Contribution ID : **251** Type : **Poster**

Crystallography for soft matter – can a crystal be soft and alive?

Diffraction is a standard technique to study crystal structure, alignment, texture and grain structure in hard matter. The important role of neutron diffraction in (hard) materials has been cemented by the penetrative and non-ionising nature of neutrons allowing non-destructive measurements in quite unusual sample environments, the sensitivity of neutrons to thermal motions, and the opportunities for isotopic studies. Similar issues arise in soft matter, where material properties (e.g. mechanical functioning, transport properties, internal surface, optical properties etc) are highly influenced by analogues to these quantities formed by the arrangements of ensembles of molecules, often in a solvent, such as amphilipilic molecules or polymers rather than atoms. The structures formed consequentially occur at longer length-scales, and the role of thermal motions is quite different.

Keywords or phrases (comma separated)

Are you a student?

No

Do you wish to take part in</br>the Student Poster Slam?

No

Are you an ECR? (<5 yrs</br>since PhD/Masters)

No

What is your gender?

Male

Primary author(s) : Dr GARVEY, Chris (ANSTO)

Presenter(s) : Dr GARVEY, Chris (ANSTO)

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