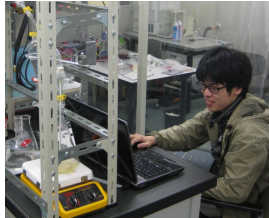


Space-Saving Cooling and Drying Systems

Professor Ichiro Kano

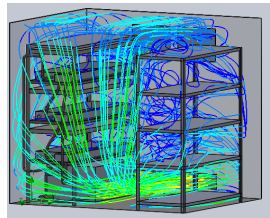
Thermal-fluid
engineering



Temperature/Pressure/
Velocity Measurement



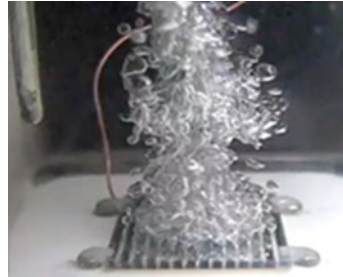
Simulation



Drying Technology



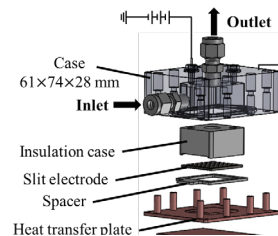
Active Controlled Boiling



Functional
Dehydrated Foods



Space-Saving Liquid
Cooling System



Content:

Space saving liquid cooling systems for cooling heated electric devices and dryers for dehydrating foods are developed with a fundamental technology based on thermal-liquid engineering. Especially, the latest technologies, such as micro-pumps without movable parts, high performance heat exchangers using boiling heat transfer are investigated and applied to devices and equipments which are component parts of the cooling systems. These technologies are based on the fluid control technology using precise measurement techniques and computational fluid dynamics. Realizing the new equipments with the latest technology, an academic field of thermal-fluid engineering is expanded into MEMS (Micro-Electro-Mechanical Systems) and Electrochemistry. Appealing point:

The space saving high performance heat exchanger is expected to cool laser diodes, CPU and other heating electrical devices.

Research Field : Mechanical Engineering systems

Specialty : Thermal-fluid engineering

E-mail : kano@yz.yamagata-u.ac.jp

Tel : +81-238-26-3226

Fax : +81-238-26-3226

HP : <https://kanolab.yz.yamagata-u.ac.jp>

