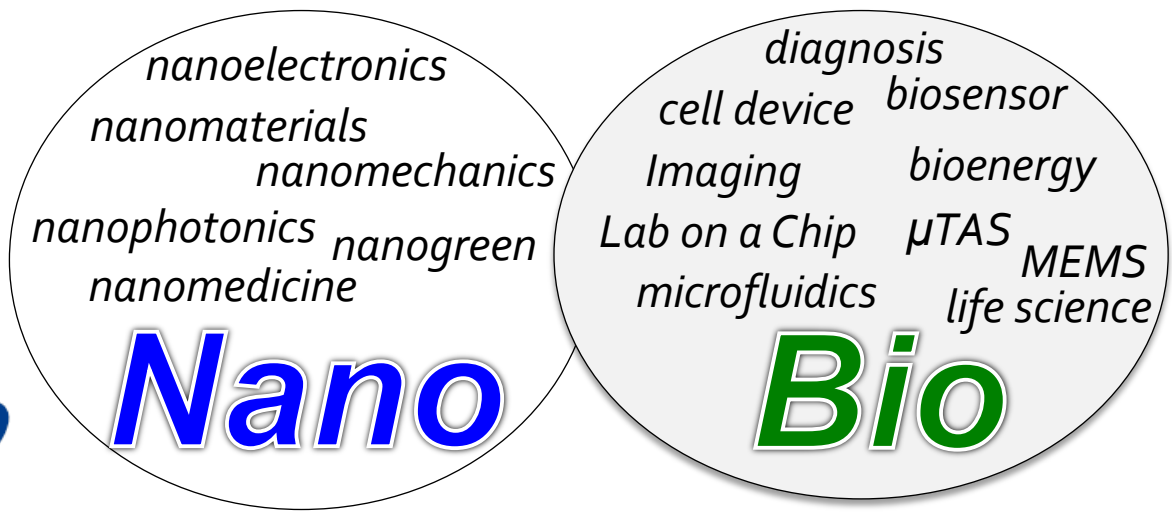
2015年秋季応用物理学会 シンポジウム ***名古屋国際会議場***

“Asian Joint Symposium on Nanobiotechnology”

Sep. 13 16:00-18:00, Poster Session PB会場
Sep. 14 8:55-18:30, Oral Session 3A会場

『ナノバイオテクノロジー』は応用物理学会で活発に研究されている分野の一つです。応用物理学会におけるセッションは、有機分子・バイオエレクトロニクス分科会に関連する 12.6 ナノバイオテクノロジー、12.7 医用工学・バイオチップだけでも、総講演数は大きく伸びてきています。この分野をより活性化させていくことを考えると、日本人研究者・学生に加えて、日本に来ている外国人研究者や留学生、さらには近隣諸国の大学・研究機関で関連研究を進める海外の研究者をも取り込んで、大きなコミュニティを形成してことが望ましいといえます。
2015年秋季講演会では、”English session: Asian Joint Symposium on Nanobiotechnology” シンポジウムを企画いたしました。海外から６名、国内から３名の著名な研究者による招待講演と一般講演をあわせて開催いたします。ナノバイオ分野における最新の研究成果について議論・討論します。ご参加をお待ちしております。

“Nanobiotechnology” is one of the hot research fields in applied physics. The nanobiological fields constitute fast growing interdisciplinary areas, which motivates many researchers. For active and lively research in this field, involvement of not only the local Japanese researchers but the students and young scientists oversea is rather essential. Together with universities, collaboration in a form of a large community with research institutes and any bio-related researchers of neighboring asian countries should be emphasized. There will be a symposium entitled “Asian Joint Symposium on Nanobiotechnology” held in the autumn meeting of JSAP. The session will be held in English language and active researchers from abroad and domestic are invited. We also welcome contributed papers for the symposium. Through this session we hope to discuss the cutting-edge results in the bio-fields. We look forward to seeing you at Nagoya.



Program

Sep. 13 Poster Session
16:00-18:00 14 papers ※有機分子・バイオエレクトロニクス中分類 12.6, 12.7 ポスター同時開催

Sep. 14 Oral Session
8:55-9:00 Opening Address
E. Tamiya (Osaka Univ.)

9:00-10:15 Session 1
[Invited] *"Sensing molecular events of virus in live cells"*, X.-E. Zhang (Institute of Biophysics, Chinese Academy of Sciences)
"In vitro cardiomyocyte-based drug profiling and screening application of the designed centrifugal microfluidic chip", W. Espulgar (Osaka Univ.)
"Fundamental study on electrical measurement of allergy response based on semiconductor principle", H. Yang (Univ. of Tokyo)
"Neuronal selective growth on nanopillars using supported lipid bilayer", N. Kasai (NTT)

10:30-11:45 Session 2
[Invited] *"Plasmonic nanostructures based on self-assembled nanoparticles for biosensing"*, K. Ijiro (Hokkaido University)
"Sensitive single-particle fluorescence imaging with a plasmonic chip", K. Tawa (Kwansei Gakuin Univ.)
"Fabrication of antireflective and superhydrophobic gold nanocone arrays on flexible polymer films", M. Toma (Kwansei Gakuin Univ.)
"Label-free monitoring of amyloid β aggregation using polymer-based photonic crystal", T. Endo (Osaka Pref. Univ.)

13:15-14:45 Session 3
[Invited] *"Aptamer nanobiosensors for ultrasensitive detection of pandemic viruses, type 2 diabete biomarkers, and antibiotics"*, M. B. Gu (Korea University)
[Invited] *"DNA nanotechnology-based organization on the nano-bio interfaces"*, C. Fan (Shanghai Institute of Applied Physics, Chinese Academy of Sciences)
[Invited] *"Micro fluidic chip and glass microfluidic control devices"*, Y. Tanaka (RIKEN)

15:00-16:45 Session 4
[Invited] *"Application of nanoplasmonics-based microfluidic sensor for highly sensitive biomedical detection"*, J. Choo (Hanyang University)
[Invited] *"Field-directed assembly of magnetic nanoparticles and potential application in biomedical nanotechnology"*, N. Gu (Southeast University)
"Biocompatible polymer modification of carbon-base materials with for implanted device", M. Takai (Univ. of Tokyo)
"Raman and immunofluorescence imaging analysis of mineralization process in mouse osteoblasts", A. Hashimoto (Osaka Univ.)
"Optical change property in micro-inclination of light-reflecting surface of biogenic guanine crystal under magnetic field", Y. Mizukawa (Hiroshima Univ.)

17:00-18:30 Session 5
[Invited] *"Microfluidic multiplexed assays using tissue samples of human breast cancer"*, J.-K. Park (KAIST)
[Invited] *"Development of minimally invasive medical devices and healthcare devices using microsystems"*, Y. Haga (Tohoku University)
"A small implantable imaging device for nitric oxide signal detection", A. Wuthayavanich (NAIST)
"Fully automated microelectrofluidic device for diagnostic application", T. Rahman (Univ. of Tokyo)

Symposium Organizers
E. Tamiya (Osaka Univ.), Y. Yanase (Hiroshima Univ.),
H. Takehara (NAIST), A. Miura (Hokkaido Univ.),
S. Kumagai (Toyota Technol. Inst.)