



PhD Studentship

Multifunctional Papers from Lignocellulosic Waste for Cutting-edge Construction Applications

A fully funded PhD scholarship is available in the captivating field of lignocellulosic functional nanomaterials and their applications. We invite passionate and forward-thinking individuals to join a collaborative project that delves into the valorisation of lignocellulosic waste through pioneering methodologies.

Project Overview:

This research is a pivotal part of the 'Waste to Treasure: Using Novel Chemistry to Valorise Residual Plant Materials' program, an Endeavour Program funded by the Ministry of Business, Innovation and Employment (MBIE), New Zealand, and a collaborative venture between the University of Auckland and Scion which is set to redefine the landscape of sustainable materials.

We aim to harness the potential of lignocellulosic waste as we explore novel approaches in the synthesis of (nano) materials and the creation of multifunctional papers tailored for revolutionary construction applications. This visionary research project merges cutting-edge techniques in organic chemistry, materials science/engineering, and nanotechnology, offering a unique intersection of expertise.

Candidate Profile:

The applicant is expected to have an MSc, BSc(hons) or an alternative master's degree, in a field relevant to the research. We seek candidates preferably with experience in organic nanomaterials, lignocellulosic waste valorisation, papermaking, or fire-retardant materials. Your passion for innovation and sustainability will drive the success of this transformative initiative.

Supervision team:

The student will be registered at the University of Auckland under the supervision of Professor Paul Kilmartin (The Faculty of Science) and co-supervised by Dr. Tripti Singh and Dr. Ayyoob Arpanaei, Senior Scientists and Project Leaders at Scion, Rotorua. The student will be based primarily at Scion, Rotorua.

Scholarship Details:

The scholarship is valued at NZ\$33,000 (tax-free) per year for 3.5 years and covers tuition fees as well.

Application Process:

If you are ready to embark on this exciting journey, express your interest by sending an email to Prof. Paul Kilmartin at p.kilmartin@auckland.ac.nz. Include your CV, academic transcripts, and a concise cover letter (max 1 page).

The program starts in early 2024. Applications will be assessed as they are received and continue until the position is filled.