

July 4, 2019

Fully-Funded 3-Year-Long PhD Studentship – Fluid Dynamics/Nanocomposite Manufacturing

The successful candidate will join the School of MACE, University of Manchester, and will work alongside our experienced research teams from School of Materials and Northwest Composites Centre (NWCC).

Research topic:

This project will focus on developing innovative and advanced simulation tools (non-isothermal multi-scale multi-phase flow solver) to manufacture graphene-enhanced polymer composites, which can be used in in EVs with applications in battery cooling systems, battery module housing, and structure of the car body, with improved curing and cooling cycles, reduced time and cost, and tailored thermal-mechanical properties of parts.

Supervisory team:

Lead Supervisor: Dr Masoud Jabbari (Lecturer)

Co-Supervisors: Dr Kali-Babu Katnam (Senior Lecturer), Prof Constantinos Soutis (FREng, FRAeS)

Nationality: the position is available for UK/EU students.

Knowledge, skills:

- Academic background in a relevant discipline, such as engineering, material science or physics;
- Background or knowledge of composites and/or composite processing;
- Experience in computer programming (e.g. Matlab, Python, C++) and in CFD (using OpenFOAM, or commercial software, i.e. ANSYS or Star-CCM+);
- Self-motivated and capable of working with minimum supervision and as part of a team to meet promised deliverables;
- Good communication skills for regular interaction with industry and academia;
- Excellent time management and organisational skills.

We would particularly welcome female applicants for this post as a part of the School's commitment to Athena SWAN principles including the promotion of gender equality in STEM.

Deadline: as soon as possible

Apply: please send a letter expressing your interest and a copy of your CV with the contacts of two academic referees as a single pdf file to

Dr Masoud Jabbari

Lecturer in Mechanical and Aerospace Engineering

The university of Manchester

Email: m.jabbari@manchester.ac.uk

General enquiries: General enquiries relating to the postgraduate application process within Mechanical, Aerospace & Civil Engineering should be directed to:

Martin Lockey

Senior PG Recruitment & Admissions Administrator

Email: martin.lockey@manchester.ac.uk

Phone: +44(0)161 275 4345