



included: The physical bases of the electron diffraction and their special features with respect to X-ray and neutron diffraction. The experimental diffraction methods: traditional diffraction techniques and PED and ADT methods. Phasing via electron diffraction data: computer applications.

**Workshop Website:** <http://crystallographypatras.wordpress.com/>

**Title: Electron Crystallography School – Introduction to electron diffraction tomography**

Number of Participants: 42

Level of involvement of SIG in the activity:

Members registered with the SIG involved in the organizing committee

ECA Individual Members registered with the SIG involved as lecturers

Short Description: (50 words max.)

The school (7.4.-11.4.2014) organized by the group of Prof. Ute Kolb covered the basic concepts of electron diffraction and imaging, new ways of data acquisition using different upcoming tomography methods in reciprocal space as well as procedures for structure solution. 5 Lecturers gave practical afternoon courses using different transmission electron.

The school was sponsored by the IUCr and the ECA.

**Title: ESTEEM2 Electron Crystallography Workshop, ,**

Number of Participants: 38

Level of involvement of SIG in the activity:

Members registered with the SIG involved in the organizing committee

ECA Individual Members registered with the SIG involved as lecturers

Short Description: (50 words max.)

Under the auspices of the European network ESTEEM 2, the University of Cambridge Electron Microscopy Group hosted a workshop (22 - 25 July 2014) on electron crystallography (EC) at Downing College, Cambridge. It showcased the latest developments in EC theory and experiment with topics including precession electron diffraction, convergent beam electron diffraction, ptychography, structure solution and structure refinement methods (direct methods, charge flipping, etc), high resolution imaging and orientation mapping.

**Workshop Website:** <http://www.ecryst2014.msm.cam.ac.uk/>

## **9. Future/Programmed Activities.**

After a very active year, we have no knowledge of schools or workshops planned for the coming year.

## **10. Other matters. ( 50 words max.)**

## **11. Brief annual activity report ( 100 words max.)**

This last year the members of SIG4 were involved in many activities like workshops and schools (cf. more detailed descriptions above) as we believe that teaching is a key activity to promote electron crystallography. Knowledge about the possibilities of structure determination by electron crystallography and the practice of its methods is steadily increasing in the crystallographic community. We took an active part in the program committee of ECM28 in Warwick, UK. The microsomnia we organize jointly with other SIGs clearly show the interdisciplinary interest electron crystallography induces. We participate in the organisation of ECM29 in Rovinj, Croatia.

## **12. List SIG officers, name and e-mail, and specify their main function in the SIG:**

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