

A Word from the Editor-in-Chief of TRANSACTIONS

In contrast to the SIMULATION journal, TRANSACTIONS of the Society for Computer Simulation focuses on articles that are methodological in nature and whose application to general modeling and simulation issues is clear. The joint special issue illustrates the scope and orientation of TRANSACTIONS. Each of the four papers has something novel and important to add to the knowledge base of simulation science. They transmit results of research that should be of interest to other researchers in that they open new possibilities for inquiry. But beyond this, they also provide new insights and approaches to problems faced by people working every day with models and simulations. Such practitioners may not benefit immediately from all research results, especially those results that are in the nascent stage. However, the objective of this journal is that even if such theories can't be expressed in today's familiar terms, their key concepts should be understandable and useful to all.

What are some of the directions that need research and that could benefit everyday practice? One such direction has to do with the fundamental problem of assuring that the predictions of a simulation model can be relied upon. While there has been an explosion of commercial tools for developing such models in recent years, complete with graphical interfaces and animated output, there has been a deafening silence on tools, methods, or even concepts, that would help model builders convince model users of the model's worth. New developments such as the U.S. government's Simulation-Based Acquisition plans have grand ambitions that can only be achieved with solid methodologies, reliable models, and appreciation for their fallibilities.

Many papers in TRANSACTIONS rely on theories and formalisms—at least some of which may unfamiliar to each of us, whether practitioners or researchers. Indeed, creative solutions to current problems often must break current mind sets to emerge. As Editor-in-Chief, I look forward to your comments and critiques on how we might do things better to advance simulation science and its application to the problems you face.

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