

# Guest Editorial

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The past decade has seen an emergence of taskforces, centers, institutes, degree programs, and course development geared toward incorporating sustainability into engineering curricula. A quick search on Google using the keywords sustainability and curriculum produced over 1,000,000 hits and narrowing the topic to sustainability and engineering curriculum produced nearly as many results (over 900,000). Indeed, the term sustainability is as commonplace in homes and communities as it is in academic circles. As a result, the students entering our classrooms recognize that there is a link between engineering and sustainability. Moreover, they are often as familiar with the importance of considering sustainability in engineering decision making as many of our faculty which presents some difficult challenges. Programs, departments, colleges and universities around the world are struggling with the question, "How do we address the global need to modify our curricula to teach concepts associated with sustainability?"

Significant strides have been made over the past several years to facilitate these endeavors. Many faculty have addressed the challenges of educating themselves and developing course materials and pedagogical tools that can be implemented and disseminated. Organizations such as the Association of Environmental Engineering and Science Professors (AEESP), the Center for Sustainable Engineering, United Nations Educational, Scientific and Cultural Organization (UNESCO) and Tsinghua University have organized workshops to identify curricular needs and to disseminate materials. The range of activities has extended from the development of course modules related to one or two components of sustainability to university wide curriculum reform that includes certificates or degree programs in sustainability. The content of the course materials being developed ranges from developing individual technologies to systems or community level assessment approaches.

This is the first of two *IJEE* issues devoted to methods for incorporating sustainability into the engineering curriculum. This first issue provides papers that address the broader issues of curricular reform and implementation while the papers in the second issue provide examples of courses and case studies. Although the material presented in these issues is not exhaustive, it does cover a broad array of topics. For example, the topics in the first issue range from teaching sustainable thinking and green engineering to sustainability across the curriculum and using sustainability to increase diversity.

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