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Complex Coacervates as encapsulation system

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Complex coacervates are oppositely charged self-assembled biopolymers such as proteins and polysaccharides. They can be used both as a delivery system of bioactive materials, and for improving the structural and textural functionalities of the final food products. The functionalities of the coacervates are dependent on their microstructures, which are determined on a case-by-case basis depending on the combination of protein, polysaccharide, and bioactive. The encapsulation approach developed in this work incorporates the binding of the bioactives to proteins prior to forming complex coacervates with pectin. This was compared to the coacervate structures formed without the bioactives.

Structural characterization using SANS showed that protein-bioactive complexes could effectively self-assemble with pectin to form complex coacervates making them suitable to be considered as effective encapsulating systems that can be used as value added products such as fat and meat analogues.

Level of Expertise

Student

Presenter Gender

Woman

Pronouns

Which facility did you use for your research

Australian Centre for Neutron Scattering

Students Only - Are you interested in AINSE student funding

No

Do you wish to take part in the Student Poster Slam

Yes

Condition of submission

Yes

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