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To the question "What is engineering?" there are a variety of answers given today. Some are helpful, many are confused, a few border on nonsense. Their variegation is impressive, their capacity for mutual contradiction startling. But within the broad range of ideas about engineering there is wide agreement that design—itsself a subject of diversified definition—is a central engineering function and an earmark of the field. It is heartening, therefore, to see a renaissance of process design courses in chemical engineering curricula. The significantly creative efforts in process design pedagogy at McMaster University, M.I.T., Dartmouth, and Michigan, to name a few, promise a bright future for the teaching of design to chemical engineering undergraduates, graduate students, and industrial practitioners.

Process design is as complex as it is important, and to strive for it to yield increasingly optimum plants is to move toward complexity and difficulty that are orders of magnitude greater. In an engineering world where the system seems to be a new discovery in mechanical and electrical realms, the chemical design engineer is an old and calloused hand at dealing with the super system: a chemical manufacturing process that is a linkage of components each of which itself may be a quite sophisticated system. It is appropriate, then, that process design become an unparalleled illustration of splendid systems engineering. The challenge that it do so is matched by a remarkable convergence of favorable conditions: necessary knowledge was never more plentiful, technique never more advanced, computation never more facile, the incentive never stronger.

CHEM ENG ED commends to its readers the significant articles on process design pedagogy carried in this issue and in the preceding one. Others will follow from time to time. Watch for them.

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