

The 28th Symposium on Phase Change Oriented Science

PCOS 2016

PCOS web site <http://www.jpcos.jp/>

November 24 (Thu)- 25 (Fri), 2016

KKR Hotel Atami

Address : 4396-1, Kasuga-cho, Atami-shi

Shizuoka-ken, 413-0005, Japan

Tel : +81-557-85-2000

Website: <http://www.kkr-atami.gr.jp>

Managed and sponsored by The Society of Phase Change Oriented Science

Cosponsored by

The Japan Society of Applied Physics, The Ceramic Society of Japan, Japan Society of Thermophysical Properties

Scope and the history of this Symposium

The Symposium on Phase Change Oriented Science (Predecessor: The Symposium on Phase Change Optical Information Storage), will greet the 28th meeting this year. This Symposium provides you an opportunity to collectively discuss the advance of Phase change recording technology for each year regarding the crystallization mechanism, recording material, structure, device and application about recording in the phase change method, etc. Wide phase change phenomena including the phase change non-volatile memory (Ovonic memory and PRAM), which is the beginning of the phase change research, is also put in view.

The symposium will be held as a forum to discuss basic and applied phase change technology and science. We would like to brighten up this symposium with active discussion and the exhibition of phase change materials related devices to provide a good venue for exchanging information.

Topics to be Considered

This symposium provides a forum for the scientific and technical community to exchange information on phase change phenomena, the status of phase change recording (i.e. Optical memory, Ovonic memory or PRAM) device, system and applications. Discussion will cover a broad range of topics from basic theory to manufacturing issues.

Basic Theory

- Phase change phenomena
- Analysis of crystallization and amorphization
- Structure analysis

Media

- Rewritable and write once (WO)
- Characterization, recording, readout mechanisms
- Data stability and interchangeability

High-Density Recording and Future Technologies

- Super-resolution
- Photon mode recording

Multi layer recording
Non-Volatile Memory device
Structure
Phase-change Material
New applications
Devices by using Phase-change technology

Schedule of Events (tentative)

Thursday 24 November 2016

12:00-	Registration
13:00-14:50	Opening/Session 1
14:30-14:50	Break time
15:10-17:50	Session 2,3 (including poster session)
19:00-	Reception

Friday 25 November 2016

8:30-11:50	Session 4
11:50-13:20	Lunch
13:20-17:25	Session 5, 6
	Award and closing

Advisory Committee

Kunimaro Tanaka, Teikyo Heisei University
Takahiro Kubo, Kubo Technical office
Kazunori Ito, Ricoh Company Ltd.
Toshihiro Sugaya, The University of Electro-Communications
Ryuuji Sato, Japan Broadcasting Corp.(NHK)
Takeo Ohta, Ovonic Phase Change Institute
Isao Satoh, i&H Consulting Company

Technical Program Committee

Noboru Yamada, Kyoto Univ., General Chair
Toshimichi Shintani, Hitachi LG Data Storage Co., Chair
Keiichiro Yusu, New Energy and Industrial Technology Development Organization
Masashi Kuwahara, National Institute of Advanced Industrial Science and Technology
Hajime Yuzurihara, Ricoh Company Ltd.
Rie Endo, Tokyo Institute of Technology
Toshiharu Saiki, Keio Univ.
Yuji Sutou, Tohoku Univ.
Takashi Yagi, National Institute of Advanced Industrial Science and Technology
Yuta Saito, National Institute of Advanced Industrial Science and Technology

Symposium Secretary

1) Application of attendance and Accommodation

Masashi Kuwahara
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National Institute of Advanced Industrial Science and Technology
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2) Editing of digest and proceeding

Yuta Saito (PCOS2016 Editor)
Nanoelectronics Research Institute
National Institute of Advanced Industrial Science and Technology
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E-mail: yuta-saito@aist.go.jp (e-mail submission is preferable)

Preparation of Abstract

Each author is requested to submit one page abstract of the A4-size with at least one table or figure (Template can be downloaded from PCOS website). All of contributed papers covering original unpublished work within the scope of the symposium will be accepted for presentation. The scheduling for presentation will be determined by above sheets when the program committee meets to review them in the end of September. Accepted abstract will be appeared on PCOS website.

Abstracts must be received by **31st August, 2016.**

Submission of Abstracts

Yuta Saito (PCOS2016 Editor)

Nanoelectronics Research Institute

National Institute of Advanced Industrial Science and Technology

Central 5, 1-1-1 Higashi, Tsukuba-shi, Ibaraki 305-8565, Japan

E-mail: yuta-saito@aist.go.jp (e-mail submission is preferable)

Submission of Paper

We would like to contact individually to presenters after acceptance of abstract.

Oral Presentation

The language should be **Japanese or English**. In general, presentation time is 25 minutes, including five minutes for discussion. Papers designated "Invited" are generally given 40 minutes presentation time, including 10 minutes for discussion.

Audio-Visual Aids

All presenters will be provided with a projector free of charge. If requiring other equipment, please notify the symposium secretary at least two weeks before the meeting. Presenters are also recommended to make presentation using their own personal computers. Please let PCOS editor know, if you cannot prepare the PC.

Poster Presentation

All poster presenters must display your poster as soon as you arrive. You will find your reserved place by referring to the first author name on your abstract. Authors are asked to stand by their posters during the sessions allocated for this purpose, so that they can answer questions. We propose the A0 format for your poster (84 cm × 119 cm, portrait format).

PCOS Award

PCOS Award has been established since 2002.

Registration Fees

Type		Fee
A	Regular	¥45,000
	Student	¥32,000
B	Regular	¥35,000
	Student	¥22,000
C	Regular	¥20,000
	Student	¥10,000

Type A: One copy of Technical Digest, 2 nights.

Type B: One copy of Technical Digest, 1 night.
Type C: One copy of Technical Digest

Note : Please use the attached registration form.

Please pay registration fees by cash in Japanese Yen at the registration desk during PCOS2016. Please note that credit card is not available.

Deadline for registration : 31st October, 2016

Travel Information

From main airports to Hamamatsu station: (Please see access map)

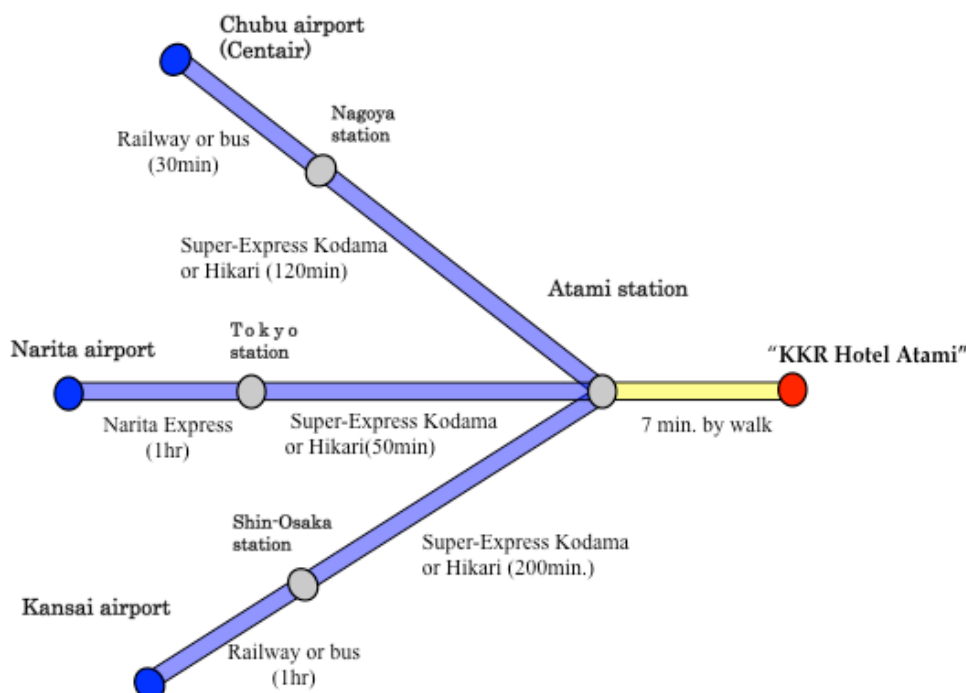
From Narita Airport to Tokyo Station, Narita Express (JR Line) and airport limousine bus are available (1 hour). From Tokyo Station to Atami Station, please take the Tokaido Shinkansen ("Super-Express Kodama": ~50 min and "Super-Express Hikari": ~40 min, Please do not take "Nozomi".)

From Chubu airport to Nagoya Station, JR Line and airport limousine bus are available (30 min.). From Nagoya Station to Atami Station, please take the Tokaido Shinkansen ("Super-Express Kodama": ~120 min and "Super-express Hikari": ~90 min, please be careful for every Hikari not stopping at Atami station. Please do not take Nozomi.)".

From Kansai airport to Shin-Osaka Station, JR Line and airport limousine bus are available (1 hour). From Shin-Osaka Station to Atami Station, please take the Tokaido Shinkansen ("Super-Express Kodama": ~ 200 min and "Super-Express Hikari": ~140 min, please be careful for every Hikari not stopping at Atami station. Please do not take Nozomi.)".

From Atami station to Atami New Fujiya hotel:

About a 7-minute walk from JR Atami station to the hotel.



Access map from main airports to KKR hotel Atami

FAX: +81-29-861-2939 E-mail: kuwaco-kuwahara@aist.go.jp

Masashi Kuwahara

Electronics and Photonics Research Institute

National Institute of Advanced Industrial Science and Technology

**Registration Form for
28th Symposium on Phase Change Oriented Science
PCOS 2016**

Last Name: _____ 1st Name: _____ E-mail: _____ Type: _____

Last Name: _____ 1st Name: _____ E-mail: _____ Type: _____

Last Name: _____ 1st Name: _____ E-mail: _____ Type: _____

Last Name: _____ 1st Name: _____ E-mail: _____ Type: _____

Organization: _____

TEL/FAX: _____

Address: _____ Country: _____

Registration Fees

Type		Fee
A	Regular	¥45,000
	Student	¥32,000
B	Regular	¥35,000
	Student	¥22,000
C	Regular	¥20,000
	Student	¥10,000

Type A: One copy of Technical Digest, 2 nights

Type B: One copy of Technical Digest, 1 night

Type C: One copy of Technical Digest

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