# **The 15th Asia-Pacific Conference on Near-Field Optics**

#### The first Announcement of the 15<sup>th</sup> Asia-Pacific Conference on Near-field Optics

## APNFO-15

Since the past three decades, the optics interaction with matter at nanometer scale attracted the attentions of scientists worldwide, especially in the direction of higher resolution over optical diffraction limits. Hence, a new research filed: Near-field Optics was born. After the initial focus on developments of the instrumentations of higher optical resolution and spectroscopy, and the basic theory of near-field optics, the research direction moves to the wider areas of some basic physical excitations, such as plasmonics and application to the IT industry, biology and medicine.

The Asia-Pacific Conference on Near-field Optics (APNFO) has provided an opportunity for well-known scientists and young researchers in the Asia-Pacific Region to sit together face-to-face to discuss the latest developments of theories and cutting-edge instrumentation.

Since the first meeting of APNFO chaired by Prof Wonho Jhe in Seoul in 1996, and the second one Chaired by Xing ZHU in Beijing in 1999, the APNFO becomes a scientific brand of nano-optics in the region, which has been held every other year, i.e. Melbourne 2001 chaired by KA Nugent and A Roberts, Taroko 2003 by DP Tsai, Niigata 2005 by Y Kawata, Yellow Mountain 2007 by H Ming, Jeju 2009 by SH Park, Adelaide 2011 by DY Jin, Singapore 2013 by MH Hong, Hakodate 2015 by M Ohtsu, Tainan 2017 by DP Tsai, Xiamen 2019 by R Zhou, MH Hong and XG Luo, Sapporo 2022 by H Misawa, as well the 14<sup>th</sup> APNFO Busan by JY Kim. Through such meetings, the scientists working at near-field optics, nano-optics, professors or students, old or young have become the collaborators and friends.

This summer, August 18-21, 2025, we are expecting to welcome all of you to attend the 15<sup>th</sup> APNFO in Bali Island, Indonesia.

The topics of interests at this conference will be the near-field theory and quantum optics, near-field imaging and super-resolution techniques, polaritons and metamaterials, multi-physical fields integrated near-field techniques, biological and molecular sensing.

One of the organizers of this conference is Chinese Society of Micro Nano Technology, which will celebrate her 20<sup>th</sup> birthday since the establishment of the Society in 2005.

**Conference Information** 

Title	The 15 <sup>th</sup> Asia-Pacific Conference on Near-field Optics (APNFO 15)
Dates	August 18-21, 2025
Venue	Tsinghua Southeast Asia Center UID Bali Campus, Serangan, Denpasar City, Bali, Indonesia

Organizers	Tsinghua University, Peking University, Shanghai Jiaotong University, National Center for Nanoscience and Technology, China Chinese Society of Micro Nano Technology	
Important Dates	Early registration:April 1, 2025Abstract submission end:June 10, 2025Early registration deadline:July 10, 2025Notification of abstract acceptance June 20, 2025	
Secretariat	Contact: Juan LI Chinese Society of Micro Nano Technology Email: csmnt@tsinghua.edu.cn Tel: +86 10 62772108 Web: APNFO15.csmnt.org.cn	

#### **Chair Group**

The Honorary General Chair: Prof. Xing ZHU, Peking University General Chair: Benfeng BAI (Tsinghua University) General Co-Chair: Qing DAI (Shanghai Jiaotong University) General Co-Chair: Zheyu FANG (Peking University)

**Organization Committees** (Sort by initials of surnames)

## APNFO 15 International Advisory Committee Chair: Qing DAI

Harry Atwater, Chunli Bai, Din Pin Tsai, Jennifer Dionne, Zhenchao Dong, Nader Engheta, Min Gu, Qihuang Gong, Chennupati Jagadish, Dai-Sik Kim, Bert Hecht, Hiroaki Misawa, Teri W. Odom, Namkyoo Park, Motoichi Ohtsu, Zhipei Sun, Zhongqun Tian, Jianbin Xu, Xiang Zhang, Nikolay Zheludev, Lei Zhou

## **APNFO 15 International Organizing Committee**

#### **Chair : Zheyu FANG**

Javier García de Abajo, Yasuhiko Arakawa, Tiejun Cui, Baohua Jia, Dayong Jin, Minghui Hong, Aiqun Liu, Xiangang Luo, Stefan A Maier, Olivier, J.F. Martin, Jwa-Min Nam, Peter Nordlander, Masaya Notomi, Chengwei Qiu, Ann Roberts, Vladimir M. Shalaev, Takuo Tanaka, Jianfang Wang, Hongxing Xu, Shuang Zhang, Wanhua Zheng, Shining Zhu

#### **APNFO 15 Local Organizing Committee**

Chair: Xiaoxia Yang (National Center for Nanoscience and Technology)
Co-Chair: Fei TANG (Tsinghua University, Chinese Society of Micro Nano Technology)
Co-Chair: Debo HU (National Center for Nanoscience and Technology)
Jianing Chen, Shu Chen, Xiangdong Guo, Min Hu, Guangwei Hu, Lili Jiang, Tian Jiang, Tao
Jiang, Juan Li, Peining Li, Dangyuan Lei, Yang Luo, Qingdong Ou, Quan Sun, Zhiyuan Sun,
Qixia Wang, Qianchun Weng, Jun Yi, Shunping Zhang, Yao Zhang

## **Conference Topics\***

## 1. Near-Field Theory and Quantum Optics

Theoretical advances in near-field optics and the exploration of novel phenomena at the quantum scale. Utilization of artificial intelligence to enhance near-field analysis.

## 2. Near-Field Imaging and Super-Resolution Techniques

Progress in advanced near-field imaging methods and super-resolution techniques for improved spatial resolution beyond the diffraction limit.

## 3. Polaritons and Metamaterials

Understanding the physical mechanisms of polaritons and their integration with metamaterials for novel optical functionalities.

## 4. Multi-physical Fields Integrated Near-field Techniques

Investigation of coupling effects between near-field optics and other physical fields (thermal, electrical, magnetic fields, etc.). Emphasis on multi-domain (time-space-spectral) and multi-modal detection/imaging techniques to foster interdisciplinary collaboration.

## 5. Biological and Molecular Sensing

Applications of near-field optics in biological imaging, molecular detection, and environmental monitoring, including state-of-the-art techniques for high-sensitivity and realtime analysis.

\*Note: the applicant can select your own topic(s) in the registration

	Early registration	Full registration
	Before July 10, 2025	After July 10, 2025
Regular Participant	USD 700	USD 750
Student*	USD 400	USD 450
Retired**	USD 450	USD 500
Accompanying person	USD120	USD150

#### **Registration fees\***

\*Full-time undergraduate and graduate only. Please enclose the proof of status

\*\* Please enclose the proof of status

#### The Registration Fee Covers the Following Items:

#### For Regular Participants and Students

- 1. Participation in the scientific programs
- 2. The abstract and program book
- 3. Coffee and snacks during breaks
- 4. Welcome reception on Aug 18, 2025
- 5. Three day's lunch box Aug 19-21, 2025
- 6. Shuttle bus between Hotels to the meeting Campus
- 7. Half day tour Aug 20, 2025
- 8. Banquet on Aug 20, 2025

#### **For Accompanying Persons**

- 1. Welcome reception on Aug 18, 2025
- 2. Half day tour Aug 20, 2025
- 3. Banquet on Aug 20, 2025

#### Schedule

Time	Activities	
Aug 18.(Mon.)	Registration & Check-in, Reception	
Aug 19.(Tue.)	Opening Ceremony, Plenary Talks,	
	Special Sessions, Exhibitions, Banquet	
Aug 20.(Wed.)	Special Sessions, Exhibitions, Technical Tour	
Aug 21.(Thur.)	Special Sessions, Exhibitions, Closing Ceremony	
For more activities, please visit	the official website of APNFO15.	

PC: apnfo15.csmnt.org.cn

Mobile: Scan to log in



#### How to Attend through Website?

