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 Program Co-Chair:
Dr. M. D. Murthy Peri
Seagate Technologies, USA
Email: murthy.peri@seagate.com
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 all 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/](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.*
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<th>Technical Tracks and Organizers</th>
<th>Organizers</th>
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| Tribology, Dynamics and Servo control of Nano-Micro systems        | Prof. F. E. Talke (UCSD, USA)  
                       | Prof. Jia-Yang Juang (NTU, Taiwan)  
                       | Dr. Junguo Xu (Western Digital, USA) |
| 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 University) |
| Fundamentals of Energy Assisted Magnetic Recording                  | Dr. Haoyuan Mu (Western Digital, USA)  
                       | Dr. Abhishek Srivastava (Western Digital, USA) |
| Packaging Technologies for Solid-State Flash Storage and Memory     | Prof. Ephraim Suhir (Portland State Univ., USA)  
                       | Dr. Ning Ye (Western Digital, USA)  
                       | Dr. John Burke (Western Digital, USA) |
| Data Storage Solution and System for data center operation and     | Dr. Shaomin Xiong (Western Digital, USA) |
| optimization                                                        |                                                                                                    |
| Dynamics and Control for Future Technologies                        | Dr. Guoxiao Guo (Western Digital USA)  
                       | Dr. Eng Hong Ong (SUTD, Singapore)  
                       | Prof. Gunhee Jang (Hanyang 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) |
| 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  | Dr. J. McAllister (HP, USA)  
                       | and Printing Technologies                                                                   | 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      | Dr. Haoyu Wu (Western Digital, USA)  
                       | engineering                                                                        | Prof. Minghui Zheng (University at Buffalo, USA)  
                       | Dr. Andrey Ovcharenko (Western Digital, USA)  
                       | Prof. James Chang (NTHU, Taiwan) |
## ASME ISPS Executive Committee 2020

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<tr>
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| 2020 Conference Chair           | Prof. Wan-Chin Kim               | Email: wckim97@hanbat.ac.kr     |
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| Immediate Past Chair (2018-2019) | Dr. Andrey Ovcharenko            | Email: Andrey.Ovcharenko@wdc.com |
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