

**IUCr-UNESCO Bruker OpenLab Albania**  
*Polytechnic University of Tirana, 30 May - 3 June 2016*

PROGRAMME

**Monday, 30 May**

*PUT, Main Auditorium "Silvano Pedrollio", second floor*

- 17:00 Arrival of participants and registration
- 18:00-18:15 **Bujar Dida** (FIMIF-PUT) and **Dritan Siliqi** (IC-CNR), *Welcome*
- 18:15-19:00 **Opening ceremony** at the presence of authorities (Master of ceremony: **Bujar Dida**)
- 19:00-19:30 Opening Lecture: **Michele Zema** (IUCr) *Crystallography and Society: the contribution of the IUCr to the development of scientific education, research and infrastructure*
- 19:30-21:00 **Welcome party** offered by the Rector of the Polytechnic University of Tirana

**Tuesday, 31 May**

*PUT, Faculty of Mathematical Engineering and Physical Engineering*

- 09:00-10:00 **Bujar Dida** (FIMIF-PUT), **Michele Zema** (IUCr) and **Dritan Siliqi** (IC-CNR) *Introduction to the OpenLab*
- 10:00-13:00 GROUP A | **Bruker Lab session I**: SMART X2S demonstration; crystal mounting and preparation; data collection (**Bruce Noll**)
- 10:00-13:00 GROUP B | **XRPD Tutorial I**: An overview of powder diffraction; Instrumentation and methods for X-ray powder diffraction; Phase identification and qualitative phase analysis (**Corrado Cuocci**)
- 13:00-14:30 Lunch
- 14:30-17:30 GROUP A | **XRPD Tutorial I**: An overview of powder diffraction; Instrumentation and methods for X-ray powder diffraction; Phase identification (**Corrado Cuocci**)
- 14:30-17:30 GROUP B | **Bruker Lab session I**: SMART X2S demonstration; crystal mounting and preparation; data collection (**Bruce Noll**)

**Wednesday, 1 June**

*PUT, Faculty of Mathematical Engineering and Physical Engineering*

- 09:00-11:00 **Gervais Chapuis** (EPFL) *Symmetry in Crystallography*
- 11:00-11:15 Coffee break
- 11:15-13:00 Exercises: **Gervais Chapuis** (EPFL) *Symmetry in Crystallography*
- 13:00-14:30 Lunch
- 14:30-17:00 GROUP A | **Bruker Lab session II**: Data reduction, structure solution and refinement with APEX3 (**Bruce Noll**)
- 14:30-17:00 GROUP B | **XRPD Tutorial II**: Structure determination by XRPD – part I (**Corrado Cuocci**)

**Thursday, 2 June**

*PUT, Faculty of Mathematical Engineering and Physical Engineering*

- 09:00-11:00 **Gervais Chapuis** (EPFL) *X-ray diffraction*
- 11:00-11:15 Coffee break
- 11:15-13:00 Exercises: **Gervais Chapuis** (EPFL) *X-ray diffraction*
- 13:00-14:30 Lunch
- 14:30-17:30 GROUP A | **XRPD Tutorial III**: Structure determination by XRPD – part II (**Corrado Cuocci**)
- 14:30-17:30 GROUP B | **Bruker Lab session III**: X2S practicals: crystal mounting, data collection, structure solution and refinement (**Francesco Capitelli, Dritan Siliqi, Michele Zema**)

**Friday, 3 June**

*PUT, Faculty of Mathematical Engineering and Physical Engineering*

- 09:00-11:00 **Gervais Chapuis** (EPFL) *Structure solution*
- 11:00-11:15 Coffee break
- 11:15-12:15 **Gervais Chapuis** (EPFL) *Structure completion and refinement*
- 12:15-13:00 **Gervais Chapuis** (EPFL) *Anisotropic tensor properties*
- 13:15-14:30 Lunch
- 14:30-15:30 **Michele Zema** (IUCr) *Recap: single-crystal XRD analysis* – Open discussion
- 15:30-17:30 GROUP A | **Dritan Siliqi** (IC-CNR) *Crystallography for Biology and Medicine*
- 15:30-17:30 GROUP B | **XRPD Tutorial III**: QualX/EXPO2014 hands-on (**Corrado Cuocci**)
- 17:30-18:00 **Bujar Dida** (FIMIF-PUT) and **Dritan Siliqi** (IC-CNR) *Closing ceremony and presentation of certificates*