

機械工程系  
Department of  
Mechanical  
Engineering

計算與理論流體力學  
Computational and  
Theoretical Fluid  
dynamics

計算與理論流體力學實驗室  
Computational and  
Theoretical Fluid dynamics  
Lab



O: 綜科707-2  
#2058

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■ **Research Area:**

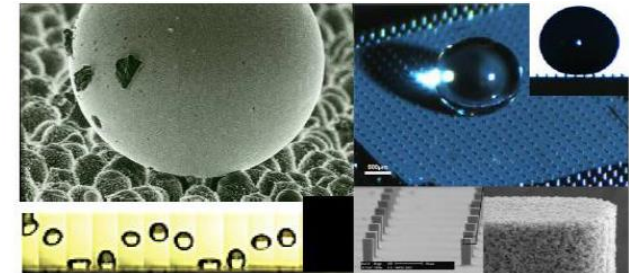
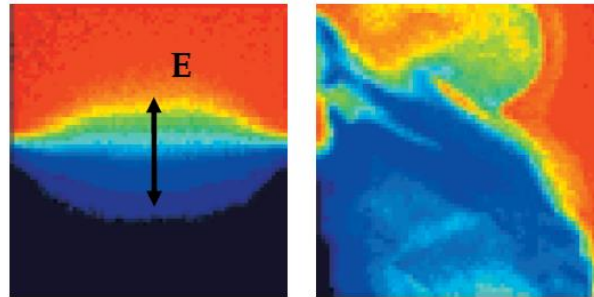
Direct Numerical simulation of fluid particle flows  
Self-assembly and electrohydrodynamics flows  
Hydrophobic and Hydrophilic surface  
Biomechanics: cell migration  
Electro-orientation  
Instability analysis of electric field

■ **Recent Topics:**

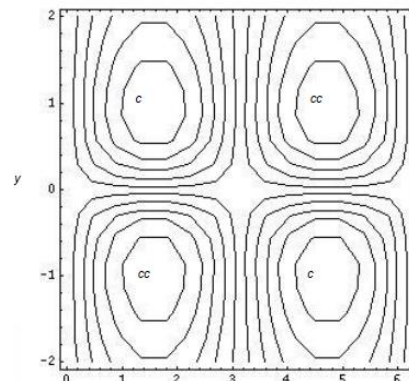
Shear thickening fluid  
Rotating two immiscible flow  
Fluid analysis of aneurysm of aorta  
Gecko Robot

■ **Teaching:**

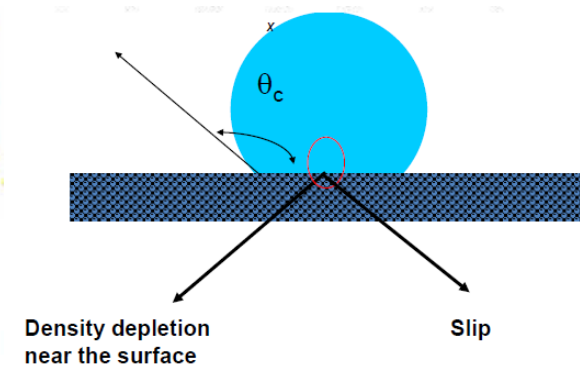
Applied mathematics (I) (II)  
Fluid Mechanics  
Computational Fluid dynamics



Roughness-induced superhydrophobicity



Instability Analysis



Hydrophobic surface and slip