

## Fluid Engineering Laboratory

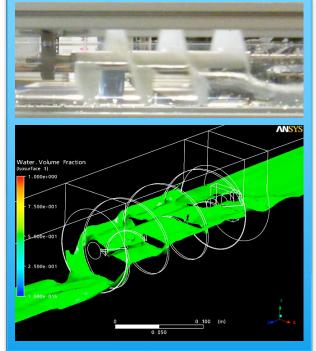
Keyword; turbomachinery, fluid engineering, pump, water turbine

Fluid machines such as pumps and water turbines support our lives in a variety of fields as energy conversion machines. With the aim of improving the performance, efficiency and stability of these machines, we investigate and understand the flow inside fluid machinery using both experimental and numerical analysis methods. And we try to find better designs on those.

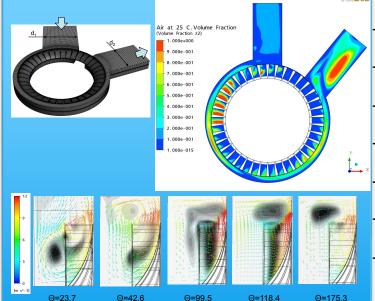


air-entraining vortex at the pump sump

## spiral turbine model and its numerical simulation



flow simulation of regenerating pump in which bot water and air flows



## performance of waterwheel

