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RESEARCH CONFERENCES

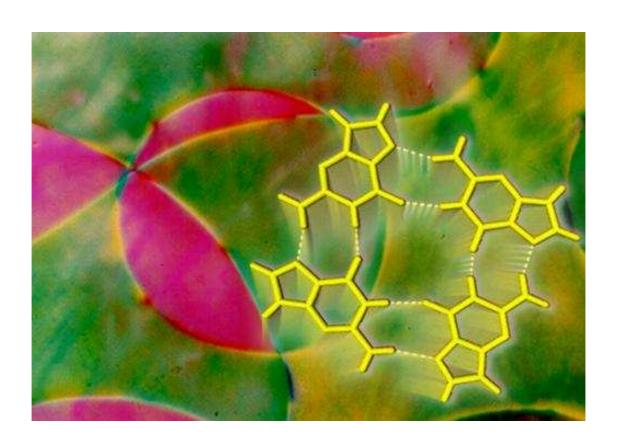
ESF-FWF Conference in Partnership with LFUI

Self-Assembly of Guanosine Derivatives: From Biological Systems to Nanotechnological Applications

Universitätszentrum Obergurgl (Ötz Valley, near Innsbruck) • Austria 20-25 June 2009

Chair: **Gian Piero Spada**, University of Bologna, IT Co-Chairs: **Irena Drevensek-Olenik**, University of Ljubljana, SI; **Lea Spindler**, University of Maribor, SI

www.esf.org/conferences/09289



Preliminary Programme

A recent recognition of the widespread biological relevance of the guanosine self-assembly triggered an expanding research of the associated structures and phenomena. The field evolved into various branches and is at present ripe for exchange of ideas and collaboration. The purpose of the conference is to provide a platform for exchange of expertise and ideas between the senior and young reserachers and to create interdisciplinary links between the scientists in this field. It also aims to help establish scientific collaborations on the pan-European and international level.

Guanosine-based self-assembled structures posses large potential that connects biological with the technical world. The importance of G-quadruplex structures in vivo (in telomere structure and function) requires development of a comprehensive knowledge of the structural and folding properties of the G-rich DNA regions. In addition, many recent successful demonstrations of applications of the G-based materials in areas ranging from medical chemistry to molecular nanotechnology and biotechnology require a rapid progress of the interdisciplinary expertise on the topic.

The topic is highly interdisciplinary connecting molecular biology and soft-condensed matter physics with supramolecular chemistry. A link will be established between theory, simulation, experiment and application.

Invited Speakers will include

- Koji Araki
 University of Tokyo, JP
- Mihail Barboiu
 Institut Européen des Membranes, Montpellier, FR
- Paula BatesUniversity of Louisville, US
- Jeffery T. Davis
 University of Maryland, College Park, US
- Rosa Di Felice
 Istituto Nazionale di Fisica della Materia, Modena, IT
- Shozeb Haider
 University of London, UK
- Alexander B. Kotlyar
 Tel Aviv University, IL
- Nancy Maizels
 University of Washington, Seattle, US
- Jean-Louis Mergny
 Musée National d'Histoire Naturelle, Paris, FR

- Anh Tuan Phan
 Nanyang Technological University, Singapore, SG
- Janez Plavec
 National Institute of Chemistry, Ljubljana, SI
- Antonio Randazzo Università degli Studi di Napoli, IT
- Ross Rinaldi
 Universita' degli Studi di Lecce, IT
- Paolo Samorì
 Université Louis Pasteur, Strasbourg, FR
- Naděžda Špačková Institute of Biophysics, Brno, CZ
- Mateus Webba da Silva University of Ulster, Coleraine, UK
- Gang Wu Queen's University, Kingston, CA