It is my great pleasure to launch this Special Issue on Ultrasonics in Acoustical Science and Technology (AST). Ultrasound is usually defined as sound waves or vibrations at frequencies higher than the audible range. In this sense of ‘not audible,’ ultrasonics is a special field in the acoustical society. However, it has a wide variety of applications in industrial and medical measurements, underwater use, sensors, and functional devices such as filters, resonators, and optical modulators. The energy of ultrasonic waves has also been utilized in machining, cleaning, welding/bonding, actuators, and chemical process as well as medical treatment. Such a tremendously broad application results in a wide range of frequency use of up to the GHz range. This ‘inaudible’ research field is deeply tied with all other research fields in the acoustical society. The theories and numerical methods to understand ultrasonic vibrations and propagation are common to audible sound and vibrations, since ultrasonic waves are the same physical phenomenon as audible ones. The concept of ‘transducers’ is similar to that of electroacoustic devices such as loud speakers and microphones. We could discuss plenty of similar examples if more space were available.

We had so many submissions for this special issue that the editorial committee decided to publish half of the papers/letters in Vol. 36, No. 2, which will be put out two months earlier than originally scheduled. The remaining papers/letters will appear in the scheduled issue that will be published as Vol. 36, No. 3. It is clear that this number reflects the large amount of activity in the research field of ultrasonics. Here, I would like to express my sincere thanks to all the authors contributing to this special issue as well as to the editorial team and reviewers for their valuable work. I hope that this issue will be useful to a wide range of readers, and will encourage new spontaneous submissions to AST.