

The 50th Lecture Meeting on Biomedicine in Fluid Science / Special Lecture

Date and Time: Wednesday, June 24, 2026, 10:00–11:00

Venue: Meeting Room, 2nd Floor, Building 1, Institute of Fluid Science, Tohoku University

Lecturer:

Ken-ichi Yano

Professor, Institute of Industrial Nanomaterials, Kumamoto University
(Visiting Professor, Institute of Fluid Science, Tohoku University)

Lecture Title:

Applications of Physical Methods in Life Sciences: Nanosecond Pulsed Electric Fields and Laser-Based Analysis

Abstract:

This lecture will cover two examples of how physical methods can be applied to life science research. The first part will focus on the application of nanosecond pulsed electric fields in cancer therapy. The second part will introduce laser-based techniques for analyzing protein mobility in living cells.

Biosketch:

Dr. Ken-ichi Yano received his Ph.D. in Biology from Tokyo Metropolitan University. He conducted research in radiation biology at the JFCR Cancer Institute, Lawrence Berkeley National Laboratory, and the University of Texas Southwestern Medical Center. Since 2008, he has served as a Professor at Kumamoto University. His research focuses on the biological effects of physical stimuli, including nanosecond pulsed electric fields and laser irradiation, and their applications in biology and medicine.

Organizer:

Health, Welfare and Medical Cluster, Institute of Fluid Science, Tohoku University
This special lecture is supported by the GCORE-IFS Visiting Professor Program.

Contact:

Takehiko Sato
Institute of Fluid Science, Tohoku University
Tel: 022-217-5320
E-mail: takehiko.sato.d7@tohoku.ac.jp