> July 2009.
- Presented a paper 'In vivo micronucleus test A cytogenetic tool for genotoxicity and genoprotective evaluation' in National Seminar on Biotechnology Challenges and Prospects funded by BRNS, DBT, CSIR and DST, St Aloysius College, Mangalore on 4-6<sup>th</sup> January 2002.
- Presented a paper 'The Studies on the Genotoxicity of Endosulfan an Organochlorine pesticide in in vivo mouse' in National Conference on Zoology Vision for 21<sup>st</sup> Century / 13th All India Congress of Zoology at Bangalore University on 28<sup>th</sup> 31<sup>st</sup> Dec. 2002.
- Presented a paper 'Evaluation of the genotoxicity of bisphenol-A using mouse in vivo system' in EMSI Siler Jubilee Conference on Environmental Mutagenesis: Challenges in the New Millennium, organized by Environmental Mutagen Society of India and M.S. Swaminathan Research Foundation, Chennai on 1-3 March 2000.
- Presented a paper 'Studies on the in vivo genotoxicity of xenoestrogens Bisphenol-A in mouse' in National Seminar on Zoology for 21<sup>st</sup> Century, organized by Goa University on 7-9<sup>th</sup> Dec. 2000.

## **Research Projects:**

- Co-investigator of the project Effect of Irradiation on Biochemical and Phyto-chemical Constituents in some Species of Mushrooms and Toadstools of Western Ghat Forests of Karnataka (In progress). Rs. 13.5 lakhs
- Co-investigator of the project, 'Biodiversity and Bioprospects of Flora, Fauna and Microbes of Kaiga, Karnataka' funded by National Power Corporation India Ltd. (NPCIL); 35.0 lakhs (Completed).

#### **Invited talks:**

- Resource person and delivered a talk on Micronucleus assay in the 3<sup>rd</sup> International Conference on Genetic and Molecular Diagnosis in Modern Medicine and Biology 2010; Yenepoya University, Mangalore (27<sup>th</sup> Feb to 1<sup>st</sup> March 2010).
- Resource person to delved invited talk DNA damage studies in International symposium on Recent Trends and Advances in Biomedical Research – an Integrated Approach' organized by Indian Association of Biomedical Scientists and Nitte University, Mangalore on (1st-3rd Nov 2012)
- Chaired the scientific session in : UGC sponsored National Seminar on 'Relevance of Information and Communication Technologies in Agriculture' Shree Dharmasthala Manjunatheshwra College, Ujire, on 20-21<sup>st</sup> March 2009.
- Chaired a scientific session in : 3<sup>rd</sup> Kannada Vijnana Sammelana (15-17<sup>th</sup> 2007) Karnataka Science Congress and Kuvempu University.

- Chaired a Scientific session in International Conference on Radiation Biology & Clinical Applications, organized by K.S. Hegde Medical Academy (25-27<sup>th</sup> October 2013).

# **Books published:**

- 1. Prashantha Naik and K.K.vijayalaxmi (2012) Genotoxicity of xenoestrogens and genoprotection by ascorbic acid: An *in vivo* assessment, LAMBERT Academic Publishing, Germany.
- 2. Suchetha Kumari N., Prashantha Naik, Prerana Shetty and P. Kathyayani (2012) Some techniques for DNA damage studies, Nitte Education Trust, Mangalore, India.
- 3. Prashantha Naik (2013) Prani Jagathina Vismayagalu Mangalore, Akrathi Ashaya Publication, ISBN: 978-93-83765-01-0.
- 4. Prashantha Naik (2013) Parisara Hinde, Indu mattu Munde..? (Part –I), Bantwala (D.K.), Chinthana Bayalu, Bantwala (D.K.), ISBN: 9788192137667.

#### Awards:

- CSIR-UGC JRF 2002.
- Best Paper Presentation Award in 3rd Kannada Vijanana Sammelana, organized by Swadeshi Vijanana Andolana at Kuvempu University on 17<sup>th</sup> September 2007.
- Certificate of Excellence for securing the first place in research paper presentation in the conference Symbiot-2014, organized by Manipal Institute of Technology (M.I.T) on 11<sup>th</sup>-12<sup>th</sup> April 2014.
- Received the 'Certificates of Appreciation' from United Nations Environment Programme (UN-EP) for having convened the programmes to celebrate the 'World Environment Day at Mangalore University (June 5<sup>th</sup> 2012), Sri Ramakrishna High-school, Harekala, Mangalore (June 5<sup>th</sup> 2013) and Govt. High School, Pavoor (June 5<sup>th</sup> 2014).