



# The Edinburgh Complex Fluids Partnership

#### About ECFP

ECFP is the knowledge exchange organisation for complex fluids research at the University of Edinburgh. Our mission is to be a leading centre for science-driven formulation across multiple sectors through consultancy services, collaborative research and partnership development. Since its inception in 2012, ECFP has worked with more than 50 companies, ranging from small local manufacturers to global blue-chip companies.



- Food
- Agrochemicals
- Personal Care
- Paints & Coatings
- Fine Chemicals
- Medical/Pharmaceuticals
- Veterinary/Animals Health
- Industrial Biotech
- Petrochemical Industry
- Instruments
- Robotics
- Food

#### **Capabilities and expertise**

ECFP has expertise in **characterising single ingredient properties** (particle size and shape, fluid viscosity etc.) as well as the **behaviour of complex formulations** (stability, rheological and thermal properties, and microstructure). Insight gained from such characterisation enables fundamental understanding to be derived, facilitating mitigation of problematic formulations and optimisation of industrial processing.





### Through ECFP, partners can access cutting edge facilities such as:

- Cryo FIB SEM imaging opaque, semi-solid samples
- Rheology suite rotational, extensional, microrheology and rheo-imaging
- Particle size and morphology suite laser scattering, dynamic differential microscopy
- Computational molecular, coarse grained, discrete elemental modelling
- Structure and thermal analysis X-Ray diffraction and calorimetry

## **Applied Research**

Our scientists study the fundamental physics that govern how components (colloids, polymers, particles etc.) interact with one another in complex fluid systems (emulsions, dispersions etc.). We support industry across a range of diverse applications including:

- Sustainability
- Formulation Science
- Advanced Materials
- Skin Science
- Food & Drink
- Cleaning & Disinfection
- Water Treatment
- Instrument Development

## Award-winning science and products

We have a track record of working successfully with external partners to generate innovative solutions and products. Our work with Aqualutions led to a new product launch which won Best New Product at the prestigious Business Insider Made In Scotland Awards 2022.

Our academics are globally recognised experts in their field. A recent award includes the Society of Rheology Bingham Medal for Professor Wilson Poon.





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