



ASME ISPS-2020 Call for Papers

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

The 29th ASME Annual Conference on Information Storage and Processing Systems (ISPS2020) is now soliciting technical presentations for the conference to be held in [Western Digital Campus in Milpitas, Santa Clara, California, USA](#), from **June 25 to June 26, 2020**.

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 Tribology, magnetic head technology, servo and other topics magnetic recording, and mechanical science and technology in the micro/nano scale system
- **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
- **Fundamentals of Energy Assisted Magnetic Recording:** Materials, physics, mechanical design and simulations 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 MOEMS and mechatronic systems 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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ISPS Program Chair:
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ISPS Conference Co-Chair:
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ISPS Program Co-Chair:
Dr. M. D. Murthy Peri
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Conference Features

ISPS 2020 offers the following features:

- One Best Paper Award for each technical track.
- One Best Student Paper Award.
- ISPS Division Graduate Student Fellowships in the form of USD 1000 ~ 2000 each including registration fee waiver. (In ISPS 2019, 5 fellowships are awarded. All students applying to this fellowship should submit 3-page paper for technical publication in conference proceeding)
- Conference Scholarships for graduate students in the form of registration fee waiver. (In ISPS 2019, 7 scholarships are awarded. All students applying to this scholarship should submit 3-page paper for technical publication in conference proceeding)
- Discounted registration fees for ASME members and students.
- Special issue in the Microsystem Technologies, a journal SCI indexed, for peer-reviewed full length 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).

Fellowship & Scholarship Award Application

Support materials: ISPS final paper, resume, one reference letter and one page research statement. Please send your application materials to Dr. Rahul Rai. **Deadline: May 16, 2020.**

Important Dates

- **Abstract Submission: Jan. 12, 2020**
- **One page and 3 page paper submission: Feb. 16, 2020**
(For submissions with "**Technical Publication**", a 3-page paper is required for a technical publication in ASME conference proceedings.
For submissions with "**Technical Presentation Only**", a 1-page paper as PDF is required.)
- **Paper Acceptance/Rejection/Request Revision: Mar. 15, 2020**
- **Copyright Process Opens: Mar. 16, 2020**
- **Revised Final 1-page/3-page paper Submission: April 26, 2020**
(No revised final papers accepted after this date)
- **Copyright Completion: April 26, 2020**
- **Fellowship and scholarship application deadline: May 16, 2020**
- **Pre-Registration Deadline: May 24, 2020**
- **ISPS 2020 at Western Digital Campus in Milpitas: June 25-26, 2020**
- **Full paper submission due for publication in Microsystems Technologies: Oct. 31, 2020**
- **Peer-review of full papers completed: Jan. 31, 2021**
- **Authors responses and revisions due for submission: Feb. 29, 2021**
- **Publication of special edition of Springer Journal of Microsystems Technologies: Nov. 1, 2021**

Final Paper Submission –Apr. 26, 2020. 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'20 papers.**

Technical Tracks and Organizers

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

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