



RESEARCH CONFERENCES

ESF-FWF Conference in Partnership with LFUI

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

Universitätszentrum Ötztal (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 researchers 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 possess 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 Bates**

University 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**

Università 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