



Doctoral Scholarships

The Institute of Biomedical Technologies (IBTec-www.ibtec.org.nz) is a multi-disciplinary and inter-faculty university research institute hosted and administered by the Faculty of Design and Creative Technologies at AUT, Auckland, New Zealand. IBTec is comprised of academic and research staff from the School of Engineering, the Faculty of Health and Environmental Sciences as well as national and international collaborators from other distinguished universities, hospitals, research institutions and medical device companies. The Institute consists of three research centres with primary activities including fundamental and applied research with focus on biomedical applications.

Centre for Respiratory Therapies

This centre conducts research on the mathematical modelling, development, improvement and optimization of respiratory therapy methods and devices. Research is focused on therapy and relief within the conductive and terminal respiratory system. Main areas of research include, but are not limited to, obstructive sleep apnea, respiratory distress syndrome, asthma and treatment of sinus disorders.

Centre for Cardiovascular Diagnostics

The mission of this centre is to develop diagnostic tools for various cardiovascular conditions. Research activities include mathematical modelling of cardiovascular systems, development of measurement and signal processing techniques validated through the use of statistical and clinical models.

Centre for Biomedical Materials

The mission of this centre is to investigate, develop & improve novel polymers & composites for use in biomedical applications. The aim of the research group is to give materials the ability to be intelligent and smart with emphasis on developing materials with elemental functions and desired microstructures. Some of the research areas of the centre are hydrophilic materials, electroactive polymers, microneedles.

IBTec is embarking on several projects and in urgent need for 3-4 PhD students. These candidates must have a strong academic background in one or more of the following areas:

- Biomedical/Mechanical Engineering with focus on CFD modelling
- Biomedical Engineering/Physiology with focus on ASM
- Electrical/Electronic/electromechanical Engineering with focus on miniaturised actuators.
- Chemical Engineering/ Chemistry with hydrophilic/polymer focus.

Full scholarships which include fees waiver and stipend will be offered to selected candidates.

Please contact:

Prof A. Al-Jumaily on +649-921-9777 (ahmed.al-jumaily@aut.ac.nz) or Meha Mathur on +649-921-9999 Ext 8932 (xdw5984@aut.ac.nz)