EDB-IPP PhD Opportunities for August 2018 Intake

Evonik has identified Development of Advanced Materials for realizing Additive Manufacturing into Industrial Applications, as the next phase of EDB-IPP research.

With the overall goal to develop novel material, either as bulk raw material or additive, which significantly enhance the AM process and end-product, and therefore can realize the said AM technology into commercialization, three new positions are available for the August 2018 PhD intake at Nanyang Technological University, Singapore (ranked No.1 in the QS2015 Top 50 universities established within 50 years). The scope of the material includes (a) inorganic: metal oxide nanoparticle; (b) organic: polymeric resin (non-powder). Base chemistry may be derived from what Evonik can offer, however identification of completely new material can be an option too.

These projects* will be under an Evonik contract but under the supervision of and at the premises of the Singapore Centre for 3D Printing at NTU.

Responsibilities

- Literature review and develop the scope of the project together with the supervisors from both NTU and Evonik
- Evaluation and review of existing Evonik materials and/or new materials which can fit to the scope of the project
- Material development (synthesis or formulation or other material engineering route), either based on Evonik technology competencies or beyond
- Proof-of-concept evaluation with the selected AM technology
- We also encourage the students to explore and develop new ideas which can be beneficial for the project

Requirements

- Bachelor degree in related disciplines with outstanding results (at least 2nd Upper Honours)
- High motivation for spearheading research and development
- Ability to structure and manage cross-disciplinary projects
- Aptness for hands-on work at mechanical testing devices
- Excellent skills in teamwork and communication
- Collaborative problem solver; ability to grasp technologies inputs from various sources & translate them into the projects as well as new ideas
- Not afraid to take a risk & willing to learn from failure
- Self-driving & self-motivating, initiate & drive projects/ideas independently

Your application

Interested? Please send in your resume and transcripts to Suan (suan.ng@ntu.edu.sg).

Evonik, the creative industrial group from Germany, is a global leader in specialty chemicals and active in over 100 countries around the world. Our specialty chemicals activities address economic megatrends as health, nutrition, resource efficiency and globalization. In fiscal 2015 more than 33,500 employees generated sales of around €13.5 billion and an operating profit (adjusted EBITDA) of about €2.47 billion. In the South East Asia, Australia & New Zealand Region Evonik is operating several state-of-the-art manufacturing sites, RnD centers, laboratories and sales offices. Our success is based on the expertise, the commitment and the unique diversity of our talented workforce.

* Pending EDB approval