



Research Masters Opportunity (MSc)

“Investigation into the role of fat filled milk powder in yoghurt manufacture and mechanisms to improve the yield, body and mouthfeel of yoghurt manufactured from fat filled milk powder”

Background

Irish dairy companies are global leaders in the manufacture of fat filled milk powder (FFMP). FFMP is used in products for childhood nutrition, coffee whitening and baking, however, a significant portion of Irish FFMP is sold as an ingredient for yoghurt manufacture.

The MSc student will investigate the role of FFMP in the manufacture of yoghurt. While there is a considerable body of work comparing the characteristics of low-fat yoghurts made from skimmed milk with those made from reconstituted SMP there are far fewer studies comparing full-fat equivalents with those made from WMP or FFMP. Thus the aim of the present project is to establish the key compositional, formulation and processing factors that govern the quality and yield of yoghurts made from FFMP. To make this assessment a comparison of the yoghurt manufacturing process in powder-based substrates and in liquid substrates will be required. This will involve detailed rheological and compositional characterisation of the various matrices before during and after the acidification process which may in turn, require some novel method development.

The overarching aim of the project is to conduct novel research that will underpin the advancement of the Irish dairy sector.

Qualifications

The ideal candidate will have an interest in emulsion chemistry, spray drying and ingredient functionality. As part of their studies the student will spend a significant portion of their time conducting laboratory research and reading scientific papers. Candidates should be enthusiastic, self-motivated individuals, who interact well within a larger research team and can work on their own initiative.



The student will possess;

1. An honours degree in Food Science, Food Technology or a related discipline.
2. Commitment to research and excellent problem solving skills.
3. Excellent scientific, organisational and project management skills.
4. Ability to work independently and as part of a multi-disciplinary team focused on delivery of high-quality research.
5. Excellent interpersonal and communications skills.

Award

The successful candidate will conduct their research as part of Professor Dolores O’Riordan’s research team and will be based in the UCD Institute of Food and Health. A student stipend of approximately €22,000 per annum is available from which the student is required to pay fee’s. The masters is planned to start in September 2017 and funding is available for 2 years.

Application Procedure

Enquiries regarding the position are welcome and should be sent to Dr. Graham O’Neill graham.oneill@ucd.ie

Applicants should email a cover letter (1 page) and CV (2 pages) to Dr. Graham O’Neill graham.oneill@ucd.ie

Closing Date

Applicants are asked to submit their application no later than **August 11th** 2017.