

The international school on “Fundamental Crystallography with applications to Electron Crystallography” this year took place at the end of June 2016 in the University of Antwerp. Lectures in the first three days were given by Prof. Mois Aroyo and Prof. Massimo Nespolo who dealt with fundamental crystallography. Topics ranged from the basics of matrix calculus and Fourier transforms to using computer programs to determine crystal structure. Lectures were given on matrix calculus, Fourier series, group theory, crystallographic point groups, miller planes, screw axes and glide planes, group-subgroup relations of space groups, crystal structure relationships, and crystallographic computing programs.

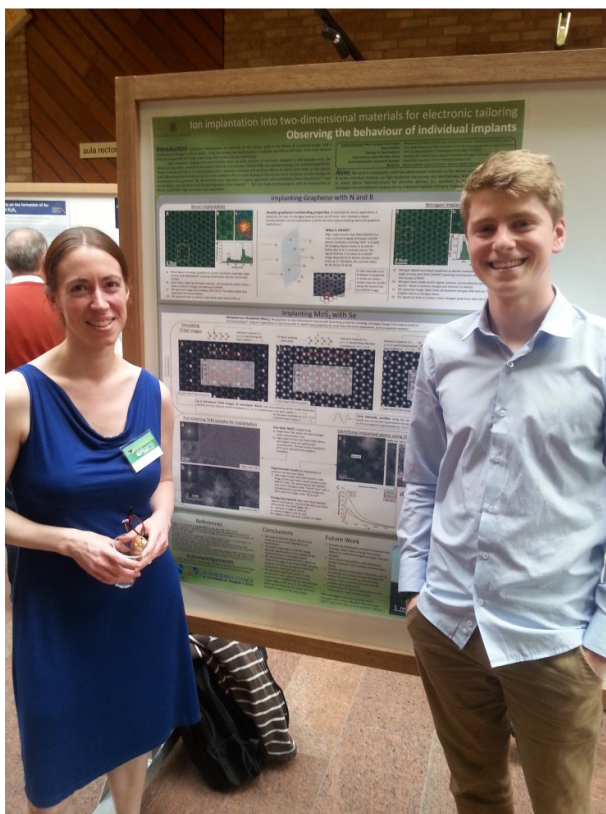
The aim of the first three days was to give the participants grounding in crystallographic theory for use during the electron crystallography and diffraction section taught by Prof. Joke Hadermann. This section was given during the final three days of the school, and included a tour of the EMAT (Electron Microscopy for Material Science) Centre’s collection of microscopes. The topics covered the basics of indexing selected area, micro, and convergent beam diffraction patterns, the Ewald sphere, symmetry labelling, refining and solving structure, and cell super structure. The school also organised a poster session and a tour of the Antwerp City Hall. On the final day, a copy of the book “Electron Crystallography – Electron microscopy and electron diffraction” was given to every participant who presented a poster.

I would highly recommend this intense but fruitful course to any student, researcher or technician working in the area of material science and microscopy who wish to improve their knowledge of basic crystallography and electron diffraction.

Link to school: <https://www.uantwerpen.be/en/summer-schools/fundamental-electron-crystallography/>



Group photo from inside Antwerp City Hall.



Eoghan with Prof. Joke Hadermann at the poster session of the Crystallography summer school.



View of the Cathedral of Our Lady and the Silvius Brabo statue from the Antwerp City Hall.