



Girrens and Livescu named ASME Fellows

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The American Society of Mechanical Engineers (ASME) has chosen Steve Girrens, associate director for LANL's Engineering directorate, and Daniel Livescu of the Lab's Computational Physics and Methods group as Fellows. The ASME Committee of Past Presidents confers the Fellow grade of membership on worthy candidates to recognize their outstanding engineering achievements.

Girrens' achievements

Girrens is recognized for his leadership of the engineering activities associated with the Laboratory's national security mission. The citation stated that he "has tirelessly promoted engineering innovation in our nation's nuclear weapons program and other global security work, developed and sustained research collaborations with private industry, promoted professional society activities and championed new collaborative education and research programs with domestic and foreign university partners. Girrens also volunteers significant time on various boards and organizations in the Los Alamos community." He was selected in the ASME Fellow category of Industrial Leadership/Management. This category honors an executive or top-level manager who has achieved national or international prominence as a leader, innovator, and spokesman for his or her particular industry. The recipients must have a documented history of successful major accomplishments in management and have received recognition for significant engineering achievement.

Girrens received a doctorate in mechanical engineering from Colorado State University and joined the Lab in 1979. He has diverse experience as a mechanical engineer and project manager developing and applying engineering technologies to solve problems in national security. Areas of expertise include mechanical engineering design and analysis, fracture and thermo-mechanics analysis, computational mechanics, structural seismic response, and project and personnel management. Girrens has technical organization management experience relevant to nuclear operations and facilities including safety basis development and implementation, operational readiness, conduct of operations, and compliance programs.

Livescu's achievements

Livescu is an authority in the field of fluid mechanics and has made significant contributions to the LANL/DOE stewardship mission as a Principal Investigator for the

NNSA Defense Science Programs. He received the award in the ASME Research and Development category. Fellows in this category have made noteworthy invention, discovery or advancement in the state of the art as evidenced by publication of widely accepted materials, by receipt of major patents, or by having products or processes in the marketplace.

Livescu received a doctorate in Mechanical and Aerospace Engineering from the University of Buffalo and joined the Laboratory in 2001. His research focuses on direct-numerical simulation of turbulence and large-scale flow computations. Livescu has led numerous open science proposals, including on Lawrence Livermore National Laboratory's Dawn and Sequoia supercomputers and LANL's Roadrunner. The Roadrunner proposal resulted in the first successful implementation of a large fluid dynamics code on the Cell architecture. He has performed the largest simulations to date of turbulent flows, approaching or exceeding the parameters achieved in typical experiments. The simulations have revealed new or unexpected physics and helped to develop the Laboratory's turbulence models. Livescu has mentored 11 postdocs and 10 doctoral students (as thesis co-advisor). Many of them now hold faculty positions at prestigious universities or are Laboratory staff members.

About the ASME

The American Society of Mechanical Engineers promotes the art, science and practice of multidisciplinary engineering and allied sciences around the globe. The society includes more than 140,000 members in 151 countries. ASME codes and standards, publications, conferences, continuing education and professional development programs provide a foundation for advancing technical knowledge and a safer world. Fellows must have 10 or more years of continuous corporate membership in ASME, have been responsible for significant engineering achievements and have 10 or more years of active practice.

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