



No.34

## IPPS Lecture & Seminar (大学間連携オムニバス講義)

Title: Piezoelectric Transducers and Their Applications

Lecturer: Dr. Negareh Ghasemi [Queensland University of Technology (QUT) ]

Date & Time: November 1 2017, 13:00~14:30

Venue: Kurokami South W5 (Engineering Research Labs., 3rd Floor, Meeting room)

**Abst.:** Piezoelectric transducers are widely used in different applications ranging from biomedical to industrial applications due to their capability in converting the mechanical energy to electrical energy and vice versa. Generally, piezoelectric transducers can be classified as high power and low power transducers. To achieve desirable energy conversion performance (electrical to mechanical), a high quality electrical signal is required for piezoelectric transducer excitation. However, generating a high power high quality signal using power converters is a challenging issue. Compared to high power piezoelectric transducers, low power transducers are usually used for energy harvesting to extract the ambient mechanical vibrations and convert it to electrical energy.

The focus of this presentation is on high power and low power piezoelectric transducers, their constraints and applications.

主催 パルスパワー科学研究所  
協賛 大学間連携プログラム