



Background

- 1991 B. Sc. (Ind. Chem. Eng.) King Mongkut's Institute of Technology Ladkrabang, Thailand
- **1995** M. Eng. (Chem. Eng.) Chulalongkorn University, Thailand
- 2002 D. Eng. (Chem. Eng.) Kyoto University, Japan
- **1998-Present** Lecturer at Department of Chemical Engineering, Faculty of Engineering, King Mongkut's Institute of Technology Ladkrabang

Specialization

□ Nano/Miro particles formation by scCO₂

- Microcellular foam technology
- Polymer processing, Rubber technology
- □ Utilization of scCO₂ for polymer processing
- □ Thermodynamic models for polymer/CO₂ mixtures
- □ Micro fluidics technology
- □ Alternative CO₂ cleaning technology

Conferences







Assist. Prof. Dr. Surat Areerat

SURAT Lab



Micro/Nano-particle technology by scCO₂





Non-Spherical Paraffin Wax

Spherical S Paraffin Wax



Sulphur-Paraffin Wax Sulphur-Paraffin Wax Microencapsulation (Nano-Deposition) (Complete Coating)

Microcellular foaming technology

- Mathematic modeling for foaming process
- Fiber foam
- Beat foam
- Natural Foaming





Natural Rubber Technology

- Molecular weight reduction
- Rubber Compounding

scCO₂ drying technology

- Carbon aerogel
- Food Preservation



CO₂ Cleaning technology









Cooperative Researches







Surat Areerat Chem. Eng., KMITL, Thailand