EPSRC supported EngD:
Formulation Engineering of Bubble Tea

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Tax free bursary of £28,505 per annum plus fees paid.

Project Description:
Bubble tea, also known as boba tea, is a Taiwanese tea-based drink. It arrived in Europe in the early 2000s but broke the market only around a decade later. Initially sold in London, the trend has spread all over the UK and Europe. Bubble tea, consumed with a wide straw, contains edible, flavoured popping bubbles. The liquid filling inside is released by chewing, making the strength of the bubble wall are critical to product quality. If it is too strong, and the mouthfeel is unpleasant. If it is too weak, the bubbles burst before reaching the consumer. While it does not impact taste, a high-quality bubble tea should contain only perfectly spherical bubbles.

Bubble tea formulations contain several ingredients including flavours, thickeners, sugars, salts, and water. The formulations have grown empirical and have strong potential for simplification. Processing the formulation into bubbles brings its own challenges, including minimising mechanical bubble damage and reducing of non-spherical shapes, which lead to processing waste.

The overall aim of this project is to systematically explore bubble tea formulations to creating a formulation matrix delivering desired and consistent outcomes in the existing or an improved bubble tea process.

Funding Details:
Due to funding restrictions, this project is currently open to UK Nationals or those with settled status who are eligible for home fees.

To be eligible for EPSRC funding, candidates must have graduated with least a 2(1) in an engineering or scientific discipline, or a 2(2) plus MSc.

While flexible, the expected start date is February 2027.

To apply and for more details on the Engineering Doctorate scheme visit the homepage.