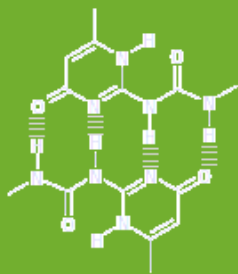


COLLOQUIUM OF THE DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY



Thursday, December 2nd 2010, 16:00

Amphitheater "Maria Manassaki"

Students Center, University of Crete, Voutes, Heraklion

Why we cannot make life *Prof. Bert Meijer*

"*The origin of life on earth*" is without doubt one of the most intriguing scientific topics, while the wish to create life in a laboratory is amongst the most difficult challenges. The enormous progress in science and technology offers many answers to the miracles of living systems. On the one hand, we can clone sheep, grow organs from stem cells, while cells, plants, and bacteria have been modified genetically. On the other hand, the synthesis of small and large molecules has become so sophisticated that almost every molecule that exists on earth can be made in a laboratory, including long strands of DNA, proteins and complex drugs that can cure diseases. These many insights, however, also show the complexity of the molecular cell biology and as a result the astonishment over how life could originate increases. The lecture will illustrate the greatest challenges seen in the understanding of the origin of life and show that it will take very, very long before a living cell out of his individual components can be made in a laboratory. Special attention will be given to the self-organization of complex supramolecular systems, being a critical step in the building process.

E.W. "Bert" Meijer is Distinguished University Professor in the Molecular Sciences, Professor of Organic Chemistry at the Eindhoven University of Technology and scientific director of the Institute for Complex Molecular Systems. Bert Meijer is member of many editorial advisory boards, including *Chemical Communications*, *Angewandte Chemie* and *Journal of the American Chemical Society*. Bert Meijer received numerous awards, including the 1999 Silver Medal of the Macro UK group, the Spinoza award in 2001, the ACS award for Polymer Chemistry in 2006, the AkzoNobel Science Award 2010 and he is member of the Royal Netherlands Academy of Science.

