

W0113

***In situ* Electrocrystallography; The Effect of an Applied Electric Field on Crystal Structures and Their Formation.** A. Parkin, C.C. Wilson, Dept. of Chemistry, Univ. of Glasgow, University Ave., Glasgow G12 8QQ, UK.

Although many electrochemically-produced materials have their structure and composition determined by single crystal diffraction, it is only recently that it has been possible to study the two simultaneously with the construction of a cell for the *in situ* study of electrocrystallisation (right). In this talk we will briefly examine the latest developments in the design of the electrochemical cell for use with different diffractometer geometries and with different experiments, before going on to show some of the latest developments in the materials being studied. These materials will include novel *in situ* electrocrystallised structures, as well as single crystal structures being studied under an applied electric field (i.e. with constant electric current flowing at the time of the diffraction experiment).

