



## Analysis and Applications of Mathematical Fluid Dynamics

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### Message from the Guest Editor

Dear Colleagues,

Fluid dynamics studies deal with fluid flow in fluid mechanics. Fluids may be categorized into three forms, namely, liquids, gases, and plasma. Plasma is ionized gas, and much of the universe is thought to consist of plasma. It is often applied in galaxy information and modern plasma television. The study of fluid dynamics has attracted many researchers because of its widespread applications, including, among others, for biological and medical purposes, flow rate and velocity, Bernoulli's equation: pressure and speed, Poiseuille's equation and viscosity, blood flow, surface tension, molecular transport phenomena, pumps, and the heart. In addition to the abovementioned research areas, fluid mechanics covers aerodynamics, which is concerned with the study of air in motion, whose applications, among others, include finding and calculating forces acting on airplanes and the design of airplane wings.





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## Message from the Editor-in-Chief

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