

Poster Presentation

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Helping to set standards for high quality XAFS

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The Commission for XAFS has played a significant role in assisting both the IUCr, the IXAS and the wider XAS community in working towards a set of standard for data collection, data preprocessing, data analysis, publication and presentation, and data deposition. The work on the Dictionary for IUCr and the dictionary for XAFS has been a particularly effort which has yielded good success and also revealed challenges of putting all strands of a rapidly-evolving science into a narrowly defined standard. This has led, before and after, to successive extremely successful Workshops at the corresponding IUCr Congresses on XAFS for beginners, or XAFS for Crystallographers, or in general Workshops for anyone seeing the potential value of data collection from complementary sources especially including XAS and XAFS for challenging structural problems. This has led to the proposal, now coming to fruition, for a new Volume of the International Tables for Crystallography, Volume I on X-ray Absorption Spectroscopy and X-ray Absorption Fine Structure. Recently, this has led to the Q2XAFS Satellite and separate workshop series, which most recently is a Satellite of this Congress and was held in Diamond, UK on xxx. I will report a few of the successful outcomes of that series and a way forward to assist the world-wide community in producing stronger data, information content, validation and deposition with publication.

[1] C. T. Chantler, Z. Barnea, C. Q. Tran, N. A. Rae, M. D. de Jonge, 'Invited / Topical Review' A step toward standardization: Development of accurate measurements of X-ray absorption and fluorescence. *Journal of Synchrotron Radiation* 19 (2012) 851-862

[2] J D Bourke, C T Chantler, Y Joly, FDMX: Extended X-ray Absorption Fine Structure Calculations Using the Finite Difference Method, *Journal of Synchrotron Radiation* 23 (2016) 551-559

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