

## Preface

# Visualizing is Believing



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We are pleased to present the *Journal of Visualization* Volume 10, Number 2, to readers around the world. In the ten years since *JOV* was first published, it has earned a worldwide reputation as one of the top international scientific journals. This has had a significant effect on its impact factor, which has increased every year, and we hope that it will reach 1.0 in the near future. The concept this journal is evaluated so highly is our position as a unique journal for scientific visualization. The proverb “Seeing is believing”, which is derived from historical events in China, is well-known among Asian people. Visualization of information gives a direct impression and clear understanding which is superior to verbal description. In the field of engineering, as in many other areas, image information is an eloquent tool of expression which allows instant understanding of complex ideas. To put it simply, visualizing information is “Seeing is believing”. The strong, effective communication enabled by visualization techniques contributes to the consistently high evaluation of this journal around the world.

This special 10-year anniversary issue of *JOV* includes two congratulatory messages, four reviews by world leaders in their fields, six portfolios, three short papers, and nine regular papers. The papers introduce fundamental academic research in such areas as supersonic impulse jets impinging on a baffle plate and the behavior of plasma jets in a strong magnetic field. New visualization techniques, including ethyl benzene- and naphthalene-seeded laser-induced fluorescence and dynamic PIV, are applied to gas flow, near-wall velocity measurements over an airfoil, and three-dimensional vortex structures around a dragonfly. Novel software techniques introduced in this issue include the use of 3D-TIRM to examine particle distribution in a microchannel flow pressure gradients in the breakdown of boundary layer streaks, a compact Green’s function for identification of an aerodynamic sound source, direct numerical simulation of a turbulent flame, and air flow around a circular cylinder with curved sectional grooves. Finally, scientific and artistic viewpoints are combined in the article on hidden patterns of radial spreads of ink in water, and recent progress in the generation of fluid art. We hope that all our readers will enjoy these full-color articles.

*Managing Editors*  
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