In-situ studies of flowing samples with SAXS and SANS

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Small-angle scattering is used to study a number of systems of practical interest such as dispersions of colloidal particles and polymers in solution. Many of these materials are synthesised or processed under conditions of flow. This talk will present some results from studies of synthesis using in-situ sampling with both small-angle X-ray and neutron scattering. Time resolved data that extends to the ultra small-angle scattering regime measured with double crystal instruments with both neutrons and X-rays gives new insights into synthesis. Some illustrations of templated synthesis of silica will be shown.