

APNFO13

The 13th Asia-Pacific Conference on Near-Field Optics July 4-8, 2021, Hokkaido University, Sapporo, Japan

Organizers: Japan Society of Applied Physics,
Nano Optics Group, The Optical Society of Japan,
Plasmonic Photochemistry Society of Japan

OVERVIEW

The Asia-Pacific Conference on Near-field Optics (APNFO) has provided an opportunity for leading scientists and young researchers in the field of nano-optics to discuss new ideas and approaches in cutting-edge research, and to network with each other. APNFO has been held every two years, following the first meeting in Seoul in 1996, in Beijing, Melbourne, Taroko, Niigata, Yellow Mountain, Jeju, Adelaide, Singapore, Hakodate, Tainan, Xiamen and will be held in Sapporo, Japan in 2021.

Rapid progress in nanoscience and nanotechnology has made near-field optics more attractive and applicable to various research fields on condensed matter physics including chemistry and biology. The unique characteristics of light-matter interactions on the nanoscale have provided a tool for microscopic study to pursue basic science interests, including the quantum mechanical nature of light and electrons. It has also brought a discipline to address engineering and manufacturing challenges for making devices smaller, faster, and more energy-efficient, and more importantly, for promoting conceptually new device paradigms. In the coming phase, the near-field nano-optics is expected to be applied not only to biosensors and nanofabrication technology, but also to light-energy conversions and storages such as solar cells and artificial photosynthesis. At APNFO-13, we organize a special session entitled "Hot carrier sciences and its application to light-energy conversions" to allow participants to share their experiences, problems, and concerns, and to discuss promising future directions. In addition, keynote and invited speakers are also arranged to exhibit the current trends in near-field optics, which will inspire and motivate young researchers and students.

TOPICS

- Novel concepts and phenomena in near-field nano-optics
- Theory and modeling in nano-photonics
- Near-field enhancement phenomena
- Nonlinear and quantum optics of near-field regime
- Plasmonics
- Fano resonance
- Strong coupling
- Metamaterials
- Infrared and THz technology
- Hot carriers
- NSOM, super-resolution and nanofocusing
- Nano-optical fabrication and manipulation of matters
- Nano-optical characterization, optical spectroscopy and instrumentation
- Nano-photonic materials, structures and waveguides, devices and designs
- Applications in sensing, solar cells, condensed matter physics including chemistry and biology etc.

IMPORTANT DATES

Submission of Abstracts: by February 26, 2021 (23:59 JST)
Online Registration: by June 23, 2021 (23:59 JST)



**International
Advisory
Committee**

Chair: Ann Roberts, The Univ. of Melbourne, Australia
Din Ping Tsai, Hong Kong Polytechnic Univ., Hong Kong
Dayong Jin, Univ. of Technology Sydney, Australia
Luping Shi, Tsinghua Univ., China
Takashi Yatsui, Toyohashi Univ. of Technology, Japan
Toshiharu Saiki, Keio Univ., Japan
Wonho Jhe, Seoul National Univ., Korea
Seung-Han Park, Yonsei Univ., Korea
Harith Bin Ahmad, Univ. of Malaya, Malaysia
Tou Teck Yong, Malaysia Multimedia Univ., Malaysia
Richard Blaikie, Univ. of Otago, New Zealand
Ai Qun Liu, Nanyang Technological Univ., Singapore
Minghui Hong, National Univ. of Singapore, Singapore

Yung Chiang Lan, National Cheng Kung Univ., Taiwan
Masud Mansuripur, The Univ. of Arizona, USA
Martin Moskovits, Univ. of California Santa Barbara, USA
Vu Dinh Lam, Institute of Materials Science, Viet Nam
Yuan-Fong Chou Chau, Univ. Brunei Darussalam, Brunei
Wan Mahmood B Mat Yunus, Univ. Putra Malaysia, Malaysia
Zubin Jacob, University of Alberta, Canada
Yu-Jung Lu, Academia Sinica, Taiwan
Hui-Hsin Hsiao, National Taiwan Normal University, Taiwan
Hiroaki Misawa, Hokkaido Univ., Japan
Min Gu, Univ. of Shanghai for Science & Technology, China

**Organizing
Committee**

General Chair: Hiroaki Misawa, Hokkaido Univ., Japan
Kosei Ueno, Hokkaido Univ., Japan
Keisuke Imaeda, Hokkaido Univ., Japan
Akira Ishikawa, Univ. of Yamanashi, Japan
Kazuharu Uchiyama, Univ. of Yamanashi, Japan
Kohei Imura, Waseda Univ., Japan
Yasuo Ohdaira, Niigata Univ., Japan

Masaru Sakai, Univ. of Yamanashi, Japan
Hiroyasu Fujiwara, Hamamatsu Photonics, Japan
Kei Murakoshi, Hokkaido Univ., Japan
Hiroo Minamimoto, Hokkaido Univ., Japan
Kentaro Iwami, Tokyo Univ. of Agriculture and Technology, Japan
Naoya Tate, Kyushu Univ., Japan

**Program
Committee**

Keiji Sasaki, Hokkaido Univ., Japan
Pin Christophe, Hokkaido Univ., Japan

Atsushi Ono, Shizuoka Univ., Japan
Tamitake Itoh, AIST, Japan

**FURTHER
INFORMATION**

<http://www.nano-optics-group.org/apnfo13/>