EPSRC supported EngD:

Engineering the microstructure of surface deposits to control bio-delivery for sustainable crop protection products

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

Project Description:
Agriculture is vital to our society in fulfilling the needs for food, feed for livestock, fuel, fibre, and biomass, and it uses a staggering amount of resources as a sector. In here, crop protection products are complex aqueous suspension used to deliver active ingredients (AIs) when being applied to seeds (coating), roots (drip), and foliage (spray), and subsequently provide effective protection against pathogens. They have a significant impact on the sustainability of not only our society, but the environment.

The aim of this proposal is to develop sustainable crop protection products that meet the requirement by precision agriculture such as very low spray volumes (VLV). It will focus on engineering the microstructure of the deposits formed on the foliar surfaces as a function of the following factors: formulation, surrounding environment, and delivery method, all of which will subsequently be related to the biological performance of the formulations.

Working closely with the industrial partner from Bayer AG, the EngD candidate will develop a wide range of knowledge and skills in colloidal and interface science, fluid mechanics, and establish a broad appreciation of formulation engineering. They will build a portfolio of transferrable skills such as project management, communication, team working, which ensures an excellent employability upon completion of the project.

If you have a background in Chemistry, Physics, or Chemical Engineering, and are passionate about Sustainability and Interdisciplinary Research, this is an excellent opportunity.

Funding Details:
To be eligible for EPSRC funding candidates must have at least a 2(1) in an Engineering or Scientific discipline or a 2(2) plus MSc.

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