

# Homework - due Monday 27 March before the start of class

1. In a SAXS experimental setup, suppose the original maximum  $q$  value [ $q_{max}$ ] recorded on the detector is  $1 \text{ Angstrom}^{-1}$  and we would like data out to a  $q_{max}$  of  $2 \text{ Angstrom}^{-1}$ . Describe three different ways to modify the experimental setup to achieve this?
2. What energy in keV corresponds to a wavelength of 2 Angstroms?
3. What is contrast matching? Describe its use.
4. What information can be derived from a Guinier Analysis?