

APBP'15 Program (final version 13/4/15)

Wednesday, April 22

13:40-13:45 Opening [Room 414&415]

Opening Remarks

13:40 T. Omatsu, Conference Chair of OMC'15, Chiba Univ., Japan

13:45-16:15 OMC & APBP Joint Session [Room 414&415]

Chair: H. Ishihara, Osaka Pref. Univ., Japan

E. Okada, Keio Univ., Japan

OMC&APBP-1 (Invited) Angular momentum of light in optical tweezers and application in cell biology

13:45 H. Rubinsztein-Dunlop, S. Zhang, D. Carberry, T. Nienimen
Univ. of Queensland, Australia

OMC&APBP-2 (Invited) Optical tweezers for investigation of mechanical property of a cell

14:15 T. Sugiura
Nara Institute of Science and Technology, Japan

----- Break (14:45-15:15) -----

OMC&APBP-3 (Invited) Combined optical and acoustic trapping

15:15 G. Thalhammer, M. Ritsch-Marte
Medical Univ. of Innsbruck, Austria

OMC&APBP-4 (Invited) Molecular mechanism of efficient muscle contraction revealed by single molecule approaches

15:45 M. Kaya, T. Washio, T. Hisada, H. Higuchi
Univ. of Tokyo, Japan

16:15-16:20 Closing [Room 414&415]

Closing Remarks

16:15 T. Iwai, Conference Chair of APBP'15, Tokyo Univ. of Agri. & Tech., Japan

Thursday, April 23

9:10-9:15 Opening [Room 303]

Opening Remarks

9:10 T. Iwai, Conference Chair of APBP'15
Tokyo Univ. of Agri. & Tech., Japan

9:15-11:00 APBP1: Optical Coherence Imaging [Room 303]

Chairs: M. Ohmi, Program Committee co-Chair, Osaka Univ., Japan

Y. Yasuno, Program Committee co-Chair, Univ. of Tsukuba, Japan

APBP1-1 (Invited) Optical coherence tomography based on resonant absorption and scattering of localized surface plasmon on Au nanorings

9:15 C.-K. Yu, T.-T. Chi, Y.-C. Tu, S.-Y. Chen, M.-J. Li, C.-K. Chu, Y.-W. Kiang, C.C. Yang
Nat'l Taiwan Univ., Taiwan

APBP1-2 Ultra-high resolution polarization-sensitive optical coherence tomography for retinal blood vessel wall measurements

9:45 B. Cense¹, I. Ibrahim¹, P. Mondal¹, M. Miura², E. G. Ruiz³
¹Utsunomiya Univ., Japan, ²Tokyo Med. Univ., Japan, ³National Instruments Corp., Japan

APBP1-3 Optical coherence tomography guided laser incision of cornea and lens

10:00 T. J. Eom¹, B. Lee¹, B.-M. Kim², C. K. Joo³
¹GIST, Korea, ²Korea Univ., Korea, ³Seoul St. Mary's Hosp., Korea

APBP1-4 Longitudinal spatial coherence gated high-resolution full-field optical tomography and topography using laser light source

10:15 D. S. Mehta¹, S. Nandy², V. Srivastava³, A. Ahmed¹
¹Indian Inst. of Tech., India, ²Univ. of Connecticut, USA, ³Amity Univ., India

APBP1-5 Spectral domain optical coherence tomography with balanced detection using a single line-scan camera and a time delay optical fiber

10:30 M. G. Hyeon¹, H.-J. Kim¹, B.-M. Kim¹, T. J. Eom²
¹Korea Univ., Korea, ²GIST, Korea

APBP1-6 Clinical validation of optical coherence tomography derived Index of plaque attenuation

10:45 M. Gnanadesigan¹, T. Kameyama², A. van der Steen¹, A. Karanasos¹, N. Dietzhuijzen¹, K. Witberg¹,
J. M. Lighthart¹, E. Regar¹, G. van Soest¹
¹Erasmus MC, Netherlands, ²Tohoku Univ., Japan

----- Break (11:00-11:15) -----

11:15-12:15 APBP2: Poster Flash Presentation [Room 303]

Chairs: **K. Saito**, Program Committee Member, Tokyo Med. & Dent. Univ., Japan

Y. Ozeki, Program Committee Member, Univ. of Tokyo, Japan

- APBPp2-1** **Phase-contrast optical microscopy for biological tissues using oblique laser illumination**
Y. Miyake, M. Hisaka, T. Ikuta
Osaka Electro-Comm. Univ., Japan
- APBPp2-2** **A software utility for tracking FUCCI-labeled gastric cancer cells with multicontrast time-lapse images**
H. Kawaguchi ¹⁾, Y. Maeyama ^{1),2)}, S. Kikuchi ³⁾, M. Otsu ²⁾, H. Ito ¹⁾
¹⁾Natl Inst. of Radiol. Sci., Japan, ²⁾Univ. of Tokyo, Japan, ³⁾Hyogo Coll. of Med., Japan
- APBPp2-3** **Proposal of Raman Fourier-spectroscopic tomography for iPS solid organs in the field of regenerative medicine**
S. Ogawa, M. Fujiwara, P. K. W. Abeygunawardhana, S. Sato, S. Suzuki, A. Nishiyama, K. Wada, I. Ishimaru
Kagawa Univ., Japan
- APBPp2-4** **Design of implantable probe for simultaneous measurement of NIRS, ECoG and thermometry**
S. Esaki ¹⁾, T. Yamakawa ²⁾, M Niwayama ¹⁾
¹⁾Shizuoka Univ., Japan, ²⁾Kumamoto Univ., Japan
- APBPp2-5** **Full field OCT using short multimode fiber probe**
M. Sato ¹⁾, Y. Sekine ¹⁾, T. Takahashi ¹⁾, I. Nishidate ²⁾
¹⁾Yamagata Univ., Japan, ²⁾Tokyo Univ. of Agri. & Tech., Japan
- APBPp2-6** **Stability in phase and intensity measurement using quasi single shot wide field optical coherence tomography**
T. Anna ¹⁾, S. Kimura ¹⁾, D. S. Mehta ²⁾, M. Sato ¹⁾
¹⁾Yamagata Univ., Japan, ²⁾Indian Inst. of Tech., India
- APBPp2-7** **High-speed en face optical coherence tomography using KTN optical beam deflector**
M. Ohmi ¹⁾, A. Fukuda ¹⁾, Y. Shinya ¹⁾, J. Miyazu ²⁾, M. Ueno ²⁾, S. Toyoda ²⁾, J. Kobayashi ²⁾
¹⁾Osaka Univ., Japan, ²⁾NTT Corp., Japan
- APBPp2-8** **In vivo retinal imaging with variable lateral resolution using optically deviated focusing based high-resolution optical coherence tomography**
R. E. Henry Wijesinghe, K. Park, J. Kim
Kyungpook Natl Univ., Korea
- APBPp2-9** **Influence of spatial coherence on visible-LED OCT imaging**
D. Kaneko, T. Iwai
Tokyo Univ. of Agri. & Tech., Japan
- APBPp2-10** **All single mode fiber optics spectral domain polarization sensitive optical coherence tomography**
J.-P. Xu, W.-C. Kuo
Natl Yang-Ming Univ., Taiwan
- APBPp2-11** **Characterization of the responses of cerebral vasculature due to electrical stimulation using OCT**
B.-H. Lin, L. Yang, M.-Y. Chiang, Y.-Y. Chen, W.-C. Kuo
Natl Yang-Ming Univ., Taiwan
- APBPp2-12** **Photoacoustic imaging system with ultra-thin hollow optical fibers**
A. Seki ¹⁾, K. Iwai ²⁾, Y. Matsuura ¹⁾
¹⁾Tohoku Univ., Japan, ²⁾Sendai Natl Coll. of Tech., Japan
- APBPp2-13** **Photo-acoustic analysis of dental pulp using near infrared laser light**
A. Yamada ¹⁾, S. Kakino ²⁾, Y. Matsuura ¹⁾
¹⁾Tohoku Univ., Japan, ²⁾Tokyo Med. & Dent. Univ., Japan
- APBPp2-14** **Fundamental study on control of motion of nanoparticles using scattering field of laser light**
N. Yokoi ¹⁾, Y. Aizu ²⁾
¹⁾Asahikawa Natl Coll. of Tech., Japan, ²⁾Muroran Inst. of Tech., Japan
- APBPp2-15** **Dynamic observation of blood coagulation process in digital holographic microscopy**
H. Funamizu, Y. Watanabe, T. Kumagai, Y. Aizu
Muroran Inst. of Tech., Japan
- APBPp2-16** **Diffusing topographic imaging of melanin layers distributed in a phantom**
Y. Yokoyama, T. Iwai
Tokyo Univ. of Agri. & Tech., Japan
- APBPp2-17** **Optical imaging of simulated blood vessel dynamics by laser scanning topography**
N. Shinonaga, T. Iwai
Tokyo Univ. of Agri. & Tech., Japan
- APBPp2-18** **Combined probe for optically assisted ultrasonic velocity-change imaging aimed at detection of unstable blood vessel plaque**
S. Tanigawa, K. Mano, K. Wada, T. Matsunaka, H. Horinaka
Osaka Pref. Univ., Japan

- APBPp2-19** **Near-infrared fluorescence fluctuation measurement system - Its design and applications**
G. Nishimura
Hokkaido Univ., Japan
- APBPp2-20** **Investigation of age-associated beating behaviors between different heart chambers of *Drosophila* using optical coherence tomography**
T.-H. Hsiung ¹⁾, J.-T. Wu ²⁾, C. C. Yang ²⁾, M.-T. Tsai ¹⁾
¹⁾Chang Gung Univ., Taiwan, ²⁾Natl Taiwan Univ., Taiwan

----- Lunch Break (12:15-13:15) -----

13:15-14:00 APBP3: Poster Flash Presentation -2 [Room 303]

Chair: S. Kawauchi, Program Committee Member, Natl Def. Med. Coll., Japan

I. Nishidate, Program Committee Member, Tokyo Univ. of Agri. & Tech., Japan

- APBPp3-1** **Development of near-infrared multispectral angioscope at wavelengths around 1200 nm for the quantitative diagnosis of atherosclerotic plaque**
D. Matsui, K. Ishii, R. Nagao, K. Awazu
Osaka Univ., Japan
- APBPp3-2** **Simultaneous measurement of vasomotion and plethysmogram in human skin during Stroop test**
A. Hoshi ¹⁾, I. Nishidate ¹⁾, K. Niizeki ²⁾, Y. Aizu ³⁾
¹⁾Tokyo Univ. of Agri. & Tech., Japan, ²⁾Yamagata Univ., Japan, ³⁾Muroran Inst. of Tech., Japan
- APBPp3-3** **Non-contact imaging of plethysmogram and tissue oxygen saturation during change in fraction of inspired oxygen**
R. Sato ¹⁾, I. Nishidate ¹⁾, K. Niizeki ²⁾, Y. Aizu ³⁾
¹⁾Tokyo Univ. of Agri. and Tech., Japan, ²⁾Yamagata Univ., Japan, ³⁾Muroran Inst. of Tech., Japan
- APBPp3-4** **Evaluation of light scattering properties and blood content in skin tissue based on diffuse reflectance images at isosbestic wavelengths of hemoglobin**
T. Yokokawa, I. Nishidate
Tokyo Univ. of Agri. & Tech., Japan
- APBPp3-5** **Title Nonlinear estimation of chromophore concentration for human skin based on Monte Carlo simulation**
M. Hirose, N. Tsumura
Chiba Univ., Japan
- APBPp3-6** **Effect of the sample thickness on the scattering angular distribution and the anisotropy factor of biological tissue phantom**
K. Ishii, D. Fukutomi, K. Awazu
Osaka Univ., Japan
- APBPp3-7** **Error caused by anisotropy factor in optical properties measurement by time-resolved spectroscopy**
K. Nadamoto ¹⁾, Y. Tanikawa ²⁾, Y. Hoshi ³⁾, E. Okada ¹⁾
¹⁾Keio Univ., Japan, ²⁾AIST, Japan, ³⁾Tokyo Metro. Inst. of Med. Sci., Japan
- APBPp3-8** **Development of muscle activity evaluation method by using time-resolved diffuse optical tomography**
Y. Tanikawa ¹⁾, F. Gao ²⁾, M. Miyakawa ³⁾, T. Kiryu ³⁾, T. Kizuka ⁴⁾, S. Okawa ⁵⁾, Y. Hoshi ⁶⁾, Y. Yamada ⁷⁾
¹⁾AIST, Japan, ²⁾Tianjing Univ, China, ³⁾Niigata Univ., Japan, ⁴⁾Univ. of Tsukuba, Japan,
⁵⁾Natl Def. Med. Coll., Japan, ⁶⁾Tokyo Metro. Inst. of Med. Sci., Japan, ⁷⁾Univ. of Electro-Comm., Japan
- APBPp3-9** **Light propagation analysis in the cortical model with three dimensional blood vessel structure obtained by two-photon microscopy**
Y. Yoshimori ¹⁾, T. Kikuchi ¹⁾, H. Takuwa ²⁾, H. Kawaguchi ²⁾, H. Ito ²⁾, E. Okada ¹⁾
¹⁾Keio Univ., Japan, ²⁾Natl Inst. of Radio. Sci., Japan
- APBPp3-10** **Estimation of partial optical path length in the cortical blood vessels from 2D image of exposed cortex**
Y. Yamamoto ¹⁾, T. Kikuchi ¹⁾, Y. Yoshimori ¹⁾, H. Takuwa ²⁾, H. Kawaguchi ²⁾, K. Sakaguchi ³⁾, H. Ito ²⁾, E. Okada ¹⁾
¹⁾Keio Univ., Japan, ²⁾Natl Inst. of Radio. Sci., Japan, ³⁾Okayama Pref. Univ., Japan
- APBPp3-11** **Multispectral imaging of light scattering and hemodynamics of in vivo rat cerebral cortex based on the diffuse reflectance spectroscopy**
T. Ishizuka ¹⁾, K. Yoshida ¹⁾, I. Nishidate ¹⁾, S. Kawauchi ²⁾, S. Sato ²⁾, M. Sato ³⁾
¹⁾Tokyo Univ. of Agri. & Tech., Japan, ²⁾Natl Def. Med. Coll., Japan, ³⁾Yamagata Univ., Japan
- APBPp3-12** **Analysis of spatial sensitivity profile of late-arriving photons in heterogeneous tissue in near-infrared spectroscopy**
N. Wakabayashi, K. Takai, K. Kurihara, E. Okada
Keio Univ., Japan
- APBPp3-13** **Improvement of localization error and spatial broadening of diffuse optical imaging by dense probe arrangement**
Y. Sakakibara ¹⁾, K. Kurihara ^{1),2)}, E. Okada ¹⁾
¹⁾Keio Univ., Japan, ²⁾JSPS, Japan

- APBPp3-14** **Low-resolution image reconstruction for diffuse optical topography**
R. Tsuyuki¹⁾, K. Kurihara^{1),2)}, S. Okawa³⁾, E. Okada¹⁾
¹⁾Keio Univ., Japan, ²⁾JSPS, Japan, ³⁾Natl Def. Med. Coll., Japan
- APBPp3-15** **Image reconstruction for diffuse optical tomography using a realistic human head model including extra-cerebral vasculature**
K. Kurihara^{1),2)}, H. Kawaguchi³⁾, S. Okawa⁴⁾, T. Obata³⁾, H. Ito³⁾, E. Okada¹⁾
¹⁾Keio Univ., Japan, ²⁾JSPS, Japan, ³⁾Natl Inst. of Radio. Sci., Japan, ⁴⁾National Def. Med. Coll., Japan
- APBPp3-16** **Estimation of partial optical path length in the brain using an anatomical head model for near-infrared spectroscopy**
K. Nakamura¹⁾, K. Kurihara^{1),2)}, H. Kawaguchi³⁾, H. Ito³⁾, T. Obata³⁾, E. Okada¹⁾
¹⁾Keio Univ., Japan, ²⁾JSPS, Japan, ³⁾Natl Inst. of Radio. Sci., Japan
- APBPp3-17** **Neurophotonic research based on functional near-infrared spectroscopy technique**
C.-W. Sun
Natl Chiao Tung Univ., Taiwan

14:00-15:15 **Poster View and Discussion**[Exhibition Hall C]

----- Break (15:15-15:45) -----

15:45-17:45 **APBP4: Diffuse Spectroscopy and Imaging -1** [Room 303]

Chairs: G. Nishimura, Int. Steering Committee Chair, Hokkaido Univ., Japan

Y. Aizu, Int. Steering Committee Member, Muroran Inst. Tech., Japan

- APBP4-1** **(Plenary) High Resolution molecular imaging in vivo with Cherenkov excitation**
15:45 B. W. Pogue¹⁾, R. Zhang¹⁾, H. Lin¹⁾, J. Gunn¹⁾, A. Glaser¹⁾, J. Andreozzi¹⁾, S. Vinogradov²⁾, S. Jiang¹⁾,
D.J. Gladstone¹⁾, L.A. Jarvis¹⁾
¹⁾Dartmouth College, USA, ²⁾The Univ. of Pennsylvania, USA
- APBP4-2** **Combined imaging of near-infrared diffuse reflectance and cerebral blood flow for a rat stroke model: progression monitoring and differentiation of the lesions**
16:45 S. Kawauchi¹⁾, I. Nishidate²⁾, H. Nawashiro³⁾, S. Sato¹⁾
- APBP4-3** **In vivo evaluation of optical properties of rat liver using single reflectance fiber probe during ischemia and reperfusion**
17:00 S. Akter¹⁾, I. Nishidate¹⁾, S. Kawauchi²⁾, S. Sato²⁾
¹⁾Tokyo Univ. of Agri. & Tech., Japan, ²⁾Natl Def. Med. Coll., Japan
- APBP4-4** **Title Multispectral imaging of intrinsic optical properties of in vivo exposed rat brain using a digital red-green-blue camera**
17:15 K. Yoshida¹⁾, T. Ishizuka¹⁾, I. Nishidate¹⁾, S. Kawauchi²⁾, S. Sato²⁾, M. Sato³⁾
¹⁾Tokyo Univ. of Agri. & Tech., Japan, ²⁾National Def. Med. Coll., Japan, ³⁾Yamagata Univ., Japan
- APBP4-5** **Prediction of temperature distributions around a small heated sphere and its heat production rates using a near-infrared absorption technique**
17:30 N. Kakuta¹⁾, K. Yamada¹⁾, R. Fujioka³⁾, K. Kondo⁴⁾, H. Arimoto³⁾, Y. Yamada⁴⁾
¹⁾Tokyo Metro. Univ., Japan, ²⁾Tottori Univ., Japan, ³⁾AIST, Japan, ⁴⁾The Univ. of Electro-Comm., Japan

Friday, April 24

9:00-10:45 **APBP5: Photo Therapeutics and Laser Tissue/Cell Interactions** [Room 303]

Chairs: S. Sato, Int. Steering Committee Member, Natl Def. Med. Coll., Japan

K. Ishii, Program Committee Member, Osaka Univ., Japan

- APBP5-1** **(Invited) Photodynamic therapy as a salvage treatment for local failure after chemoradiotherapy for esophageal cancer**
9:00 T. Yano¹⁾, M. Muto²⁾
¹⁾Natl Cancer Cent. Hosp. East, Japan, ²⁾Kyoto Univ., Japan
- APBP5-2** **Cancer cell inactivation based on localized surface plasmon resonance of Au nanoring**
9:30 Y.-C. Tu, C.-K. Chu, Y.-W. Chang, C.-K. Chu¹⁾, S.-Y. Chen, T.-T. Chi, Y.-W. Kiang, C. C. Yang
Natl Taiwan Univ., Taiwan
- APBP5-3** **Selective ablation of atherosclerotic lesion with less thermal effect by the control of pulse structure of a quantum cascade laser in the 5.7 μm wavelength range**
9:45 K. Hashimura^{1),2)}, K. Ishii¹⁾, K. Awazu¹⁾
¹⁾Osaka Univ., Japan, ²⁾JSPS, Japan
- APBP5-4** **Proposal of ultrasonic-assisted spectroscopy for practical usages**
10:00 K. Nogo, K. Mori, S. Sato, A. Nishiyama, K. Wada, I. Ishimaru
Kagawa Univ., Japan

- APBP5-5** **Spectroscopic imaging of blood vessels only near skin surfaces for non-invasive blood glucose sensor**
10:15 K. Mori, M. Fujiwara, S. Sato, P. K. W. Abeygunawardhansdda, S. Suzuki, A. Nishiyama, K. Wada,
 I. Ishimaru
 Kagawa Univ., Japan
- APBP5-6** **Calculation of scattering coefficient with anisotropy factor considered the wavelength and absorption dependence for biological tissues**
10:30 D. Fukutomi, K. Ishii, K. Awazu
 Osaka Univ., Japan

----- Break (10:45-11:00) -----

11:00-12:30 APBP6: Photoacoustic Method [Room 303]

Chair: Y. Yamaoka, Program Committee Member, Kyoto Pref. Univ. of Med., Japan
M. Hisaka, Program Committee Member, Osaka Electro-Comm. Univ., Japan

- APBP6-1** **(Invited) Recent progress in photoacoustic imaging: systems, agents, and applications**
11:00 A.C. Kim
 Pohang Univ. of Sci. & Tech., Korea
- APBP6-2** **Theranostics based on nanosecond laser pulses enabling photomechanical drug delivery and photoacoustic imaging for pharmacokinetics**
11:30 Y. Tsunoi¹⁾, S. Sato²⁾, R. Watanabe¹⁾, S. Kawauchi²⁾, Y. Miyagawa²⁾, K. Araki²⁾, A. Shiotani²⁾,
 T. Takemura²⁾, M. Terakawa¹⁾
¹⁾Keio Univ., Japan, ²⁾Natl Def. Med. Coll., Japan
- APBP6-3** **Photoacoustic imaging of macrophage with gold nanorod**
11:45 A.Y. Saijo, R. Uamazaki, K. Ogasawara
 Tohoku Univ., Japan
- APBP6-4** **Precise cross-sectional imaging using two-photon photoacoustic microscopy with image subtraction and time-gated detection**
12:00 A.Y. Yamaoka¹⁾, Y. Harada²⁾, T. Minamikawa¹⁾, S. Nishino²⁾, S. Maehara²⁾, S. Hamano²⁾, T. Takamatsu¹⁾
¹⁾Kyoto Pref. Univ. of Med., Japan, ²⁾Terasaki Electric Co., Ltd., Japan
- APBP6-5** **A time delay calibrated method of intraocular pressure**
12:15 K.-J. Wang¹⁾, C.-L. Tsai²⁾, W. Wang¹⁾, L. Hsu²⁾, K.-Y. Hsu²⁾
¹⁾Crystalvue Medical Corp., Taiwan, ²⁾Natl Chiao Tung Univ., Taiwan

----- Lunch Break (12:30-13:30) -----

13:30-15:45 APBP7: Optical Microscopy and Nanoscopy [Room 303]

Chairs: K. Fujita, Int. Steering Committee Member, Osaka Univ., Japan
M. Hashimoto, Int. Steering Committee Member, Osaka Univ., Japan

- APBP7-1** **(Invited) Development of a novel spontaneously blinking fluorophore for single-molecule localization microscopy**
13:30 Y. Urano, M. Kamiya, S. Uno
 Univ. of Tokyo, Japan
- APBP7-2** **New concept of mechanical scanner - less multiple beams confocal microscope with wavefront modulation**
14:00 Y. Takiguchi¹⁾, M.-W. Seo²⁾, K. Kagawa²⁾, H. Takamoto¹⁾, T. Inoue¹⁾, S. Kawahito²⁾, T. Terakawa³⁾
¹⁾Hamamatsu Photonics K.K., Japan, ²⁾Shizuoka Univ., Japan, ³⁾Tokoha Univ., Japan
- APBP7-3** **Subdiffraction-limited live cell imaging using surface-enhanced plasmonics**
14:15 W. Lee, T. Son, D. Kim
 Yonsei Univ., Korea
- APBP7-4** **Biological high-resolution imaging in wet-condition using cathodoluminescence microscopy**
14:30 T. Furukawa¹⁾, S. Fukushima¹⁾, H. Niioka²⁾, M. Ichimiya²⁾, J. Miyake¹⁾, M. Ashida¹⁾, T. Araki¹⁾,
 M. Hashimoto¹⁾
¹⁾Osaka Univ., Japan, ²⁾The Univ. of Shiga Pref., Japan
- APBP7-5** **Near-infrared multi-wavelength imaging to elucidate ionic diffusion and reaction in aqueous solutions**
14:45 A.D. Kawashima¹⁾, N. Kakuta²⁾, H. Arimoto³⁾, K. Kondo⁴⁾, Y. Yamada⁴⁾
¹⁾Tokyo Metro. Univ., Japan, ²⁾AIST, Japan, ³⁾Tottori Univ., Japan, ⁴⁾Univ. of Electro-Comm., Japan
- APBP7-6** **Depth-selective reflection phase microscopy using time-varying speckle field**
15:00 A.Y. Choi¹⁾, P. Hosseini²⁾, W. Choi¹⁾, Z. Yaqoob²⁾, P. T. C. So²⁾
¹⁾Korea Univ., Korea, ²⁾MIT, USA
- APBP7-7** **Functional image of vascular smooth muscle cells grown on biomimetic nanofiber matrices using two-photon microscopy**
15:15 S. W. Jun¹⁾, Y. C. Shin¹⁾, J. H. Lee¹⁾, D.-W. Han¹⁾, C.-S. Kim¹⁾, C. Y. Dong²⁾
¹⁾Pusan Natl Univ., Korea, ²⁾Natl Taiwan Univ., Taiwan

APBP7-8 **Visible-wavelength two-photon excitation microscopy**
15:30 K. Fujita, M. Yamanaka, K. Uegaki, K.Saito, Y. Arai, Y. Yonemaru, K. Mochizuki, S. Nicholas, S. Kawata,
T. Nagai
Osaka Univ., Japan

----- Break (15:45-16:00) -----

16:00-17:30 APBP8: Diffuse Spectroscopy and Imaging -2[Room 303]

Chairs: Y. Tanikawa, Program Committee Member,AIST, Japan
M. Kawaguchi,Program Committee Member,AIST., Japan

APBP8-1 **(Invited) Recent progress in Time-**
16:00 **Resolved Spectroscopy and its medical applications**
Y. Yamashita ¹⁾, H. Suzuki ²⁾, K. Yoshimoto ²⁾, S. Honma ¹⁾, E. Ohmae ¹⁾, Y. Ueda ¹⁾, H. Ogura ²⁾,
H. Sakahara ³⁾
¹⁾Hamamatsu Photonics K.K., Japan, ²⁾Hamamatsu Univ. School of Med., Japan,
³⁾Hyogo Coll. of Med., Japan

APBP8-2 **Analysis of diffuse optical tomography using sequential FDM method**
16:30 H. S. Jang, S. W. Jun, C. S. Kim
Pusan Natl Univ., Korea

APBP8-3 **Study on a reconstruction technique using time domain reflectance measurements data**
16:45 D. Furukawa, G. Nishimura
Hokkaido Univ., Japan

APBP8-4 **Estimation of scattering coefficient using backscattered light from turbid medium**
17:00 K. Shimizu, K. Iinaga, Y. Kato
Hokkaido Univ., Japan

APBP8-5 **Numerical simulation of iterative reconstruction for optical tomography and detection of tumor in**
17:15 **human neck based on the time-dependent 3D radiative transfer equation**
K. Hashimoto ¹⁾, H. Fujii ²⁾, S. Kohno ¹⁾, E. Okada ³⁾, S. Okawa ⁴⁾, Y. Tanikawa ⁵⁾, T. Yoshinaga ⁶⁾, Y. Hoshi ¹⁾
¹⁾Tokyo Metro. Inst. of Med. Sci., Japan, ²⁾Hokkaido Univ., Japan, ³⁾Keio Univ., Japan,
⁴⁾Natl Def. Med. Coll., Japan, ⁵⁾AIST, Japan, ⁶⁾The Univ. of Tokushima, Japan

17:30-17:50 Award Ceremony and Closing[Room 303]

Award Ceremony

17:30

Closing Remarks

17:45 **G. Nishimura**, Int. Steering Committee Chair,
Hokkaido Univ., Japan