IRDS Spring Conference & INC, 2020

International Roadmap for Devices and Systems (IRDS)
Workshop and Spring Conference 2020
jointly held with
International Nanodevices and Computing Conference (INC) 2020

April 20, IRDS Workshop 2020 (closed event only for roadmap members)
April 21, IRDS Spring Conference 2020 (public symposium)
April 22, INC 2020 (public symposium)

Venue   Baba Memorial Hall, Hitachi Central Research Laboratory
               Higashi-Koigakubo 1-280, Kokubunji-shi, Tokyo 185-8601, JAPAN
               https://www.semiconportal.com/INC2020/venue.html

Registration Fee*   JPY 20,000
Registration Fee (Student)* JPY 5,000

  *All Registration fee includes: Access to IRDS Conference and INC and IRDS Banquet.
  *Additional Banquet Ticket: JPY 5,000 per ticket.
  *April 20, IRDS Workshop 2020 is free (closed event only for roadmap members)
  *The registration deadline is April 13.
   After April 14, please contact IRDS&INC2020 Secretariat,

Website   https://www.semiconportal.com/INC2020/

Contact   IRDS&INC2020 Secretariat
               irds_inc_2020@semiconportal.com

Sponsors

In IRDS Spring Conference, the latest roadmap to be released in 2020 will be presented. In addition, state-of the-art experimental results on these topics will be presented by an international group of invited experts, covering Computer Architecture and Communication Systems, Nanodevices and Materials in the fields of More Moore, More than Moore and Beyond CMOS.

The IEEE International Nanodevices and Computing (INC) conference covers the continuously evolving technology ecosystem based on nanotechnology, nanodevices and computing, supporting the global information technologies infrastructure. The INC conference includes predictions on devices for computing and communications, computer architecture, and applications. The latest results in the field of Neuromorphic Computing, Quantum Computing, Quantum Sensing and Probabilistic Computing will be highlighted. A unique summary from the reports of the upcoming More-than-Moore and Emerging Materials Integration roadmaps will be presented, as well as Brain-inspired Computation and Event-Driven Technology. Related subjects and requirements from Europe, United States, Japan and all over the world will be presented and discussed.

April 20

Closed Workshop
(IRDS* member only)

Reception desk will open at 8:00 am.

*International Roadmap for Devices and Systems

To access IRDS documents
https://irds.ieee.org/

April 21

IRDS Spring Conference 2020

Program (TBD)   Reception desk will open at 8:00 am.

Session 1		
9:00-	Regional Opening Greetings	Yoshihiro Hayashi Francis Balestra Tom Conte
9:15-	IRDS Introduction	Paolo Gargini
Session 2		
9:45-	More Moore	Mustafa Badaroglu
10:15-	Application Benchmarking	Tom Conte
10:45-	Systems and Architectures	Kirk Bresniker
11:15-	Break	
Session 3		
11:15-	Outside System Connectivity	Mike Garner
11:45-	Cryogenic Electronics/ Quantum Information	Scott Holmes
12:30-	Lunch Break	
Session 4		
13:30-	More Than Moore	Francis Balestra
14:00-	Beyond CMOS	Shamik Das
14:30-	Factory Integration	Supika Mashiro
15:00-	Break	
Session 5		
15:15-	Lithography	Harry Levinson
15:45-	Yield	Slava Libman
16:15-	Metrology	Gorge Oriji
16:45-	Break	
Session 6		
17:00-	Panel Discussion	
17:30-	Meeting Adjourn	
18:30-20:00	Joint Banquet	

April 22

International Nanodevices and Computing conference (INC) 2020

Program (TBD)   Reception desk will open at 8:00 am.

Time			
9:00-	Opening	Yoshi Hayashi,	IRDS/SDRJ/Keio-Univ.
	Greeting 1	Nobuaki Arima	Ministry of Economy, Trade & Industry
	Greeting 2	Paolo Gargini	IRDS
	Greeting 3	Francis Balestra	IMEP and SiNano
9:15-	Keynote 1	"Quantum Sensing" Mutsuko Hatano	Tokyo Tech
10:00-	Keynote 2	from US (TBD)	
10:45-	Keynote 3	"Brain-inspired computation and event-driven technology" Shih-Chii Liu	ETH, Zürich
11:30-	Lunch		
13:00-	Presentation from Japan 1 (TBD)		
13:30-	Presentation from US 1 (TBD)		
14:00-	Invited	"Quantum computing" Silvano de Franceschi	CEA
14:30-	Break		
15:00-	Invited	"MEMS Vibrational Energy Harvesters towards Perpetual Electronics" Hiroshi Toshiyoshi	The University of Tokyo
15:30-	Presentation from US 2 (TBD)		
16:00-	Presentation from EU 2 (TBD)		
16:30-	Closing remarks	INC 2020 Technical Program Committee Chair Hitoshi Wakabayashi	Tokyo Tech