

CALL FOR PAPERS

Spotlight Issue on Advances in Ultrasound Exosimetry (Submission deadline: July 31, 2022)

Over three decades ago, the *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control* hosted a Special Issue on Ultrasound Exosimetry (vol. 35, no. 2, pp. 87-269, Mar. 1988). This issue is now recognized as seminal; it laid the groundwork for the development of numerous domestic and international standards that are still widely used for calibration and regulatory characterization of ultrasound devices. Since then, diagnostic and therapeutic ultrasound have undergone significant expansion, and the time seems right for a sequel. To celebrate the 30th anniversary, the *IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control* plans to launch a Spotlight Issue focusing on “Advances in Ultrasound Exosimetry”. Applications include diagnostic and therapeutic ultrasound, both piezoelectric and fiber optic hydrophones, and most recently developed optical calibration methods. We believe the issue will provide a new publication landmark in the field of ultrasound metrology for years to come. In this context we envision the issue would benefit by including review papers encapsulating the current state of the art in the field of pressure amplitude based and light intensity-based measurement sensors.

The wide range of topics selected for this Spotlight Issue include, but is not limited to:

- hydrophones
- radiation force balances
- transducers
- novel sources and sensors
- methodology for measuring acoustic exposure
- methodology for measuring effects of acoustic exposure such as temperature rise
- calibration of measurement devices
- using ultrasound for exosimetry of other modalities (e.g., photoacoustics, thermoacoustics).
- fiber optic hydrophones and optical calibration methods

Manuscript submission: Different manuscript types (Original Research, Methods and Concepts, Reviews) are welcome. We encourage authors seeking to write review papers to contact the Guest Editors in advance in order to confirm suitability of the topic and to guard against multiple submissions that are either overlapping or redundant.

All contributions should be submitted online via <https://mc.manuscriptcentral.com/tuffc-ieee>, the Manuscript Central system of *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*. When submitting, authors should select Manuscript Type: “Spotlight”. In the “Cover Letter” section, authors should state that the submission is intended for the Spotlight Issue on Advances in Ultrasound Exosimetry, and they should highlight how their manuscript is topically aligned with the scope of the Spotlight issue stated above. Guidelines for improving quality and clarity of manuscripts may be found at <https://ieee-uffc.org/publication/t-uffc/manuscript-guidelines>.

The submission deadline is July 31, 2022. The Guest Editors for this special issue are:

Keith Wear
US Food and Drug Administration
Email: keith.wear@fda.hhs.gov

Peter Lewin (Past Editor-in-Chief)
Drexel University
Email: lewinpa@drexel.edu