

Masters Postgraduate Research Opportunity in Aquatic Science

Ref: SHELLTEC 1

Project Title: 'Disease and Parasite Diagnosis and Control in Recirculating Shellfish Holding Systems'

Funding Agency: Enterprise Ireland, Applied Research Enhancement

Description: The main objective of the ARE SHELLTEC Research Centre is to develop methodologies and innovative technologies to optimise the delivery of high quality live shellfish (crustaceans and bivalves) products from the BMW region to European and world markets. This will provide for significant additional economic value to Irish companies through greater control of the marketing chain. The utility of recirculation seawater holding systems for use by the Irish shellfish industry is being assessed as part of the SHELLTEC project. Initial use of such systems by the research group and industry has indicated that diseases and parasites may cause significant mortalities during storage. It has become apparent that due to the long duration of storage there is potential for pathogens to be a major contributor to losses and subsequent failure to operate systems in a cost-effective manner. Effective treatment of stock relies on the early detection and identification of pathogens, but currently there is no knowledge-base relating to diseases/parasites management in storage systems. The successful candidate will develop expertise in the detection, identification and management of pathogens relevant to long-term storage. Microbiological and histological preparations will be used to identify key pathogens in system water and in moribund/dead individuals. If possible, products and procedures for testing that can be utilised by industry will be developed and marketed. The use of ultraviolet and chemical treatments will be assessed in relation to their impact on pathogens, host and system stability.

Research Environment: Training will be provided and this may include placement at other European Research Centres where appropriate. Candidates should possess a strong desire to conduct a research project that has application in an industrial context.

Requirements/Background: Candidates should possess a minimum of a 2:1 primary degree (Hons) in a relevant discipline. Experience in microbiological and/or histological techniques would be an advantage. The successful candidate will join a multidisciplinary research centre and must therefore be capable of operating as part of a dynamic team.

Project Start-Date: June 2007

Project Duration: 2 years

Conditions: €1,000 per month. Postgraduate fees for EU students and any travel costs incurred during the project will also be covered.

(Candidates from beyond the EU are eligible to apply, but will be expected to provide evidence of sources of additional funds to cover excesses associated with **Non-EU fees that could amount to €6,000 per year**)

Further Information available from: Martin Robinson at martin.robinson@gmit.ie

Application Form (which must be forwarded by post) is available at:

<http://www.gmit.ie/research/vacancies.html> or phone: +353 (0)91 742759

(Please note that applications forwarded by email **will not** be accepted)

Completed Application Form to be returned to: Research Recruitment,
Development Office,
Galway-Mayo Institute of Technology,
Dublin Road, Galway, Ireland.

Closing Date for receipt of Application Forms: 12.00 noon, Friday 25th May 2007