

Faculty of Engineering

Summer Research Program 2024-2025

Project Title: Optimization of Automated Spray System for Eco-Friendly Electrically Conductive Coatings

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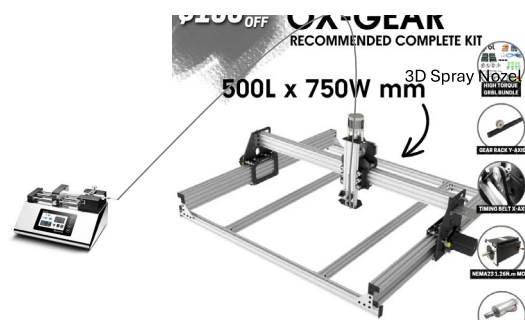
<https://research.monash.edu/en/persons/Muhammad-kashif>

Objective

Using green materials in coatings provides environmental sustainability, meets regulations, and offers technical benefits in addition to low cost and competitive edge. These approaches promote responsible and innovative manufacturing practices. The main objective of this project is to optimize various parameters of a semi-automated coating system in order to achieve uniform films using green electrically conductive ink, based on our proprietary technology.

Project Details

The project will include designing and conducting experiments to test various parameter settings of a home-made semi-automated coating system. This will be followed by data analysis to determine the most effective combination of parameters for high-quality coating application. The optimized parameters will then be implemented and validated, ensuring improved coating uniformity, conductivity, and materials efficiency.



Prerequisites

Students with prior knowledge in chemistry/chemical, physics or materials science is pre-requisite

Additional Information

Applicants may be required to attend an interview