From the Editor

LARRY J. SHUMAN

The interest in engineering ethics in general, and, in particular, educating engineering students to be able to recognize and resolve the ethical dilemmas that may occur in the workplace has been increasing over the last two decades. Certainly, a major impetus was provided with the introduction of what was originally termed EC 2000 that contained as one of its eleven outcomes an “understanding of ethical and professional responsibility.” Twenty years later, that outcome has evolved into the current outcome criterion ABET 3.4:

an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

Clearly, achieving this outcome and demonstrating it has, in fact, been met is presenting a challenge to engineering educators. We anticipate that future issues of Advances will present papers that document how programs have educated students to achieve this criterion. For now, this special issue is a first step in that process. As Rosalyn W. Berne and Sarah K.A. Pfatteicher explain in their guest editorial, the concept for this issue evolved out of a National Academy of Engineering workshop on Overcoming Challenges to Infusing Ethics into the Development of Engineers held in January 2017. From a set of sixteen presentations by teams of engineering educators, the seven papers presented here resulted. Collectively, they address the challenges that engineering educators have faced in introducing coursework on engineering ethics into the curriculum, detailing both the successes and the disappointments. Together, they make a solid initial statement as to how programs might address Criterion 3.4. As always, we welcome not only your comments, but papers on how you have also achieved or are achieving this challenging outcome.