

What is a physicist doing in the jungle? Biomimetics of the rainforest

Ille C. Gebeshuber

Institute of Microengineering and Nanoelectronics (IMWN), Universiti Kebangsaan
Malaysia (UKM), 43600 UKM Bangi, Selangor, Malaysia

Institute of Applied Physics, Vienna University of Technology,
1040 Wien, Austria, Europe

Contact: email: ille.ukm@gmail.com, phone: 013 319 8588

Having lived and worked in South East Asia for several years now, the European physics professor Ille C. Gebeshuber has broadened her horizon by getting to know and understand completely new ways of thinking, doing research, and dealing with problems. On rainforest expeditions with her PhD students from Europe and Malaysia from fields such as economics, engineering, biology, the veterinary sciences, physics and the applied as well as the fine arts and collaborators from around the globe she has established an interdisciplinary sound basis to unveil the unique wisdom and potential of the largest sustainable system we know, living nature, and what we can learn from it regarding successful addressing of major global challenges such as climate change and sustainable development, major changes in biodiversity, supply with clean water for everybody and health problems due to resistant microorganisms. The talk will deal with new ways of teaching, of disseminating and accessing knowledge, of doing engineering and shaping our approaches towards a better, healthy and good way of living, that would not compromise future generations, and that are the focus of her research. Her work is based on biomimetics and a deep understanding of trends and developments.

Biography

Prof. Ille C. Gebeshuber was born in 1969 in the little Kampung Kindberg (i.e., hill of the children) in Austria, Europe. At the age of eighteen she went to the capital of Austria, to Vienna, to study Engineering Physics. After her PhD in the Technical Sciences, she went to California, to Santa Barbara, for her PostDoc. She is habilitated for Experimental Physics at the Vienna University of Technology, where she holds a permanent post. She has been professor at IMEN, UKM, since 2009. Her major interests are physics and interdisciplinary natural sciences such as tribology, biomimetics and nanotechnology. With this base knowledge, and her new inputs in South East Asia, she develops synergistic approaches blending different ways of thinking that exist around the globe into a completely new approach to successfully address major challenges for humankind.

Reference

TEDxKL 2012 Talk: <http://www.tinyurl.com/illeted>