

# Oral Contributions

**[MS2-02] Getting more out of your diffraction experiment: complementary methods and new data collection strategies at synchrotron sources.** Arwen R. Pearson

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Traditional crystallographic experiments yield a “static” structure that is averaged over both the time required for data collection and the volume of the crystal exposed to X-rays. These structures are often radiation damaged and can contain mixtures of species. The need for additional information to help monitor radiation damage and define the chemical state of the molecules in the crystal has driven the development of on-line synchrotron based single crystal spectrometers. I will discuss new data collection approaches that take advantage of the increasing availability of such instruments and their combination with microfocus beamlines in order to collect multi-microcrystal diffraction data of X-ray labile or short-lived reaction intermediates.

Complementary methods, single crystal spectroscopy, time-resolved