

Paul Suckling

MSci in Theoretical Physics and Applied Mathematics - 1999

PhD in Theoretical Physics and Applied Mathematics - 2004

Thesis: The Impact and Spreading of Drops on Surfaces

Supervisor: Professor Yulii Shikhmurzaev

Currently: Scientific Consultant, at Quintessa Limited (<http://www.quintessa.org/>), which is a scientific and mathematical consultancy firm operating mainly in the environment and energy sectors.

How have postgraduate studies in Mathematics influenced your career?

I enjoy my current job a great deal. I would not have been able to obtain this job without following the MSci and Ph.D courses that I did. I was primarily hired on the basis of demonstrated skills in applied mathematics and problem solving, report writing and software development.

How do you use skills that you acquired during your postgraduate training in your current position?

The projects I work on are, by choice, very varied. Examples are; the statistical modelling of the changing properties of graphite cores within nuclear reactors, working with geochemists to develop and solve models for gas generation within radioactive waste repositories that ultimately helps inform post-closure safety cases, development of models for the deterioration of cement seals in bore holes which is required as part of an assessment of the feasibility of the long term geological storage of carbon dioxide, the development of an internet based database for storing and controlling site assessment data, and implementing a content management system to be used with a new company website.

Basic mathematical analysis, the ability to analyse and simplify and conceptualise problems, understanding of numerical techniques, skills in software development and in report writing are all necessary for the work I do and the foundation for all these skills were laid during my MSci and Ph.D courses.

What advice would you give to current students studying on your degree programme?

A Ph.D happened to be the right choice for me, but depending on the career path you wish to follow it might be more advantageous to go straight in to a job and undertake relevant professional qualifications instead. If choosing to follow a Ph.D, the most important factors to consider are: 1) It is important to choose a good supervisor that you can learn from and that has time to support you. 2) It is important that you choose a subject that you can develop a passion for that will last at least three years.