

A background image showing a laboratory setting with a person wearing gloves using a pipette to transfer a yellow liquid into a test tube. In the background, there are several test tubes in a rack, some containing green plant material.

# GREEN COMPOSITES BASED ON BACTERIA-DERIVED POLYESTERS

## About the Talk:

Rapid upgrades in consumer electronics, such as smart phones, at an ever increasing rate has created a stream of plastic waste that is difficult to dispose. This has driven research in sustainable fibre-reinforced bioplastics derived from renewable resources, known as "Green Composites". Zain Zaidi will talk about the challenges involved in bringing green composites into everyday applications, and current methods that exist to counter these challenges. Polyhydroxybutyrate-co-valerate (PHBV) is a bioplastic derived from bacteria and offers much promise for a sustainable future. Zain Zaidi's work will allow future researchers to study the effect of certain additives on the mechanical, thermal and biodegradation properties of PHBV.

## About the Speaker:

Zain Zaidi is a PhD student at the School of Materials Science and Engineering, University of New South Wales (UNSW), Australia. His research interests include polymer science, composite materials science, biopolymers, natural fibres and natural rubber.

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**Date: 5th December**

**Time: 6pm – 7pm**

**Venue: Soorty Lecture Hall**

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