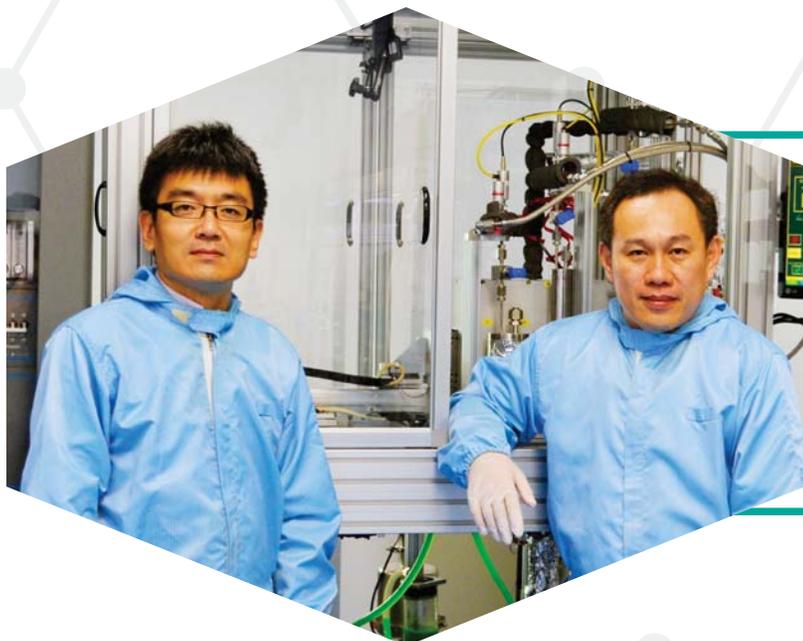


## SME DAY SPECIAL

### IMRE Scientist wins T-Up Excellence Award 2015 for thin-film coating



*T-Up Excellence Award 2015  
Winner Dr Guo Hong Chen (left)  
with Mr Koh Teng Hwee, Managing  
Director of SOLVES*

Winner of the T-Up Excellence Award, Dr Guo Hong Chen takes pride in "Chameleon", a product that he has co-created with the team at SOLVES Innovative Technology Pte Ltd (SOLVES) over three years.

"Chameleon" is an apparatus to mass-produce coloured fasteners (e.g. screws for the microelectronic industry) in large volumes by depositing ultra-thin films onto them. The thickness of films can be precisely controlled such that the refraction would produce vivid colours onto these fasteners for easier identification. These films can also provide anti-corrosion properties.

The technology behind "Chameleon" is the Computational fluiddynamic Assisted Synchronous Controlled (CASC) Atomic Layer Deposition (ALD). "Chameleon" also utilises a high performance computer to simulate reactant gas flow in a vacuum chamber for complex 3D surfaces.

"Working with Dr Guo Hong Chen has been a pleasant experience. He is very helpful, hard-working, and fits seamlessly into our team. I appreciate his relentless enthusiasm to utilise his scientific knowledge for industrial applications," commented Mr Koh Teng Hwee, Managing Director of SOLVES.

Dr Guo Hong Chen, a scientist from IMRE, is one of the three T-Up Excellence Award Winners from A\*STAR for 2015.

Thirty-nine researchers from IMRE had gone through the T-Up programme since 2002. The T-Up initiative, a multi-agency effort by A\*STAR, EDB, SPRING, IE and IDA, involves seconding Research Scientists and Engineers to local enterprises to allow them access to the pool of R&D talent in local Research Institutes.

**"I was like a soldier being sent to the actual battlefield... it is exhilarating to see the results of my research being adopted for real industrial applications... I really enjoyed my three years in this programme."**

Dr Guo Hong Chen on how he felt about his T-Up attachment.