



Postdoc (3 posts), PhD studentships (4 posts)

Queen Mary University of London

Queen Mary University of London (QMUL) is a leading research-focused university in the United Kingdom and a member of the prestigious Russell Group of universities. QMUL is ranked 100th in the global Best Global Universities ranking by U.S. News. Our engineering research achievements were ranked second nationwide in the 2021 Research Excellence Framework, and our overall engineering ranking is seventh in the UK. The engineering and materials science department at our university currently boasts three Fellows of the Royal Society and seven Fellows of the Royal Academy of Engineering.

Mechanics of Composite Materials Group

The main research directions of the Composite Materials Mechanics Research Group include: (1) Mechanics of Materials: Research areas encompass plasticity, fracture, fatigue, and material damage due to liquid-solid impact. (2) Multifunctional Composite Materials: Development of multifunctional composite materials tailored for applications such as energy storage, shape-changing, and sensing. (3) Modelling: Application of mathematical, numerical, finite element, and data-driven methods for modelling and optimization of solids, porous materials, and fluid-solid interactions. The research group leverages the excellent experimental facilities at Queen Mary University of London and maintains long-term collaborations with universities such as the University of Cambridge and Imperial College London.

Supervisor:



Dr. Wei Tan is a Senior Lecturer (Associate Professor) at Queen Mary University of London. With over a decade of research experience, he is a leading expert in composite materials mechanics, multiscale modelling, and multiphysics. Dr. Tan has published over 40 papers in renowned journals, accumulating 1800+ Google citations with an H-index of 18. In recent years, he secured substantial funding as an independent Principal Investigator, including an ERC Starting Grant (~£1.3 million), an EPSRC New Investigator Award (£392,000), and a Royal Society grant (£70,000). Dr. Tan has been invited to deliver lectures at prestigious international universities, conferences (such as the European Mechanics Conference), and webinars (such as the Saudi Composite Materials Association).

Send CV to Dr Wei Tan (wei.tan@qmul.ac.uk) by January 31st 2024

Postdoctoral Positions: Three positions, 2-4 year contracts, annual salary around £40,000, requiring Ph.D. completion within the last 2 years.

Ph.D. Positions: Four positions for 2024 intake, two fully funded by CSC (QMUL covers tuition, CSC provides 4-year stipend), two partially funded (£20,000 annual salary, international student tuition fee difference needs covering).

Research Topic: "Life-like Resilient Materials for Mitigating Liquid-Solid Impact Damage"

Disciplinary Background: Mechanical Engineering, Aerospace Engineering, Civil Engineering, Physics, Materials Science, Chemistry/Chemical Engineering, etc.

Research Experience: Proficiency in high-speed impact mechanics, material fabrication, fluid-structure interaction, machine learning, computational mechanics, and related fields.

Ph.D. Admission Requirements: IELTS score of 6.5 or above (writing not below 6.0, no section below 5.5), and a master's degree.