***Program***

* **Saturday 7th September** 
  + 08:45-09:20 Welcome
  + 09:20-11:00 **Kozlowski**

Metals and Neurodegeneration

* + 11:00-11:20 coffee break
  + 11:20-13:00 **Faa**

Neurodegenerative diseases: pathological features.

Zinc in health and disease

* + 13:00-14:30 light lunch
  + 14:30-16:10 **Natile**

Mechanism of Action of Platinum Drugs: Effect of Chirality.

Mechanism of Transport of Platinum Drugs.

* + 16:10-16:30 coffee break
  + 16:30-17:20 **Palacios**

Metallothioneins. An overview.

* + 17:20-18:10 **Faller**

The role of metal ions in neurodegenerative diseases: a bioinorganic chemist view. I

* **Sunday 8th September** 
  + 09:00-10:40 **Faller**

The role of metal ions in neurodegenerative diseases: a bioinorganic chemist view. II

* + 10:40-11:00 coffee break
  + 11:00-11:50 **Zoroddu**

The Biological Periodic Table.

* + 11:50-12:40 ***Student-teacher time***
  + 12:40-14:00 light lunch
  + 14:00-14:50 **Zoroddu**

The metals human body must have.

* + 14:50-15:40 **Turano**

NMR approaches to study protein-protein interactioms.

* + 15:40-16:00 coffee break
  + 16:00-17:40 **Palacios**

Metallothioneins. The real state-of-the-art.

* **Monday 9th September**
  + 09:00-10:40 **Turano**

NMR approaches to study large multimolecular assemblies and their interactions.

Ferritin: assignment of a 480 kDa protein; use of paramagnetic approaches to draw iron pathways. Complementarity between NMR and X-ray for the characterization of weak protein-metal ion interactions.

* + 10:40-11:00 coffee break
  + 11:00-11:50 **Gumienna-Kontecka**

Towards key factors of receptor-substrate recognition events: physico-chemical studies of artificial siderophores.

* + 11:50-12:40 ***Student-teacher time***
  + 12:40-14:00 light lunch
  + 14:00-15:40 **Gans**

Exposition of the basic principles applied to protonation and metal-binding equilibria. Illustrations to includ ATP protonation, chelation therapy, NMR contrast reagents.

* + 15:40-16:00 coffee break
  + 16:00-17:40 **Gans**

Experimental methods for data collection: potentiometric, spectrophotometric, calorimetric, NMR data.

Computer programs for obtaining equilibrium constants from experimental data.

Practical experience in using HySS to examine equilibrium speciation.

* **Thuesday 10th September**
  + 09:00-10:40 **Natile**

Non Classical Platinum Drugs: The Trans Isomers.

Interaction of Platinum Drugs with Proteins: Inhibition of Metalloproteinases.

* + 10:40-11:00 coffee break
  + 11:00-12:40 ***Student-teacher time***
  + 12:40-14:00 light lunch
  + 14:00-15:40 **Gumienna-Kontecka**

Hydroxamic Acids and Oximes for Inorganic and Bioinorganic Modelling and Applications.

* + 15:40-16:00 coffee break
  + 16:00-17:40 **Garcia-Espana**

Oxygen, life and environment

Protective ROS enzymes: SODs and CATs

* + 20:00------- Social dinner
* **Wednesday 11th September**
  + 09:00-10:40 **Kozlowski**

Homeostasis of metals in bacteria

* + 10:40-11:00 coffee break
  + 11:00-11:50 **Garcia-Espana**

Polyamine complexes as enzyme mimics

* + 11:50-13:00 ***Student-teacher time***
  + 13:00-14:00 light lunch
  + 14:30 Visit