New Generation Ecotox - Biosystem of water monitoring through analysis of real-time image

Gilmar S. Erzinger
University of Joinville Region - UNIVILLE

This idea wins Top 50 innovative, technology-led small to medium enterprises (SMEs) in our global network of incubators in 2011 Global Forum on Innovation and Entrepreneurship in Helsinki, Finland in May 2011. EcoBabitonga Technology - a small Brazilian company with only eight months of existence but whose team has over twelve years of experience in research and development of advanced technology - is proposing an instrument called NG-Tox (new Generation ECOTOX). This is high-tech equipment that performs bioassays and works on the concept of real-time image analysis and could be a landmark in tests and water quality control, i.e. the ecotoxicology testing called due to its high portability, convenience, high operation reliability providing statistically significant results in their analysis. With low cost of operation can use natural microorganism non-genetically modified like Euglena gracilis and Prorocentrum for water evaluation of different salinities, with applications in many distinct area like agriculture, seafood, oysters cultures and more, and especially for the efficiency of water treatment plants. Another possible use of NG-Tox and its applicability as an early warning system for environmental disasters in aquatic systems, both in rivers, dams and lakes and in seawater.

Biography

Graduated in Pharmacy and Biochemistry, Federal University of Santa Catarina 1985, Master of Biochemical and Pharmaceutical Technology from the University of São Paulo 1995 and Ph.D. in Pharmaceutical Technology Biochemistry from the University of São Paulo 2000. Post Doctorate in photobiology from the Federich Alexander Erlangen&Nürnberg, Germany 2009. Professor in University of Joinville Region of the Medicine and Pharmacy courses, Coordinator of the Masters Program in Health and Environment. It is also professor of Lutheran Education Association Bom Jesus Ielusc in the nursing program. He has experience in the development of biotechnological processes, with emphasis in applied enzymology, instrumental analysis, mainly in the following areas: marine ecotoxicology, UVA and UVB, through image analysis, applied microbiology and the development of new products. He is currently a partner at Ecobabitonga Technology, a company of technological innovation incubated with the INOVAPAQ. Researcher FAPESC.