



THE EGYPTIAN SOCIETY OF  
CRYSTALLOGRAPHY AND  
ITS APPLICATIONS (ESCA)



NATIONAL COMMITTEE OF  
CRYSTALLOGRAPHY,  
Academy of Scientific  
Research and Technology



THE IUCr COMMISSION ON  
BIOLOGICAL  
MACROMOLECULES

*Macro-molecular Structure of Biological and  
Non-Biological Materials*

**18-22 November 2012**  
Hurghada, Red Sea, Egypt

<<100 YEARS OF X-RAY DIFFRACTION>>

and

<<11<sup>th</sup> INTERNATIONAL SCHOOL AND WORKSHOP>>

**HELD UNDER THE AUSPICES OF**

**Prof. Dr. Maged El-Sherbiny**

President of Academy of Scientific Research and Technology

**Honorary Chairmanship**

**Prof. Dr. Tarek Hussein**

President of National Committee of Synchrotron Radiation

**Chairman**

*Prof. Dr. Karimat El-Sayed*

President of ESCA

**Co-Chairman**

*Prof. Dr. Ibrahim Farag*

Vice-President of ESCA

**Organizing Committee:**

*Yehia Abbas, Salah Arafa, Ahmed Ramadan,  
Mostafa Radwan, Alia Adm and Aisha Moustafa*

# Program

<b>First Day (18 November 2012)</b>		
Chairman: <i>Dr. Pietro Roversi &amp; Dr. Manfred Weiss</i>		
07.00	<i>Departure from Cairo</i>	
11.00	<i>Visit to Wind Station (Zaafrana)</i>	
14.00	<i>Lunch</i>	
16.00 – 18.00	<i>Registration and Accommodation</i>	
18.00 – 18.30	<i>Opening Ceremony</i>	<i>Prof. Yehia Abbas Prof. Alia Aadm</i>
18.30 – 19.30	<i>“Protein Crystallography and Structural Genomics”</i>	<i>Prof. Xiao-Dong Su</i>
20.00	<i>Dinner</i>	

<b>Second Day (19 November 2012)</b>		
Chairman: <i>Prof. Irene Margiolaki &amp; Dr. Ivan Halasz</i>		
07.00 – 08.30	<i>Breakfast</i>	
09.00 - 12.00	<i>100 Years of X-Ray Crystallography</i>	
09.00 - 09.30	<i>“Recent Advances in Computer Memory and Speed Have Enhanced the X-ray Study of Macromolecular Structures”</i>	<i>Prof. Farid Ahmed</i>
09.30 - 10.00	<i>“History of Crystallography of Biomolecular Structures”</i>	<i>Prof. Xiao-Dong Su</i>
10.00 - 10.30	<i>“History and Development of Crystallography in Egypt”</i>	<i>Prof. Karimat El-Sayed</i>
10.30 - 11.00	<i>"History and development of Crystallography in Morocco: Teaching, Research and Instrumentation"</i>	<i>Prof. Abdelmalek Thalal</i>
11.00 – 11.30	<i>"History and development of Crystallography in Algeria"</i>	<i>Prof. Nourredine Benali-Chrif</i>
11.30 – 12.00	<i>"History and development of Crystallography in Tunisia"</i>	<i>Prof. Mongi Debbai</i>
12.00 – 12.30	<i>Coffee Break</i>	
12.30 – 13.30	<i>“Application of Solution Small-Angle Scattering for Study of Biological Macromolecules”</i>	<i>Dr. Michael Kachala</i>
14.00	<i>Lunch</i>	
17.00 – 19.30	<i>Program's Training: “ATSAS Package for Small-Angle Scattering Data Analysis”</i>	<i>Dr. Erica Valentini</i>
20.00	<i>Dinner</i>	

<b>Third Day (20 November 2012)</b>		
Chairman: <i>Prof. Abdelmalek Thalal &amp; Dr. Michael Kachala</i>		
07.00 – 08.30	<i>Breakfast</i>	
09.00 - 10.00	“Crystallization and Single Crystal Structure Determination of Biological Molecules”	<i>Dr. Manfred Weiss</i>
10.00 - 11.00	“Ab-initio Structure Determination and Parametric Rietveld Refinement”	<i>Dr. Ivan Halasz</i>
11.00 - 12.00	Program’s Training: “Ab-initio Structure Determination and Parametric Rietveld Refinement”	<i>Dr. Ivan Halasz</i>
12.00 – 12.30	<i>Coffee Break</i>	
12.30 – 13.30	Program's Training: “Ab-initio Structure Determination and Parametric Rietveld Refinements”	<i>Dr. Ivan Halasz</i>
14.00	<i>Lunch</i>	
16.00 – 19.30	<i>Free/Excursion</i>	
20.00	<i>Dinner</i>	

<b>Fourth Day (21 November 2012)</b>		
Chairman: <i>Prof. Stefano Lupi &amp; Prof. Nourredine Benali-Chrif</i>		
07.00 – 08.30	<i>Breakfast</i>	
09.00 – 11.00	“Application of Powder Diffraction in Nanotechnology”	Panalytical
11.00 – 12.00	“Structure of Biological Molecules from Powder diffraction”	<i>Prof. Irene Margiolaki</i>
12.00 – 12.30	<i>Coffee Break</i>	
12.30 – 13.30	Program's Training: “Structure of Biological Molecules from Powder diffraction”	<i>Prof. Irene Margiolaki</i>
14.00	<i>Lunch</i>	
17.00 – 19.30	Program's Training: "Bioinformatics and Solving The Phase Problem in Biological Materials”	<i>Dr. Pietro Roversi</i>
20.00	<i>Dinner</i>	

<b>Fifth Day (22 November 2012)</b> Chairman: <i>Prof. Xiao-Dong Su &amp; Prof. Mongi Debbai</i>		
07.00 – 08.30	<i>Breakfast</i>	
09.00 – 10.00	"Raman and I. R. Characterizations of Protein and Bio-Molecular Materials.	<i>Prof. Stefano Lupi</i>
10.00 – 11.00	<i>Closing Ceremony: Recommendations</i>	<i>Prof. Salah Arafa Prof. Mostafa Radwan</i>
11.00 – 13.00	<i>Check Out</i>	
13.00	<i>Departure to Cairo</i>	
14.00	<i>Lunch</i>	

**\*Posters:**

Second Day (19 November 2012) and Third Day (20 November 2012): 15.00 – 22.00.