ISOM'25

LIGHT CUBE UTSUNOMIYA, Utsunomiya, Tochigi, Japan

Oct. 19 - 22, 2025

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WELCOME STATEMENT FROM THE ORGANIZING COMMITTEE

CHAIRPERSON

The 35th ISOM (ISOM'25) will be held from Oct. 19 to Oct. 22, 2025, at LIGHT CUBE UTSUNOMIYA in Tochigi, Japan.

On behalf of the ISOM organizing committee, I am delighted to welcome all of you to the ISOM'25.

The previous symposium, held in Himeji, Hyogo, Japan, brought together 120 participants from Asia and Europe. A total of 89 papers were presented, including 15 invited talks and special lectures. Attendees enjoyed engaging in face-to-face discussions, exchanging ideas, and strengthening relationships through both technical sessions and social activities.

We believe that ISOM's activities have been highly fruitful, yielding significant achievements. Since the first ISOM in 1987, numerous papers have been presented and discussed in depth at the symposium, leading to new developments and applications in the field of optical memory. These contributions have not only driven innovation in optical memory technology but have also supported the economic growth of industries related to optical memory.

In 2017, ISOM broadened its scope to include a wider range of optical fields and applications, and subsequently changed its name to the *International Symposium on Imaging, Sensing, and Optical Memory*. The renewed ISOM now encompasses image sensing, medical and bio-optics, nano-photonics, information systems, holographic technologies, as well as optical memory. We believe this expansion will foster technological innovation and create new applications across all areas represented at the symposium.

I sincerely encourage all participants of ISOM'25 to actively engage in discussions on next-generation optical memory technologies and their novel applications.

Takanori Nomura

ISOM'25 Organizing Committee, Chairperson

ISOM'25 COMMITTEES

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ISOM'25 SYMPOSIUM SCHEDULE

	Oct. 19, Sun	Oct. 20, Mon	Oct. 21, Tue	Oct. 22, Wed	
	Registration 15:00 – 17:20	Registration 8:00 – 13:00	Registration 8:00 – 13:00	Registration 8:00 – 13:00	
8:40					8:40
9:00		**Mo-A** Opening Remarks & Keynote	**Tu-A** Optical Memory II	**We-A** **[Special Session]** Frontiers in Computational Imaging: Beyond Conventional Optics	9:00
		Short Break			
10:00		**Mo-B** Display	Break		10:00
		Break		Break	
11:00		**Mo-C** Imaging for Measurement and Analysis	**Tu-B** Digital Holography II	**We-B** Materials, Components, and Devices	11:00
12:00			ISOM'26 Announcement & Photo		12:00
13:00		Lunch	Lunch	Lunch	13:00
14:00		**Mo-D** Digital Holography I	**Tu-C** Special Invited	**We-C** LiDAR	14:00
			Short Break	Short Break	
15:00		Break	**Tu-D** Optical Structures for Imaging and Sensing	**We-PD** Post Deadline	15:00
				Short Break	
				Awards & Closing	
16:00		**Mo-E** Optical Memory I	Break		16:00
		Short Break	**Tu-E** Poster Session		
17:00		**Mo-F** Information Processing and Microfabrication			17:00
18:00	Get Together (17:00 ~ 19:00)		Break		18:00
19:00			Banquet (18:15 ~ 20:15)		19:00
20:00					20:00

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Oct. 19, 2025 (Sunday)

Oct. 20, 2025 (Monday)

Mo-A: Opening Remarks & Keynote

Presider: Takayuki Shima (AIST, Japan)

9:30 - 9:35 **Short Break**

Mo-B: Display

Presider: Yuichi Nakamura (Toyohashi University of Technology, Japan)

10:20 - 10:40 **Break**

Mo-C: Imaging for Measurement and Analysis

Presiders: Ryushi Fujimura (Utsunomiya University, Japan)
Shuhei Yoshida (Kindai University, Japan)

Mo-D: Digital Holography I

Presiders: Tetsuhiko Muroi (NHK, Japan)
Hiroshi Ohno (Toshiba Corporation, Japan)

Mo-E: Optical Memory I

Presiders: Satoru Higashino (Sony Storage Media Solutions, Japan)
Daisuke Barada (Utsunomiya University, Japan)

Mo-F: Information Processing and Microfabrication

Presider: Koichi Iiyama (Kanazawa University, Japan)

Oct. 21, 2025 (Tuesday)

Tu-A: Optical Memory II

Presider: Kimihiro Saito (Kindai University Technical College, Japan)

9:55 - 10:15 Break

Tu-B: Digital Holography II

Presiders: Shuhei Yoshida (Kindai University, Japan)
Daisuke Barada (Utsunomiya University, Japan)

Tu-C: Special Invited

Presider: Takayuki Shima (AIST, Japan)

Tu-D: Optical Structures for Imaging and Sensing

Presider: No-Cheol Park (Yonsei University, Korea)

Tu-E: Poster Session

Presiders: Koichi Iiyama (Kanazawa University, Japan)
Tetsuhiko Muroi (NHK, Japan)
Takayuki Shima (AIST, Japan)

15:45 - 17:45

Core time for the odd Tu-E and Tu-PP numbers: 15:45 - 16:45

Core time for the even Tu-E and Tu-PP numbers: 16:45 - 17:45

17:45 - 18:15 Break

18:15 - 20:15 Banquet

Oct. 22, 2025 (Wednesday)

We-A: [Special Session] Frontiers in Computational Imaging: Beyond Conventional Optics

Presiders: Takanori Nomura (Wakayama University, Japan)
Ryota Kawamata (Hitachi, Ltd., Japan)

10:35 - 10:55 Break

We-B: Materials, Components, and Devices

Presider: Tadayuki Imai (Kyoto University of Advanced Science, Japan)

Utsunomiya Univ. (Japan)

12:00 - 13:45 Lunch

Tu-C: LiDAR

Presider: Satoru Higashino (Sony Storage Media Solutions, Japan)

We-C-01 Invited

13:45 Digital Coherent LiDAR and Its Application to Tidal Level Observation.....175

Jun'ichi Abe, Tatsuya Fujimoto, Hidemi Noguchi, Yuta Koda, Toshiyuki Nomura
NEC Corporation (Japan)

We-C-02 Invited

14:10 Vertical profile measurement of atmospheric aerosol concentration by lidar.....177

Yoshitaka Jin
National Institute for Environmental Studies (Japan)

14:35 - 14:40 Short Break

We-PD: Post Deadline

Presider: Yuichi Nakamura (Toyohashi University of Technology, Japan)

We-PD-01

14:40 Improvement of Image Quality Based on Compensation Method Using Temporal Intensity Accumulation for Point-Cloud Model in Phase-Only Holographic Display 179

Masaya Hayashi, Yusuke Saita, and Takanori Nomura

Wakayama University (Japan)

We-PD-02

14:55 Enhanced Light-Matter Interaction via High-Q Trapped SPPs 181

Yao Liang[1], Yuri Kivshar[2] and Din Ping Tsai[1]

[1]City University of Hong Kong (China), [2]Australian National University (Australia)

15:10 - 15:15 Short Break

15:15 - 15:30 Awards & Closing