

The 12<sup>th</sup> International Conference on Accelerator  
and Large Experimental Physics Control Systems

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# Opening Address

Ryotaro TANAKA

ICALEPCS 2009 Chairman  
JASRI/SPring-8

ICALEPCS 2009, Kobe, Japan  
October 12, 2009

# Welcome – ようこそ神戸へ

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歓迎

benvenuto

bienvenida



환영

欢迎

bienvenue

willkommen

Добро пожаловать

# Kobe welcomes you

Bridge to Port Island

Venue

Kobe airport



A view of Port Island and Kobe airport from Rokko Mt.

Population of Kobe is 1.53M



# ICALEPCS Conference Series

1987	Villars sur Ollon	Switzerland	CERN
1989	Vancouver	Canada	TRIUMF
1991	Tsukuba	Japan	KEK
1993	Berlin	Germany	HMI
1995	Chicago	USA	Fermilab, ANL
1997	Beijing	China	IHEP
1999	Trieste	Italy	ELETTRA
2001	San Jose	USA	SLAC
2003	Gyeongju	Korea	PAL, POSTEC, KSTAR
2005	Geneva	Switzerland	CERN, CPPR
2007	Knoxville	USA	ORNL/SNS, Jlab
2009	Kobe	Japan	RIKEN/SPring-8, JASRI/SPring-8

We are here 



We mark a new  
footprint to  
the conference series

# Conference Host Institutes : SPring-8

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ICALEPCS 2009 is hosted jointly by JASRI and RIKEN

JASRI : Japan Synchrotron Radiation Research Institute



RIKEN : RIKEN Harima Institute



# Endorsement– Technical sponsorship

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## Endorsement from Physics societies and government.

- **EPS/EPCS**: European Physical Society



- **PASJ**: Particle Accelerator Society of Japan



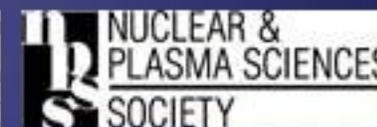
- **JPS**: The Physical Society of Japan



- **AAPPS**: Association of Asia Pacific Physical Societies



- **IEEE-NPSS**: Nuclear and Plasma Sciences Society



- Hyogo Prefectural Government



# Industrial Sponsorship

ICALEPCS 2009 is supported by 31 companies from all over the world.

Hitachi Zosen Corporation, National Instruments Japan Corporation, Hewlett-Packard Company, Rittal, K.K.Yokogawa Electric Corporation, ADVANET Inc., ARKUS Inc., Cosylab, D-TACQ Solutions Ltd., Instrumentation Technologies, d. d., Melec Inc., Mitsubishi Electric TOKKI Systems Corp., NEC Corporation, Aerotech KK, AIDEN Co., Ltd., Delta Tau Data Systems, GE Fanuc Intelligent Platforms Embedded Systems, Hytec Electronics Ltd., LHS. Incorporated, MISH INTERNATIONAL Co.,Ltd., Mitsubishi Electric Corporation, Mitsui Zosen Systems Research Inc., MTT Corporation., Orient Microwave Corporation, SANRITZ Automation Co., Ltd., Sumitomo Densetsu Co., Ltd., TechMatrix Corporation, ZTEC Instruments, Meru Networks Inc., NISSHO ELECTRONICS CORPORATION, TSUJI ELECTRONICS CO.,LTD.



# International Scientific Advisory Committee

ICALEPCS Charter was approved in November 13, 2008.

ICALEPCS organization is ruled by the document.

ICALEPCS formed new ISAC composition for 2009 Kobe Conference.

## ISAC – driving force of ICALEPCS

40 active control system specialists appointed from different experimental physics facilities around the world, representing to the extent possible a wide range of relevant disciplines (hardware, software, project management, etc.), experimental areas (accelerators, telescopes, fusion, detectors, etc.), major laboratories and geographic areas.

## Newly appointed ISAC members:

In Soo Ko (Chair), POSTECH, Korea

Paul Van Arsdall, LLNL/NIF, USA

Matthew Bickley, Jlab, USA

Giampiero DiPirro, INFN-LNF, Italy

Jean-François Gournay, CEA, France

Kuotung Hsu, NSRRC, Taiwan

Kenichi Kurihara, JAEA, Japan

Ge Lei, IHEP, China

Dekang LIU, SSRF, China

Mike M. Mouat, TRIUMF, Canada

Niko Neufeld, CERN, Switzerland

James Rezende Piton, LNLS, Brazil

Volker Schmidt, Consorzio RFX, Italy

Sudo Shigeru, NIFS, Japan

Ryotaro Tanaka (Co-Chair), JASRI/SPring-8, Japan

Ralph Baer, GSI, Germany

Eric Björklund, LANSCE, USA

Philippe Gayet, CERN, Switzerland

Dave P. Gurd(ub), (ORNL/SNS), USA

Noriichi Kanaya, Univ. Ibaraki, Japan

Sharon Lackey, FNAL, USA

Shen Liren, SSRF, China

Marco Lonza, ELETTRA, Italy

Roland Müller, BESSY, Germany

Nguyen Nhi Dien, NRI, Vietnam

Gianni Raffi, ESO, Germany

Grigori Shirkov, JINR, Russia

Karen White, ORNL/SNS, USA

Giorgio Bassato, INFN-LNL, Italy

Matthias Clausen, DESY, Germany

Andy Goetz, ESRF, France

Larry Hoff, BNL, USA

Ivan Kohler, NAC-Tlabs, S.Africa

Eric Lecorche, GANIL, France

Jo Lister, EPFL-CRPP, Switzerland

John MacLean, ANL, USA

Gregor Neu, IPP, Germany

Sarbajit Pal, VECC, India

Wayne Salter, CERN, Switzerland

Hamid Shoaee, SLAC, USA

Noboru Yamamoto, KEK/J-PARC, Japan

(Legend: Asian region, European region, American region)

# Program Committee

## PC – Session Chair, making of scientific program

At least 50% of PC members should be ISAC members.

ISAC+PC makes a list of subjects areas to be emphasized at the Conference.

PC develops the detailed program in consultation with Session Chairs and ISAC.

## Newly appointed PC members:

Noboru Yamamoto (Chair), KEK/J-PARC, Japan

Vito Baggiolini, CERN, Switzerland

Matthias Clausen, DESY, Germany

Philip Duval, DESY, Germany

Andrew Gotz, ESRF, France

Kuotung Hsu, NSRRC, Taiwan

In Soo Ko, POSTECH, Korea

Ge Lei, IHEP, China

John MacLean, ANL, USA

Niko Neufeld, CERN, Switzerland

Sarbajit Pal, VECC, India

Hiroyuki Sako, JAEA, Japan

Luigi Scibile, ITER, France

Masaru Takao, JASRI/SPring-8, Japan

Akihiro Yamashita, JASRI/SPring-8, Japan

Kazuro Furukawa (Vice Chair), KEK, Japan

Matthew Bickley, Jlab, USA

Peter Clout, Vista (IEEE-NPSS), USA

Richard Farnsworth, ASP, Australia

Jean-François Goumay, CEA, France

Norihiko Kamikubota, KEK/J-PARC, Japan

Timo Korhonen, PSI, Switzerland

Dekang Liu, SINAP(SSRF), China

Mike Mouat, TRIUMF, Canada

Dennis Nicklaus, FNAL, USA

Tom Pelaia, ORNL, USA

Wayne Salter, CERN, Switzerland

Tom Shea, ORNL/SNS, USA

Ryotaro Tanaka, JASRI/SPring-8, Japan

Eric Björklund, LANSCE, USA

Donald Dohan, BNL, USA

Philippe Gayet, CERN, Switzerland

Larry Hoff, BNL, USA

Noriichi Kanaya, Univ. Ibaraki, Japan

Richard Kouzes, PNNL (IEEE-NPSS), USA

Marco Lonza, ELETTRA, Italy

Hideya Nakanishi, NIFS, Japan

Yuji Otake, RIKEN/SPring-8, Japan

Gianni Raffi, ESO, Germany

Claude Saunders, ANL, USA

Hamid Shoaei, SLAC, USA

Karen White, ORNL/SNS, USA

(Legend: Asian region, European region, American region)

# Scientific Program Tracks

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Twelve tracks are prepared for paper submission and presentations

1. Status Reports
2. Project Management and System Engineering
3. Control System Evolution
4. Safety/High Reliability and Major Challenges
5. Protection Systems
6. Hardware Technology
7. Reconfigurable Hardware
8. Industrial Systems in Controls
9. Software Technology Evolution
10. Web Technology
11. Process Tuning and Feedback Systems
12. Operational Tools

Papers can be well fit into the twelve scientific tracks, which cover wide area of control subjects.

Note: Several oral presentations were changed  
- Visit [ICALEPCS2009](http://ICALEPCS2009) website to get the latest program

# Conference Structure – Special Invited Talks

09:30-10:10 Oct. 12(Mon)  
**X-Ray Free Electron Laser in Japan**  
 Dr. Tetsuya Ishikawa  
 XFEL Project Leader  
 RIKEN/SPring-8

10:20-11:00 Oct. 16(Fri)  
**Integrated System Engineering for Sustainable Mobility**  
 Dr. Hideo Inoue/General Manager  
 Frontier & Advanced Engineering Planning Dept.  
 Toyota Motor Corp.

Time Table of Scientific Program and Conference Social Program

	10 Sat	11 Sun	12 Mon	13 Tue	14 Wed	15 Thu	16 Fri	17 Sat
8:00			Registration	Breakfast	Breakfast	Breakfast	Breakfast	
9:00			Opening	Operational Tools	Software Technology	Control System Evolution	Web Technology	
10:00			Special Invited	break	break	break	Software Technology	
11:00			Status Report	Data and Information Management	Reconfigurable Hardware	Process Tuning Feedback Systems	Special Invited	
12:00			Lunch Break	Industrial Seminar	Industrial Seminar	Industrial Seminar	Technical Summary	
13:00							Closing	
14:00			Project Management	Hardware Technology	Protection System	Operational Tools		
15:00			break / Photo Session	Industrial Seminar	Industrial Seminar	Industrial Seminar		
16:00			Control System Evolution	Poster Presentations and break	Poster Presentations and break	Poster Presentations and break		
17:00			Reports from Satellite WS	Status Report	Safety/High Reliability	Industrial Systems in Controls		
18:00					Fabric Management			
19:00					Japanese Sake tasting			
					Japan Night Program - Gagaku 18:40-19:20			
						Banquet Open 18:30-Dinner 19:30-22:00		

Vertical labels on the right side of the table:  
 - Conference Tour to Kyoto (17 Sat)  
 - Technical Tour to Spring8 (~19:30) (16 Fri)

# Conference Structure – Industrial Program Seminars

Lunchtime Oct. 13(Tue)  
**HP ProCurve Networking Data Center Strategy**  
 Amol Mitra  
 Marketing Director  
 ProCurve Networking Business Asia Pacific &  
 Japan  
 Hewlett-Packard Asia Pacific Pte Ltd

Lunchtime Oct. 14(Wed)  
**Leverage HW & SW Technologies to Meet  
 your Control System Needs**  
 Murali Ravindran  
 Sr. Product Marketing Manager  
 National Instruments Corp.

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8:00			Registration	Breakfast	Breakfast	Breakfast	Breakfast	
9:00			Opening	Operational Tools	Software Technology	Control System Evolution	Web Technology	
10:00			Special Invited	break	break	break	Software Technology	
11:00			break	Data and Information Management	Reconfigurable Hardware	Process Tuning and Feedback Systems	Special Invited	
12:00			Status Report	Hardware Technology	Industrial Seminar by NI	Lunch	Technical Summary	
13:00			Lunch Break	Lunch Break	Lunch Break	Lunch	Closing	
14:00			Project Management	Hardware Technology	Protection System	Operational Tools		
15:00			break / Photo Session	Poster Presentations and break	Poster Presentations and break	Poster Presentations and break		
16:00			Control System Evolution	Status Report	Safety/High Reliability	Industrial Systems in Controls		
17:00			Reports from Satellite WS	Fabric Management	Japanese Sake tasting			
18:00					Japan Night Program - Gagaku 18:40-19:20	Banquet Open 18:30-Dinner 19:30-22:00		
19:00								

Conference Tour to Kyoto

Technical Tour to Spring8  
 ~ 19:30

# Conference Structure – Exhibitor’s short presentations

Five min. short presentation on the latest products by special industrial exhibitors

- Oct 13, 12:05-12:10 Hitachi Zosen Corporation
- Oct 13, 15:00-15:05 Rittal K. K.
- Oct 13, 17:55-18:00 Cosylab
- Oct 14, 12:00-12:05 D-TACQ Solutions Ltd.
- Oct 14, 15:00-15:05 Melec Inc.
- Oct 15, 12:00-12:05 Instrumentation Technologies, d.d.
- Oct 15, 14:55-15:00 Yokogawa Electric Corporation

Please visit exhibitor’s boot at 3<sup>rd</sup> floor in KICC

Time Table of Scientific Program and Conference Social Program

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11:00			break	break	break	break	Special Invited	
12:00			Status Report	Data and Information Management	Reconfigurable Hardware	Process Tuning and Feedback Systems	Technical Summary	
13:00			Lunch Break	Lunch Break	Lunch Break	Lunch Break	Closing	
14:00			Project Management	Hardware Technology	Protection System	Operational Tools		
15:00			break / Photo Session	Poster Presentations and break	Poster Presentations and break	Poster Presentations and break		
16:00			Control System Evolution	Status Report	Safety/High Reliability	Industrial Systems in Controls		
17:00			Reports from Satellite WS	Industrial	Fabric Management			
18:00				Industrial	Japan Night Program - Gagaku 18:40-19:20			
19:00						Banquet Open 18:30-Dinner 19:30-22:00		

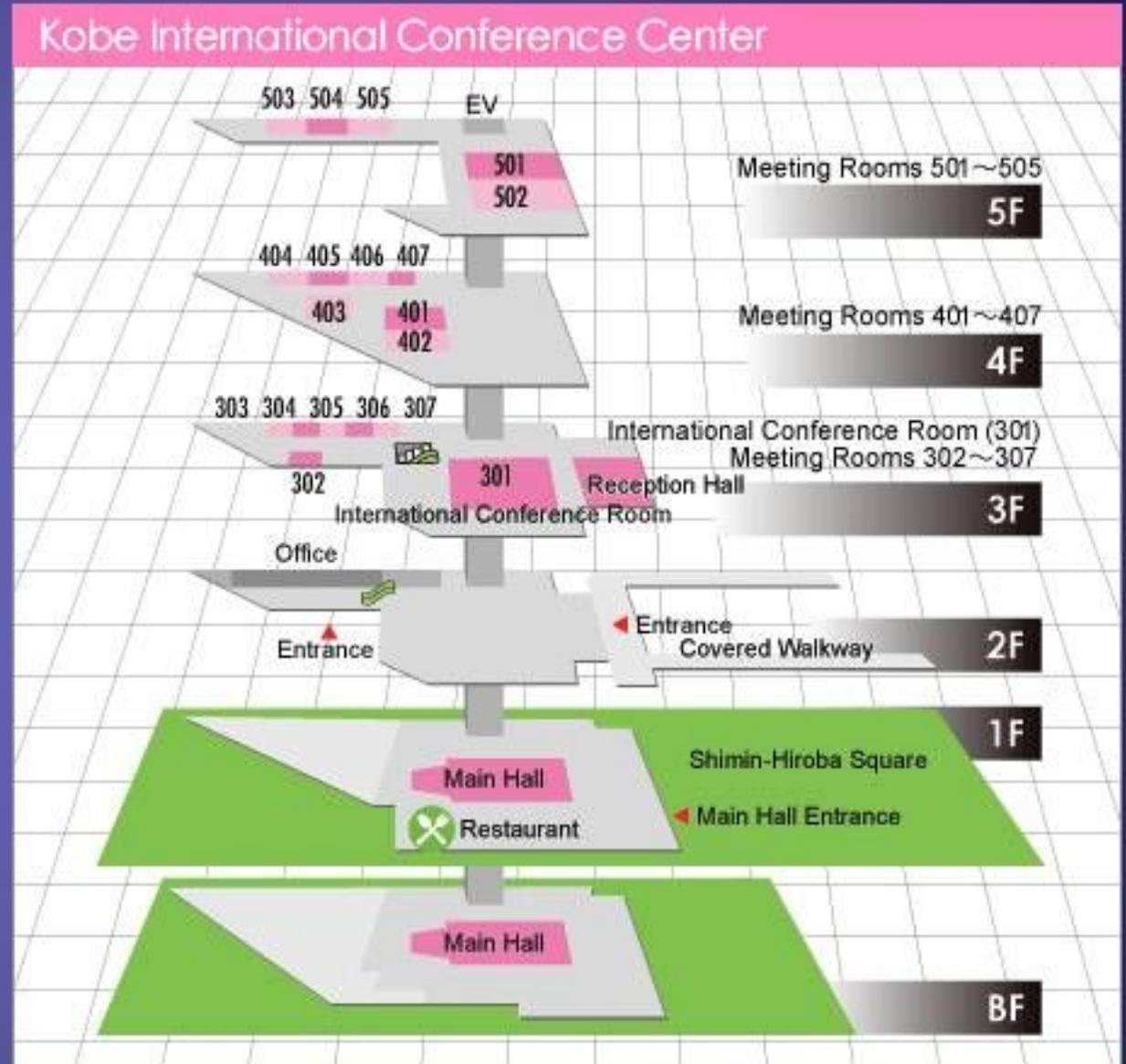
Vertical labels on the right side of the table:

- Conference Tour to Kyoto (11:00 - 15:00)
- Technical Tour to Spring8 ~19:30 (15:00 - 19:00)

Vertical labels on the left side of the table:

- Virtualization Technology Workshop (10:00 - 13:00)
- Micro Research Finland event system Workshop (13:00 - 16:00)

# Venue – KICC layout



Oral presentation take place at the Main hall

Poster presentation at 301

Registration desk at 3F

Paper office (JACoWteam) at 4F

Coffee and Industrial exhibition at 3F Reception Hall

# Social activities - Japanese traditional art

## Japan Night Program - Wednesday evening

Gagaku play at KICC main hall after oral session

Sake tasting during stage arrangement



# Banquet - Kacho-en

Thursday evening

Bird & flower park

Sitting dinner under many flowers

You can feed birds and enjoy flowers  
before banquet



+ Wadaiko Matumura-Gumi

# Technical tour - SPring-8 & XFEL facility

Friday afternoon (Course-A,B,C)

XFEL housing is ready, accelerator structures are aligned

National project  
XFEL is under  
construction  
(8GeV linac,  
Xray <0.1 nm)



SCSS(EUV FEL)  
is operating  
(250MeV linac,  
EUV~49nm)



SPring-8 facility and XFEL facility



( SASE= Self-Amplified Spontaneous Emission)

# Conference tour - Kyoto

## Saturday

### A full-day excursion to Kyoto

Depart on Saturday morning by bus, lunch will be served at Handycraft Center.

**Course-A tour:** Kinkaku temple, Nijo castle, Heian shrine, Kiyomizu temple.

**Course-B tour:** Tofuku temple, Koryu temple, Uzumasa. (Good for repeater)

Tour is free for participants and accompanied persons.



A:



B:



# Social activities for accompanying persons

- (1) Kobe city guidance, Monday morning 10/12
- (2) Kobe city half-day tour, Monday afternoon 10/12
- (3) Japanese cooking class & Flower arrangement, Tuesday morning 10/13
- (4) Full-day bus tour to Nara old town, Wednesday 10/14
- (5) Tea ceremony, Thursday morning 10/15

(2)



(5)



(4)



*Have fun*

# Local Organizing Committee

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1 Ryotaro Tanaka	Chairman
2 Tomohiro Matsusita	Web, Main hall
3 Yukito Furukawa	Poster presentation
4 Masahiko Koderu	Information systems
5 Takemasa Masuda	Social events
6 Toru Ohata	Industrial Liaison
7 Akihiro Yamashita	Abstract, Proceedings
8 Choji Saji	Abstract, Proceedings
9 Hiroaki Kimura	Secretariat (Head)
10 Shinji Kakiguchi	Secretariat (treasurer)
11 Keiko Irishio	Secretariat (general affair)
12 Kazumi Saeki	Secretariat (general affair)
+ many supporting staffs	

The Local Organizing Committee hopes  
everybody enjoys comfortable stay in Kobe.

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# We begin

All participants get together,  
and  
we, all, make ICALEPCS 2009  
a productive conference.

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Yes,  
We Can.

*Thank you very much*