

RIEC International Workshop on Biomedical Optics 2017

Date: March 6 (Mon), 2017

Place: Tohoku Univ., Elect. Info. Phys. Eng. Dept.

Workshop Program (Tentative)

10:20 Opening remarks Y. Matsuura (Tohoku Univ.)

10:25

Analysis and synthesis of dark circle under the eyes using a spectral image

R. Akaho, M. Hirose (Chiba Univ.), N. Ojima, T. Igarashi (Kao Corp.), N. Tsumura (Chiba Univ.)

10:40

Non-contact video based estimation of pulse transit time from hemoglobin composition

M. Fukunishi, T. Yonezawa, G. Okada, K. Kurita (Chiba Univ.), S. Yamamoto (Tokyo Metropolitan College of Indus.. Technol.), N. Tsumura (Chiba Univ.)

10:55

***In vivo* evaluation of cortical hemodynamics and depolarization in rat brain with a digital red-green-blue camera**

I. Nishidate, A. Mustari (Tokyo Univ. Agric. Technol.), S. Kawauchi, S. Sato (Nat'l Def. Med. College Research Inst.), M. Sato (Yamagata Univ.), Y. Kokubo (Yamagata Univ., Faculty of Medicine)

11:10

High-resolution quantitative phase microscopy of biological cells and tissues with coherent and incoherent light

D. S. Mehta, A. Ahmad, V. K. Dubey, V. Singh, A. Butola (Indian Inst. Technol. Delhi)

11:45

Saturated excitation microscopy using image subtraction

Y. Nawa, Y. Yonemaru, A. Kasai, N. Smith, H. Hashimoto, S. Kawata, K. Fujita (Osaka Univ.)

12:00 Lunch break

13:00

High-speed *en face* optical coherence tomography system using KTN optical beam deflector

M. Ohmi, Y. Shinya (Osaka Univ.), T. Imai, S. Toyoda, J. Kobayashi, T. Sakamoto (NTT)

13:15

Full field optical coherence microscopy with short multimode fiber probe

M. Sato, D. Saito (Yamagata Univ.), I. Nishidate (Tokyo Univ. Agric. Technol.)

13:30

Pearl evaluation by using optical coherence tomography

J. H. Lee, J. G. Shin, S. Lee, B. H. Lee (Gwangju Inst. Sci. Technol.)

13:45

Fiber probes for biomedical imaging

B. H. Lee (Gwangju Inst. Sci. Technol.)

14:20

Fabrication of bundle-structured tube-leaky optical fibers for infrared thermal imaging

T. Kobayashi, T. Katagiri, Y. Matsuura (Tohoku Univ.)

14:35 Coffee break

14:50

A review: infrared fiber optics for medical applications

J. Harrington (Rutgers Univ.)

15:25

Ultraviolet spectroscopic breath analysis using hollow-optical fiber as gas cell

T. Iwata, T. Katagiri, Y. Matsuura (Tohoku Univ.)

15:40

Analysis of propagation properties of terahertz hollow-optical fiber by using time-domain spectroscopy and application for THz wave remote spectroscopy

K. Ito, T. Katagiri, Y. Matsuura (Tohoku Univ.)

15:55

Improvement of transmission properties of visible pilot beam for a rugged hollow fibers designed for Er:YAG laser delivery

K. Iwai, H. Takaku, M. Miyag (Nat'l Inst. Tech., Sendai College), Y. W. Shi, X. S. Zhu (Fudan Univ.), Y. Matsuura (Tohoku Univ.)

16:10 Coffee break

16:25

Development of laser ionization techniques using Zeolite matrix for imaging multiple drugs administered in cancer cells

S. Nomura, H. Hazama, Y. Kaneda (Osaka Univ.), T. Fujino (Toyo Univ.), K. Awazu (Osaka Univ.)

16:40

Development of a photosensitizing drug using replication-deficient virus particles and talaporfin sodium for photodynamic therapy of prostate cancer

S. Saito, M. Inai, N. Honda, H. Hazama, Y. Kaneda, K. Awazu (Osaka Univ.)

16:55

Comparison of photoacoustic signal generation characteristics of small organic molecules with various fluorescence quantum yields

T. Hirasawa (Nat'l Def. Med. College), R. Iwatate, M. Kamiya (Tokyo Univ.), Y. Ikeda, S. Okawa (Nat'l Def. Med. College), Y. Urano (Tokyo Univ.), M. Ishihara (Nat'l Def. Med. College)

17:10

Photoacoustic signal detection in using LED light source

T. Agano, N. Sato, H. Nakatsuka, Y. Shigeta (PreXion Corp.)

17:25

Evaluation of mechanical properties of biological tissue by an atomic microscopy combined with femtosecond laser stimulation

T. Iino, D. Minamino, T. Watanabe, Y. Hosokawa (Nara Inst. Sci. Technol.)

17:40 Closing remark Y. Matsuura (Tohoku Univ.)