



Waterford Institute of Technology  
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

## Postgraduate Scholarship Information Sheet

<b>Scholarship title</b>	Rheological characterization of cosmetic emulsions
<b>Reference number</b>	WD_2017_CF_004
<b>Supervisor(s)</b>	Dr Elaine Duggan
<b>Research Group</b>	Pharmaceutical and Molecular Biotechnology Research Centre
<b>Department / School</b>	Department of Science, School of Science and Computing
<b>Duration</b>	4 years
<b>Status: Full-time / part-time</b>	Full-time
<b>Funding information</b>	Funding agency: Waterford Institute of Technology Funding programme: WIT Industry-led PhD Scholarship with Oriflame
<b>Value of the scholarship (per annum)</b>	Stipend: €10,000 Fees: €4,500 Research costs: €2,000
<b>Teaching requirement (if any)</b>	Two hours of academic development activities per week during the academic year in line with scholarship requirements
<b>Closing date and time</b>	Monday 24 <sup>th</sup> April 2017 at 5pm
<b>Commencement date</b>	1 <sup>st</sup> September 2017

### Post summary

Cosmetic products are typically emulsions, enabling delivery of sensorially unpleasant or chemically unstable compounds. As emulsions are inherently unstable, a range of emulsifiers and polymers are added to formulations to increase the shelf-life of products. These components also modify the texture and flow behaviour of the product. Rheological measurement, therefore, is important tool in characterising emulsion behaviour and stability. This project will utilise rheological measurements to gain deeper scientific understanding of cosmetic emulsions in real-time conditions, such as during manufacture, storage and application with the aim of characterising the roles of raw materials in the resultant product shelf life stability and sensory properties.

### Standard duties and responsibilities of the scholarship

- The student will be based in WIT but will also spend time working closely with the industry partner, Oriflame R&D.
- As part of a structured 4 year PhD, the student will attend training courses in addition to the research work.
- Attend and present at conferences and seminars.

## Person specification

### Qualifications

Essential

- Applicants should hold or expect to attain, as a minimum, a 2.1 Honours degree<sup>1</sup>, or equivalent, by the 1<sup>st</sup> of August 2017 in Chemistry, Chemical Engineering or related discipline.

### Knowledge & Experience

Desirable

- Knowledge of emulsion behaviour

### Skills & Competencies

Essential

- Applicants whose first language is not English must submit evidence of competency in English, please see [WIT's English Language Requirements](#) for details.
- Good IT and communication skills

## Further information

For any informal queries, please contact Elaine Duggan at email: [eduggan@wit.ie](mailto:eduggan@wit.ie) or telephone: +353 (0)51 302623.

For queries relating to the application and admission process please contact the Postgraduate Admissions Office via email [pgadmissions@wit.ie](mailto:pgadmissions@wit.ie) or telephone +353 (0)51 302883.

Website: [www.wit.ie](http://www.wit.ie)

## Application procedure

Please download the Research Postgraduate Application Form from the WIT Website.

Any queries relating to the application process should be emailed to [pgadmissions@wit.ie](mailto:pgadmissions@wit.ie)

**The Institute may decide to interview only those applicants who appear from the information available, to be the most suitable, in terms of experience, qualifications and other requirements of the post.**

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<sup>1</sup> If undergraduate examination results are not known at the time of application, WIT may make a provisional offer of a scholarship on condition that the applicant's bachelor's degree results is a first class or upper second-class honours.