Our Team

PROF. YI QIN is a Professor in Manufacturing Technology and Systems, Director of the Centre for Precision Manufacturing at the University of Strathclyde, Editor-in-Chief of the Journal of Manufacturing Review. To-date, He has led and/or participated in 18 EU-funded projects as a Principal-Researcher/Technical-Manager/Co-ordinator, through which he gained vast experience in Materials Processing and Micro-Manufacturing Technologies, as well as managing/executing large collaborative projects.

DR. WENLONG CHANG is a Research Associate at the Centre of Precision Manufacturing . He focuses on ultra-precision machining and ultra-short pulse laser machining. He had more than seven years industrial experiences and works on developing high precision micro milling machining tools for EPSRC and H2020 projects.

MR. YANKANG TIAN is a PhD candidate and Part-time Research Assistant at the Centre of Precision Manufacturing. He has participated in several EU-funded projects and built up his expertise in CFD/Multiphysics Simulations and nozzle design.

Main contact in the project:

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Additive Manufacturing of 3D Microfluidic MEMS for Lab-on-a-Chip applications.

www.m3dloc.eu

The University of Strathclyde

https://www.strath.ac.uk/

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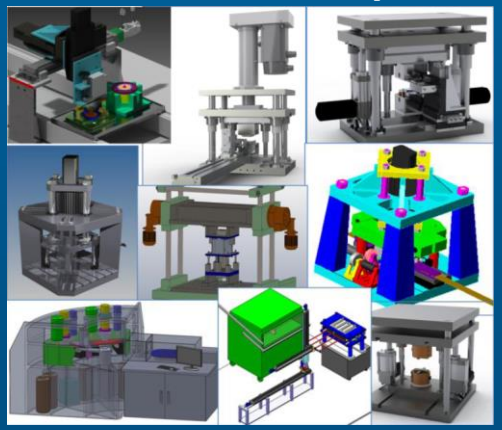
Who we are

The University of Strathclyde (UOS) is a top ranked university in the UK national Research Excellence Framework. The Centre for Precision Manufacturing (CPM) at UOS has over 40 researchers who conduct internationally leading researches in Precision-Forming and Micro-Manufacturing, Precision Engineering, and Light Metals Advanced Technology.

The goal of CPM is to be a world-leading advanced manufacturing research centre delivering "total" precision manufacturing solutions for next generation high value-added products. With the accessibility to 40 million pounds worthy world-class manufacturing research facilities, the centre conducts cutting-edge researches in Micro-Manufacturing Technology, Precision Forming Techniques, Ultra-Precision Machining Techniques, Micro/Nano-Machining Technology, Ultra-Fine Grained Metal Technology, Light-Weight Metals Processing Techniques, Multiscale Modelling, and Manufacturing systems for Ultra-Precision and Micro/Nano-Manufacturing. The centre aims to facilitate collaborations across different manufacturing themes and disciplines.

The CPM has engagement with worldwide industries and research communities (e.g. worked with more than 30 industry companies from 13 EU countries and currently working with more than 20 companies in various funded projects). The researchers of the group have generated a series of products, processes, tools and machinery designs, and analysis results respectively for material, electronic, automotive, aerospace, and machinery industries.



Examples of the machine/system models generated by CPM of UOS

Our product & service

We provide design and manufacturing services through our expertise and advanced design and manufacturing facilities, including:

Rapid Design & Manufacturing Lab focuses on rapid prototyping and manufacturing equipment. This lab is capable of different 3D printing tasks (including Fused Filament Fabrication, Inkjet 3D printing with UV curing of photopolymer, and 3D printing with powder and ink-binder), 3 & 4-axis CNC machining, Laser cutting/etching, and 3D colour laser scanning.

Precision Manufacturing Research Lab which owns the flexible forming presses, micro-machining/forming systems, water-jet cutting machine, CNC machine centres, and various research software (including Solidworks, ABAQUS, CASTEP, ANSYS and self-developed software modules) supports precision forming techniques and tooling developments, light-weight metal processing, ultra-precision and micro/nano-manufacturing, micro-manufacturing tools and customized equipment developments, and multiscale modelling of advanced materials and new manufacturing processes.

Metrology Lab is equipped with Zygo, Laser-Scanner, AFM, Optical Microscope and latest CMM, which is able to perform high precision geometric and surface measurement.