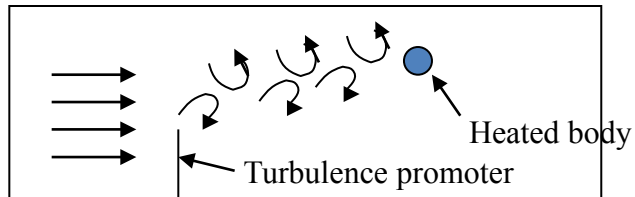


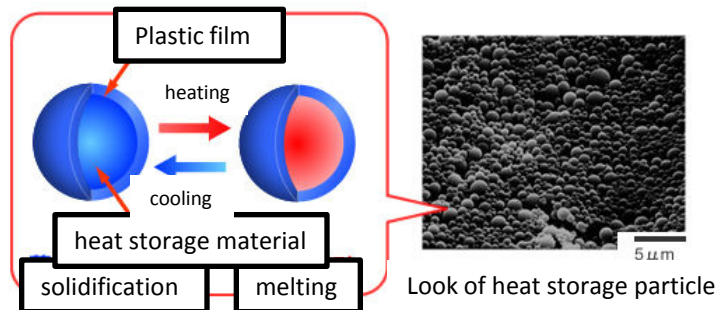
Heat Transfer Enhancement and Control of Fluid Flow

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Illustration



When gas stream hits against a solid body, strong turbulence appears behind the body. The turbulence has high potentiality for removal of heat from high temperature body.



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<http://www.e-mpm.com/capsule/con01.html>

The particle shown in upper figure involves heat storage material. When the particle is heated (cooled), the material melts (is solidified) and then stores (serves) latent heat. Application of this heat storage capsule as thermal medium is investigated to develop a new compact heat exchanger.

Contents:

Heat transfer

Heat transfer enhancement by using turbulent eddy.

Heat transfer of heat storage material/water emulsion.

Heat transfer characteristics of supercritical carbon dioxide.

Fluid Dynamics

Research on solid-liquid two-phase flow.

Liquid-liquid agitation.

Gas-liquid agitation.

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