



Corporate >

Visitor Info >

Programmes >

Events >

A*STAR >

Collaboration >

Exhibitions >

Omni-Theatre >

Membership >

Science Clubs >

ScienceNet >

Resources >

Links >

GO!



Resources - Scientists & Awards - National Science & Technology Awards 2002

The National Technology Award (NTA)



Team Comprising Of :

Dr Cheok Beng Teck

Chief Information Officer Office
Ministry of Defence
(3rd person from the left)

Professor Andrew Nee Yeh Ching

Department of Mechanical Engineering,
National University of Singapore
(2nd person from the left)

Dr Jiang Ridong

Institute of High Performance Computing
(1st person from the left)

Mr Lim Tong Wah

Molex Singapore Pte Ltd
(4th person from the left)

Citation

"For their outstanding research and engineering in the development of a Knowledge-Based Tooling Design System."

The team of researchers and technologists from the university, industry and research institute has combined their expertise to develop an innovative knowledge-based tooling design system. In this project, the team has transformed a skill-based and designer-oriented tooling process into an automated rule-based model. The team was able to develop a robust knowledge-based technique to design tooling for complex 3D sheet metal components. Before this project, hardly any physical laws or mathematical formulations were available for this function. This project has successfully anchored Molex - the world's second largest manufacturer of electronic, electrical, fiber optic interconnects and systems: switches; value-added assemblies; and application tooling - in Singapore. Using this technology, Molex Singapore has significantly reduced its lead-time for design from 3~4 weeks to 1 week. This technology has potential applications to other stamping operations. Clearly, this project has contributed tremendous economic benefits to Singapore. For their outstanding research in the development of a Knowledge-Based Tooling Design System, Dr Cheok Beng Teck, Prof Andrew Nee Yeh Ching, Dr Jiang Ridong and Mr Lim Tong Wah are presented the 2002 National Technology Award.