



MicroFabricator

Applications Close: 26th February 2021 | **Position Commencement:** March/April 2021

Position Summary

MicroTau is looking for a microfabricator to produce drag-reducing microstructures inspired by shark skin with our proprietary Direct Contactless Microfabrication (DCM) technology. Your work will involve running our in house photolithography and metrology equipment to help produce surfaces for aerospace, maritime and wind energy applications.

The role will be to carry out the DCM process which uses principles from laser optics, physics and chemistry. In addition to metrology measurements where you will measure, analyse and report on the morphology of microstructures. Your role will also include identifying areas of improvement within the current microfabrication process to increase the efficiency and yield.

This is an opportunity to work in an innovative environment which will enhance your critical thinking and knowledge of unique photolithography techniques and laboratory processes.

You will work alongside a diverse team of experienced scientists and engineers who will mentor you during your time at MicroTau.

The role will be based at MicroTau in Sydenham NSW and will require local attendance.

Knowledge and Skills

Essential

- Undergraduate or near completion of undergraduate degree in STEM
- Previous internship or experience in research
- Experience with problem solving and identifying/implementing process improvements
- Proven track record of ability to prioritise tasks and efficiently manage multiple assignments
- Experience in maintaining a lab logbook, and data storage, analysis and reporting
- Strong communication, interpersonal, and analytical skills & desire to learn new skills.

Desirable

- Research or industry experience in photopolymer chemistry, especially with respect to photolithography, 3D printing (DLP or SLA based).
- Experience in processes and process engineering.

Key Responsibilities

- Carrying out laboratory work under direction,
- Perform standard tests for microstructure manufacture,
- Undertake metrology measurements and assess outcome of test and production riblet prints,
- Collate and analyse data on riblet prints,



- Prepare data and communicate results verbally or via written report,
- Maintain the archive of metrology samples and test prints,
- Maintain records on tests performed and outcomes of tests,
- Carry out research and development to improve aspects of the printing process and metrology throughput and data collection,
- Perform regular cleaning tasks of the laboratory space,

About MicroTau

MicroTau prints nature's functional surfaces to solve human problems. Our near term aim is to reduce fuel consumption and carbon emissions by creating drag reducing surface coatings for aircraft. We work with a range of local and international companies and university research groups, as well as the US Air Force Research Laboratory and Defence Science and Technology Group. Also under development are other biomimetic properties such as self-cleaning and marine antifouling surfaces.

Remuneration

The role is full time with a competitive salary package will be paid to the successful candidate, depending on level of experience and qualifications, in addition to superannuation as applicable, together with leave entitlements under the National Employment Standards. The company offers other benefits to employees, which will be discussed during the recruitment process.

Application

To apply for the position please email your resume and cover letter to apply@microtau.com.au with 'Microfabricator' and your name included in the Subject line of the email.

Additional Information.

As a young company, we are growing rapidly and offer the ability to help shape your role and contribute to shaping the company. Every employee can make an impact on the technology and applications we pursue as well as to work with a diverse team to invent new materials and processes.

MicroTau is also a social place to work – you will get to know everyone in the company through regular tea times, coffee breaks and Bahn Mi Friday's. This will give you an opportunity to get to know and interact with a wide range of people and skill sets from engineers to physicists.

MicroTau is an equal opportunity employer, we welcome diversity, and we believe that it benefits everyone. Employment at MicroTau is based solely on a person's merit and qualifications directly related to professional competence. MicroTau does not discriminate against any employee or applicant based on their race, religion, gender, sexual orientation, gender identity/expression, national origin, disability, age, or marital status.