

Contribution ID: 16 Type: Talk

## Linking cell uptake to self-assembled block co-polymer nanoparticle morphology –small angle scattering studies

Thursday, 10 June 2021 17:20 (20 minutes)

In tandem with cell studies we have used SAXS and SANS to link nanoparticle structure and its relationship to drug content to provide new strategies for drug delivery nanoparticles as well provide insight into outstanding questions about the entry of particles into cells. Through carefully controlled polymerisation reactions self-assembled block co-polymers offer exquisite control over particle shape and surface characteristics. Small angle X-ray (SAXS) and neutron (SANS) scattering offer two similar and complementary techniques to characterise self-assembled particles used for drug delivery. There is no need for any special sample preparation and structure is evaluated in an environment very close to that of the physiological milieu.

Primary authors: GARVEY, Christopher (MLZ); Dr CAO, Cheng (University of Oslo); Prof. STENZEL,

Martina (University of New South Wales)

**Presenter:** GARVEY, Christopher (MLZ)

Session Classification: Drug design and delivery

Track Classification: Drug design and delivery