

The Innovation & Collaboration Centre (ICC) is the University of South Australia's startup incubator.

The ICC engages with the community through the delivery of community events, workshops and programs which draw on the research and professional expertise of UniSA and our partners, to support the generation of new startups and the growth of existing companies.

The ICC is headquartered in Adelaide and has a regional centre in Whyalla, South Australia.

icc.unisa.edu.au

VENTURE CATALYST SPACE

In 2019, Nano Spaces was one of 5 startup companies chosen to participate in the second cohort of the country's first space incubator program delivered by the ICC, Venture Catalyst Space.

FURTHER INFORMATION

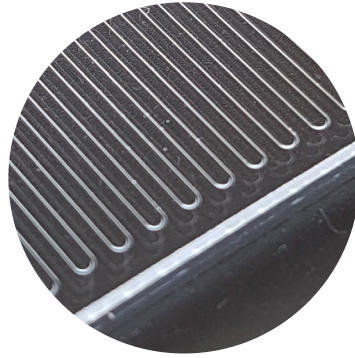
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Nanofluidic technology for space



BENEFITS

- Tiny thrusters for very small satellites
- Tuneable and integrated fuel storage and handling
- Precise and nimble movement in zero gravity.

BACKGROUND

Nano Spaces is developing micro- and nanofluidic science and technologies for space applications. Founder Craig Priest has a PhD on the science of fluid behaviour on complex surfaces and 15 years' experience working on micro and nanofluidic technologies. The Nano Spaces team includes expertise in CFD simulations, micro and nanoengineering, interfacial science and device development, which is critical to handle liquids and gasses in new ways. In space, this is very important. Nano Spaces aims to bring the unique advantages of fluids in small spaces to the biggest space of all.

TECHNOLOGY

We've all seen remarkable effects of small liquids, whether a water droplet running off a newly waxed car or a rainbow decorating a soap bubble. Over the last decade, microfluidic phenomena have been harnessed in pipes thinner than a hair. In fact, new technologies can now do chemistry, physics, and biology with much less than a single droplet of liquid. In a nanofluidic device, these volumes can be even smaller; femtolitres (10⁻¹⁵ litres). In space, weight and volume are at a premium and process efficiency is critical, so Nano Spaces aim to miniaturise payloads of spacecraft through better management of satellite fuels and other fluids with nanoscale precision.



A/Prof. Craig Priest
Founder



Dr Daisy Yang
Scientist (Interfaces)



Dr Moein Kashani
Scientist (CFD Simulations)

POTENTIAL MARKETS

Nano Spaces can help address micro and nanofluidic challenges for new technologies, whether on Earth or in space.

PARTNERING OPPORTUNITIES

Nano Spaces welcomes invitations to partner on technical challenges related to small-scale fluid handling.

