



# ASME ISPS-2019 Call for Papers

Conference Website: <https://www.asme.org/events/isps/>

The 28<sup>th</sup> ASME Annual Conference on Information Storage and Processing Systems (ISPS2019) is now soliciting technical presentations for the conference to be held in University of California at San Diego, California, USA, from **June 27 to June 28, 2019**.

The scope of the conference covers the following interdisciplinary research and application topics related to information storage and processing systems, and the application of data in mechanical engineering

- **Tribology, Dynamics and Servo control of Nano-Micro systems:** Head-Media interface, magnetic head technology, servo and other topics in conventional perpendicular magnetic recording, and mechanical science and technology in the micro/nano scale systems
- **Packaging Technologies for Solid-State Flash Storage and Memory:** Thermal management, Warpage, crack, delamination, and fatigue, Package, drive, and system level reliability (including temperature cycling, shock, and vibration) testing/modeling, Automotive reliability requirements
- **Heat Assisted Magnetic Recording & Microwave Assisted Magnetic Recording:** Systems, head, media, head disk interface, and other technical issues for HAMR/MAMR
- **Data Storage Solution and System for Data Center Operation and Optimization:** Thermal management for server, vibration control, etc.
- **Emerging and future data Storage Technologies:** Next generation data storage solutions based on magnetic/optical/solid-state memory, including phase change, MRAM, ReRAM, quantum storage, DNA storage
- **Dynamics and Control for Future Technologies:** Dynamics and control for highlighted engineering fields including robot, unmanned aerial vehicle, unmanned ground vehicle, and next-generation transportation
- **Smart Materials:** Materials science and engineering for information storages, displays, energy-recycle, and nano/micro devices, materials characteristic control and smart material applied system
- **Smart Sensors and Actuators:** Various sensors and actuators for promising engineering fields such as haptics, IOT application, biological application, motion based detection & actuation, and autonomous vehicle solutions
- **Micro/Nano & Biomedical Mechatronic Systems:** Science and technologies on micro/nano mechatronic systems and MEMS/NEMS/MOEMS for biomedical application
- **Optical Imaging Devices and Opto-mechatronic Systems:** Optical imaging systems and sensing devices detecting optical information, and opto-mechatronic systems based on imaging and sensing devices.
- **Flexible Media Handling Machines and Printed electronics, Exposing and Printing Technologies:** Copy machines, printers, scanners, office automation equipment, flexible media dynamics and control
- **Advanced Simulation in Science and Engineering:** Advanced computational simulations in engineering fields of mechanics, electro-mechanics, and electronics and simulation methods and optimization methods
- **Application of Data and Artificial Intelligence in Mechanical Engineering:** Using big data and AI for solving problems in the mechanical domain: such as product failure analysis, smart manufacturing, etc.

ISPS Conference Chair:  
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# Conference Features

## ISPS2019 offers the following features:

- One Best Paper Award for each technical track.
- One Best Student Paper Award.
- Three ISPS Division Graduate Student Fellowships in the form of USD 2000 or 1000 each and registration fee waiver.
- Five Conference Scholarships for graduate students in the form of registration fee waiver.
- Discounted registration fees for ASME members and students.
- Special issue in the Microsystem Technologies Journal of the full size papers presented at the conference.
- Conference supported by ASME centralized web hosting and paper submission handling process.
- GoGreen initiative to use online access of conference materials (on-site WiFi access provided).

## Important Dates

- **Abstract Submission: ~~Feb. 24, 2019~~ Mar. 26, 2019**  
**(Abstracts of 350-600 words required for technical publication and 1-page abstract as PDF required for technical presentations only.)**
- **One page and 3 page paper submission: ~~Mar. 9, 2019~~ Mar. 26, 2019**  
**(A 3-page paper is required for a technical publication in ASME conference proceedings. It is not required for technical presentations)**
- **Paper Acceptance/Rejection/Request Revision: April 7, 2019**
- **Copyright Process Opens: April 8, 2019**
- **Revised Final 1-page/3-page paper Submission: May 7, 2019**  
**(No revised final papers accepted after this date)**
- **Copyright Completion: May 19, 2019**
- **Fellowship and scholarship application deadline: May 20, 2019**
- **Pre-Registration Deadline: May 27, 2019**
- **ISPS 2019 at University of California at San Diego: June 27-28, 2019**
- **Full paper submission due for publication in Microsystems Technologies: Oct. 31, 2019**
- **Peer-review of full papers completed: Jan. 31, 2020**
- **Authors responses and revisions due for submission: Feb. 29, 2020**
- **Publication of special edition of Springer Journal of Microsystems Technologies: Nov. 1, 2020**

**Final Paper Submission –May 7, 2019.** A 3-page paper is to be submitted to facilitate technical review for the best track assignment and quality control in our conference proceeding. For technical presentation, only a 1 page abstract is required. The 3-page paper template and 1-page template will be posted in the conference website at: <https://www.asme.org/events/isps/>.

After the conference, accepted 3-page papers will be published in ASME conference proceedings. **Microsystem Technologies Journal will have a special issue for full ISPS'19 papers.**

## Technical Tracks and Organizers

Tribology, Dynamics and Servo control of Nano-Micro systems	Prof. F. E. Talke (UCSD, USA) Dr. Junguo Xu (HGST, Japan) Dr. Andrey Ovcharenko (WD, USA) Prof. Jia-Yang Juang (NTU, Taiwan)
Emerging and future data Storage Technologies	Prof. Kenji Fukuzawa (Nagoya Univ., Japan) Prof. Wan-Chin Kim (Hanbat National Univ., Korea) Dr. Yuan Ma (Texas A&M)
Heat Assisted Magnetic Recording & Microwave Assisted Magnetic Recording	Dr. Youfeng Zhang (WD, USA) Dr. Abhishek Srivastava (WD, USA)
Packaging for solid-state flash storage, memory and high-power electronics in data center application	Prof. Ephraim Suhir (Portland State Univ., USA) Dr. Ning Ye (WD, USA) Dr. John Burke (WD, USA)
Data Storage Solution and System for data center operation and optimization	Dr. Shaomin Xiong (Western Digital, USA)
Dynamics and Control for Future Technologies	Dr. Guoxiao Guo (WD, USA) Dr. Eng Hong Ong (SUTD, Singapore) Prof. Gunhee Jang (Hangyang Univ., Korea) Prof. Ja Choon Koo (Sungkyunkwan Univ., Korea)
Smart Materials	Prof. Kyoung-Su Park (Gachon Univ., Korea) Prof. Shintaro Itoh (Nagoya Univ., Japan)
Smart Sensors and Actuators	Prof. Shinji Koganezawa (Kansai Univ., Japan) Prof. Kwangseok Oh (Hankyung National Univ., Korea)
Micro/Nano & Biomedical Mechatronic Systems	Prof. Tien-Kan Chung (NCTU, Taiwan) Prof. Hiroshige Matsuoka (Tottori Univ., Japan) Prof. Norio Tagawa (Kansai Univ. Japan) Prof. Jia-Ying Tu (NTHU, Taiwan)
Optical Imaging Devices and Opto-mechatronic Systems	Prof. No-Cheol Park (Yonsei Univ., Korea) Dr. Jiro Hashizume (Hitachi, Japan) Prof. Paul C.-P. Chao (NCTU, Taiwan)
Flexible Media Handling Machines and Printed electronics, Exposing and Printing Technologies	Dr. J. McAllister (HP, USA) Prof. Yuta Sunami (Tokai Univ. Japan) Prof. James Chang (NTHU, Taiwan)
Advanced Simulation in Science and Engineering	Prof. Kyoung-Su Park (Gachon Univ., Korea) Prof. Sangwook Lee (Honam Univ., Korea)
Application of data and artificial intelligence in mechanical engineering	Dr. Haoyu Wu (WD, USA) Prof. Minghui Zheng (University at Buffalo, USA)

## ASME ISPS Executive Committee 2019

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