



Molecular Frontiers Symposium and Youth Forum

# How chemical cycles shape our planet – the global challenge

Date: 29—30 May 2012

Venue: The Beijer Hall, The Royal Swedish Academy of Sciences, Lilla Frescativägen 4A,

Stockholm, Sweden



# **Tuesday 29 May**

# 09:00 Opening address

Barbara Cannon

President Elect of the Royal Swedish Academy of Sciences

Bengt Nordén

Chairman of the Molecular Frontiers Foundation

# 09:10 Myths and facts of a converging world

Hans Rosling

Karolinska Institutet, Sweden

#### 10:00 Coffee break

# 10:20 Can selective catalysts deliver clean technology and sustainability?

Sir John Meurig Thomas Cambridge University, UK

# 11:10 A multidimensional index of greenness, with the entropy added to the universe as only one parameter

Roald Hoffmann

Nobel Laureate in chemistry 1981

#### 12:00 Lunch (on your own)

# 13:10 Cooperation for sustainable development in the changing world

Chunli Bai

President of the Chinese Academy of Sciences

# 14:00 Biological design by evolution

Frances Arnold

California Institute of Technology, CA, USA

#### 14:50 Coffee break

#### 15:10 Nanoscience – potentials and threats

Paul Alivisatos

Head of Lawrence Berkely Laboratory, CA, USA

16:00 General discussion, youth forum & announcement of Molecular Frontiers Inquiry





THE ROYAL SWEDISH ACADEMY OF SCIENCES

**Prize Winners** 

Moderator: Richard Zare, Stanford University, CA, USA

# Wednesday 30 May

09:10 The climate change crisis - its solution must also involve changing people's

behaviour through global education

Harry Kroto

Nobel Laureate in chemistry 1996

09:40 Coffee break

10:10 Synthetic biology towards biofuels

Jay D Keasling

The Joint BioEnergy Institute, Berkeley, CA, USA

11:00 Climate forecast -why and how? The most pressing problems

Jim Anderson

Harvard University, MA, USA

11:50 Lunch (on your own)

13:10 Panel Discussion: The Global Challenge

Moderator: Richard Zare, Stanford University, CA, USA

15:00 Coffee break

15:20 Concluding talk and discussion

16.15 End of symposium

The symposium is free of charge and open to the public but registration is required for all participants. Register at http://kva.se > Events > Molecular Frontiers Symposium.

