International Union of Theoretical and Applied Mechanics

IUTAM

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Members of the International Mechanics Community

Dear Mechanics Colleagues,

As was reported in the Final Announcement of the forthcoming International Congress of Theoretical and Applied Mechanics to be held in Adelaide, Australia next August, two major prizes in mechanics will be awarded for the first time at the Congress. These are the G. K. Batchelor Prize in Fluid Mechanics, sponsored by Cambridge University Press and the Journal of Fluid Mechanics, and the Rodney Hill Prize in Solid Mechanics, sponsored by Elsevier Ltd. and its journals in solid mechanics. Both prizes have been created in order to recognize major contributions by individuals to their respective branches of mechanics over the past 10 years. The purpose of this letter is to announce the decisions of the selection committees for these prizes.

It is with great pleasure that I report that the G. K. Batchelor Prize in Fluid Mechanics will be awarded to Professor Howard Stone of Harvard University as recognition "for for the breadth and depth of his research over the ten-year period 1998-2007, and for his widely acknowledged leadership in fluid mechanics generally. He is particularly well-known for his pioneering studies in: microfluidics, including understanding the 'slip' boundary condiditon, control of mixing, and electroosmotic effects; foam drainage, especially the proposing and testing of a new, generalised foam drainage equation; surface tension and surfactant effects; biological fluid dynamics; and colloidal dynamics. He shows a remarkable capacity for the devising and analysis of simple model problems which lead both to important fundamental understanding and practical application, using theoretical, computational and experimental methods."

It is with equally great pleasure that I report that the Rodney Hill Prize in Solid Mechanics will be awarded to Professor Michael Ortiz of the California Institute of Technology as recognition "for a remarkable stream of achievements during the period 1998-2007, encompassing physical modelling, mathematical analysis and computational technique, including in particular development of the quasi-continuum method for multiscale modelling; formulation of new incremental variational methodology for plastic deformation, with non-convex dissipation

functions leading naturally to the formation of dislocation sub-structures; development of a three-dimensional, finite deformation cohesive element model for simulation of fracture and fragmentation, and associated development of symplectic integrators; novel exploitation of tools from algebraic topology in the study of crystal lattices with defects."

Both Professor Stone and Professor Ortiz will present Prize Lectures at the Congress in the sessions identified for that purpose in the program

On behalf of the sponsors of the awards, the membership of IUTAM, and the international mechanics community, I extend heartiest congratulations to Professor Stone and Professor Ortiz for their central roles in sustaining the vitality of our discipline.

Please join us in Adelaide in August in order to celebrate the achievements of the recipients and to attend the lectures to be given by each.

Sincerely yours,

L. B. Freund
President