

PhD opportunities in the Department of Mechanical Engineering at PolyU

The composite material group led by Prof. Yiu-Wing Mai and Dr. Lei Yang in the Department of ME at PolyU is looking for talented, self-motivated and outstanding PhD candidates who can join us in Sep 2026. The topic will be focused on the fiber polymer composite design for extreme environments encountered in deep space and deep sea, through the combination of experiment, modeling, additive manufacturing and artificial intelligence. Self-motivated candidates with strong backgrounds in solid mechanics, AM, and ML are highly encouraged to reach out with your latest CV (with two or three references), academic transcript and a brief introduction of your fit to our group.

Advisors

Prof. YW Mai is Distinguished Chair Professor of Composites Science and Engineering in the Department of Mechanical Engineering at The Hong Kong Polytechnic University. His major research interests are in the fields of fracture mechanics and advanced engineering materials, particularly composites. He was elected to the fellowships of the Chinese Academy of Engineering, the Royal Society of London, the UK Royal Academy of Engineering, the Australian Academy of Science, the Australian Academy of Technological Sciences & Engineering, the European Academy of Sciences and the Hong Kong Academy of Engineering Sciences.

Dr. Lei Yang is a research assistant professor in the Department of Mechanical Engineering at The Hong Kong Polytechnic University. He received his PhD from The University of Sydney and postdoctoral training from Johns Hopkins University. His research aims to see, understand, predict, and design the behavior of structural materials under extreme loading conditions (such as impact, shock and blast), through a combination of experiments, physics-based theoretical and computational modeling, artificial intelligence, and additive manufacturing.

Funding resources (monthly stipend)

Fully funded: ~19k HKD

HKPFS: ~28k HKD

PRPgS: ~28k HKD

Only top candidates will be recommended to apply for the HKPFS and PRPgS.

Requirements

Background: solid mechanics, material science, additive manufacturing, and artificial intelligence.

Institution: 985, 211, double first-class or Top 200 QS universities.

GPA: 3.2/4 (80/100)

Language: IELTS 6.5 or TOEFL 80

Publications: at least 1 JCR Q1 paper

Contact

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Due to many inquiries, only selected candidates will be responded. Please do not send repeated emails. Thanks.