MACROMOLECULAR CRYSTALLOGRAPHY AND S.R.

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The application to macromolecular crystallography of a wide variety of SR sources and beamlines will be given, amongst the topics to be discussed will be: The ultra-high resolution (0.92Å and beyond) structure analysis of the protein concanavalin A using data collected at CHESS (MW + CCD + cryotechniques). The development of MAD phasing strategies using data collected from crystals of the synthetic oligonucleotide d(CGCG^{Br}CG) at station PX9.5 of the SRS. The structure solution, using MAD phases from data collected on BL19 of the ESRF, of the class II Zn $^{2+}$ aldolase from *E.coli.*. The use of polychromatic radiation (the Laue Method) and of the monochromatic large-angle oscillation technique (LOT) in the analysis of crystal structures (data collected at SRS and ESRF).