



Centre for Biosystems Science and Engineering

Seminar

Innovations for a Sustainable World - A Journey from Lab to Market

on

05th December 2016,
4:00 PM, Main Auditorium, Biological Sciences Building.

by

Dr. Samiran Mahapatra
R&D Director, Open Innovation, Unilever, South Asia.

Across the world we face new and bigger challenges. Nearly 800 million people do not have access to safe drinking water and over 2 billion are without access to proper sanitation. More than 2 million children die each year from preventable diarrhoea. Over a billion people live in water-scarce areas. Demand for food is increasing to feed a growing population.

Governments struggle to agree and implement global solutions on climate change and human development. At a time when business and brands have to part of the solution, Unilever have introduced an inspiring purpose for our times - to make sustainable living commonplace because of the belief that it is possible for 9 billion people – the world's population 30 years from now – to live well and live within the natural limits of the planet.

The talk will entail a discussion on how Unilever intends to grow and prosper in a world where water will be scarce, energy expensive, food supply less secure and where we will pay for the carbon we emit. It has three big goals: (i) Help more than a billion people take action to improve their health and wellbeing, (ii) Halve the environmental footprint of our products, and (iii) Enhance the livelihoods of millions of people in the supply chain.

As a specific example of innovation for sustainable world, the speaker will talk about a fairly recent innovation from India in the area of providing safe drinking water ('Pureit') and how the team developed science insights into technology, then a long journey to the product design and finally to market. The development of Pureit goes back almost 15 years and started with a big challenge: to make a device that assures 100% protection from all water-borne diseases at a cost of less than one Rupee per day. It should work without electricity and pressure from piped water.

About the speaker

Dr. Samiran has 20 years of experience in research, development and innovation management. He works seamlessly both at science and business end of the R&D spectrum. His expertise includes open innovation, water purification and smart materials.

He received his PhD degree in Chemistry from IIT Kanpur in 1993 under the guidance of Prof R.N. Mukherjee. He then joined Prof Bill Tolman at University of Minnesota (USA) as a postdoctoral associate working in in the area of Bio-Inorganic chemistry. His discovery of copper (3+) di-oxo system made from molecular oxygen resulted in creating a new field of research and is now part of textbooks.



He joined Unilever R&D as Senior Scientist in 1997 and is now heading Open Innovation in Unilever South Asia.