

# A History and Activities of JACG

## —40 years—

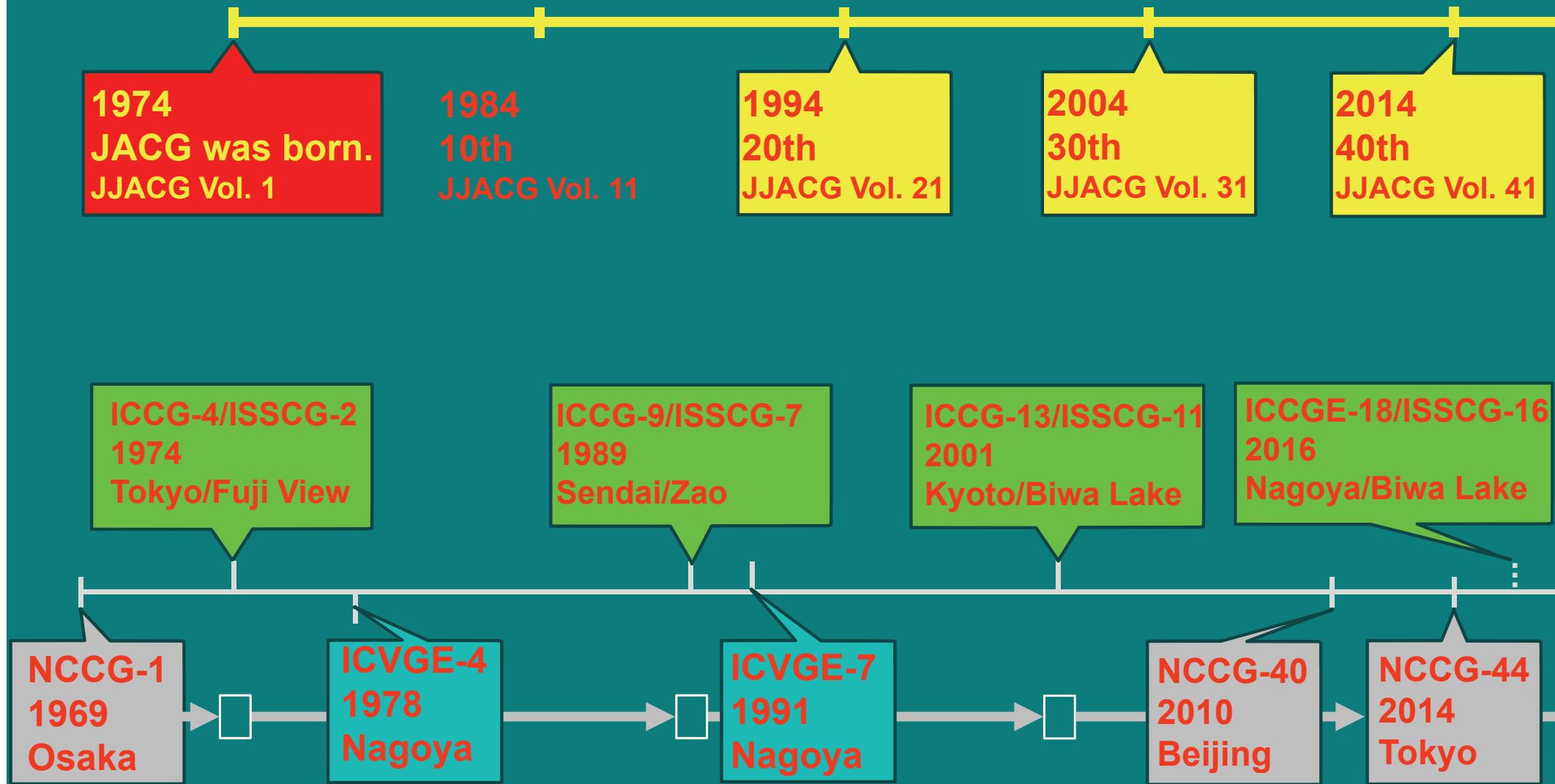
**Yoshikazu Takeda**  
**(JACG President: 2010-2012)**

**Aichi Synchrotron Radiation Center  
Graduate School of Engineering, Nagoya University**

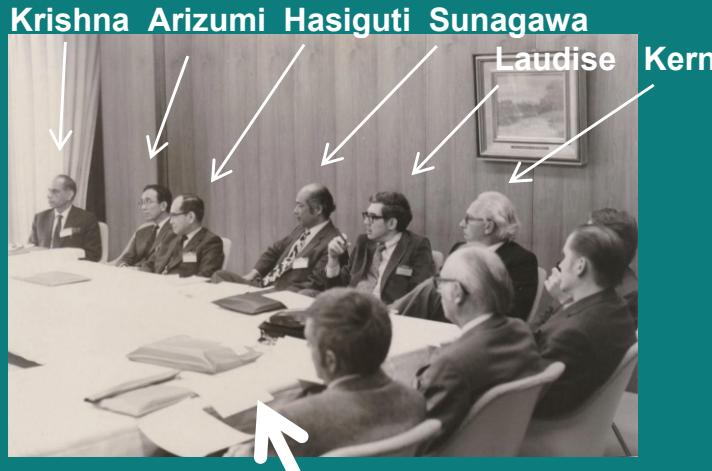
**takeda@astf.or.jp**  
**takeda@numse.nagoya-u.ac.jp**

**40th Anniversary of JACG, Nov. 5-8, 2014, Gakushuin**

# JACG and IOCG (1)



# JACG and IOCG (1)



ICCG-4/ISSCG-2  
1974  
Tokyo/Fuji View



ICCG-9/ISSCG-7  
1989  
Sendai/Zao



ICCG-13/ISSCG-11  
2001  
Kyoto/Biwa Lake

ICCGE-18/ISSCG-16  
2016  
Nagoya/Biwa Lake



# JACG and IOCG (2)

1974  
JACG was born.  
JJACG Vol. 1

1984  
10th  
JJACG Vol. 11

1994  
20th  
JJACG Vol. 21

2004  
30th  
JJACG Vol. 31

2014  
40th  
JJACG Vol. 41

EC  
R.R. Hasiguti  
Council  
R.R. Hasiguti  
N. Kato  
I. Sunagawa

EC  
I. Sunagawa  
Council  
T. Arizumi  
R.R. Hasiguti  
I. Sunagawa  
N. Kato

EC  
--  
Council  
T. Arizumi  
R.R. Hasiguti  
I. Sunagawa

EC  
H. Komatsu  
I. Sunagawa  
T. Nishinaga  
Council  
I. Sunagawa  
T. Nishinaga  
T. Ogawa

President  
T. Nishinaga  
EC  
H. Komatsu  
Council  
T. Nishinaga  
K. Sato  
H. Komatsu

Treasurer  
T. Ohachi  
Past President  
T. Nishinaga  
EC  
K. Sato  
Council  
S. Kimura  
K. Kitamura  
Y. Furukawa

Vice-President  
T. Ohachi  
EC  
K. Kakimoto  
Council  
T. Sasaki  
Y. Mori  
T. Hibiya

Vice President  
K. Kakimoto  
EC  
Y. Mori  
Council  
A. Koukitu  
Y. Takeda  
M. Uwaha

'71

'74

'77

'80

'83

'86

'89

'92

'95

'98

'01

'04

'07

'10

'13

'16

EC  
R.R. Hasiguti  
Council  
T. Arizumi  
N. Kato  
I. Sunagawa  
A. Higashi

EC  
I. Sunagawa  
Council  
T. Arizumi  
R.R. Hasiguti  
I. Sunagawa

EC  
H. Komatsu  
Council  
R.R. Hasiguti  
T. Nishinaga  
T. Ogawa

Vice-President  
T. Nishinaga  
EC  
I. Sunagawa  
Council  
J. Chikawa  
T. Ohachi  
H. Komatsu

President  
T. Nishinaga  
EC  
T. Ohachi  
T. Nishinaga  
Council  
M. Uwaha  
K. Kitamura  
H. Takei

Vice-President  
T. Ohachi  
EC  
K. Kakimoto  
Council  
T. Sasaki  
Y. Hayakawa  
K. Kakimoto

Secretary  
K. Kakimoto  
EC  
Y. Mori  
Council  
A. Koukitu  
Y. Takeda  
M. Uwaha

# JACG and IOCG (3)

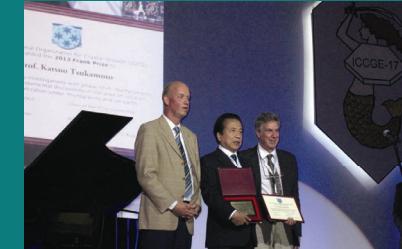
## –Prizes and Award from IOCG–



1989  
Laudise Prize:  
Jun-ichi Nishizawa



2004  
Laudise Prize:  
Tatau Nishinaga



2013 Frank Prize:  
Katsuo Tsukamoto  
Shieber Prize:  
Yuki Kimura



1998  
Laudise Prize:  
Isamu Akasaki



2007  
Distinguished  
Service Award:  
Ichiro Sunagawa

**1969 NCCG-1(Osaka University)**

**12 academic societies\* organized NCCG in turn;  
when one society organized an NCCG, other 11  
societies supported it.**

the Japanese Society of Applied Physics,  
the Society for Polymer Science,  
the Institute of Electronics, Information and  
Communication Engineers of Japan,  
Japan Foundry Society,  
the Chemical Society of Japan,  
the Japan Institute of Metals,  
the Crystallographic Society of Japan,  
Japan Association of Mineralogical Sciences,  
the Iron and Steel Institute of Japan,  
the Physical Society of Japan,  
the Pharmaceutical Society of Japan,  
the Ceramic Society of Japan

**1974**

**ICCG-4 (March, Tokyo)**

**JACG was organized (May).**

**The first president was Prof. Ryukiti Hasiguti**

**(He insisted this notation) at the University of Tokyo.**

**NCCG-6 (November, Tokyo)**

**JJACG Vol. 1 was issued in November.**

**1<sup>st</sup> Hohdankai**



**Prof. Ryukiti Hasiguti**



**JJACG No. 1, Vol. 1**



1974

IOCG Meeting at ICCG-4



ISSCG-2, Fuji View Hotel, (March-April, 1974)



**First Hohdankai (Aone Hot Spring, Aug. 1974)**



How the Hohdankai looks like (Ao-ne Hot Spring, Aug. 1987)

**1989 ICCG-9, Sendai**



**Opening Address by Prof. Sunagawa**



ISSCG-7, Zao, (Aug. 1989)

# 2001 ICCG-13, Kyoto



Opening Address by Prof. Nishinaga



**ISSCG-11, Biwa Lake, (Aug. 1989)**

# 2006 NCCG-36

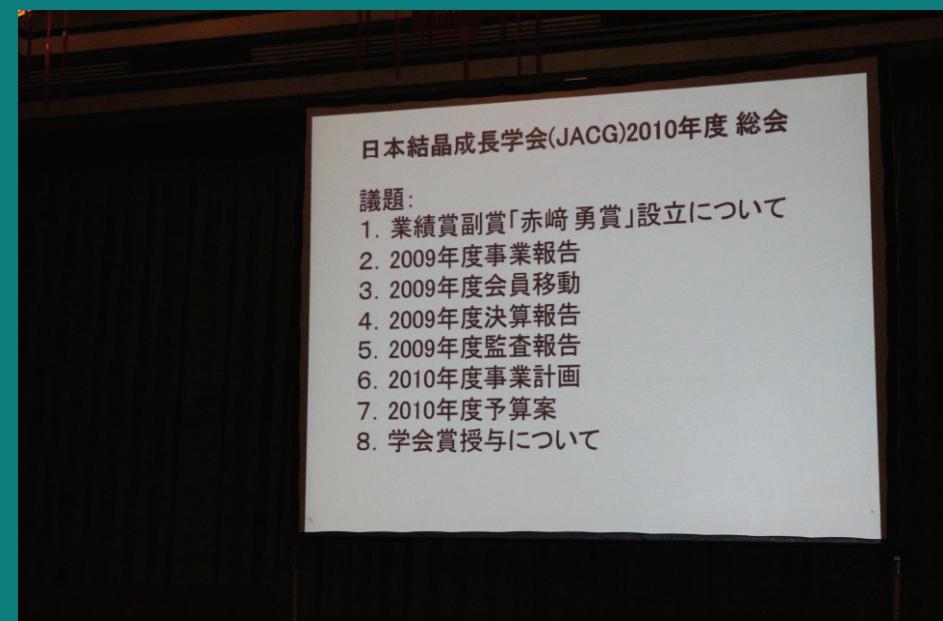
The Japanese Association for Crystal Growth and  
the Association of Synthetic Crystal Science and  
Technology unified.



The JACG started in 1974.  
The ASCST started in 1955.

# 2010 NCCG-40

We celebrated the 40th National (Japanese)  
Conference on Crystal Growth in Beijing  
prior to ICCG-16/ICVGE-14.



# Awards Ceremony

## We did it exactly as we do in Japan.





**Guests and audiences.**



**Fornari,  
Next IOCG  
President**



**Chernov,  
IOCG President**

To the Member of JACG (1)

March 17, 2011

We wish to express the solidarity and sorrow of the Japanese Association for Crystals Growth to the members, their family, relatives, friends and acquaintances who are suffering the damage by the North Japan Great Earthquake and Tsunami.

Additional problems of the Fukushima N-power plant, create a big and serious anxiety. We hope a steady and patient work to cool down the reactors.

The JACG want to know the safety of the members and help them as much as possible.  
Please send your email message to the JACG Office ([jacg@words-smile.com](mailto:jacg@words-smile.com)) checking items below. We would like to upload those informations (2) and (3) if it is agreed.

(1) Please inform your safety (This reply is not uploaded.)

Safe    Damaged (How:

)

【Your name:

Your institution/company:

】

email addresses you want to inform this information:

(2) Support you need (

)

Upload    Do not upload

(3) Other message (

)

Upload    Do not upload

Yoshikazu Takeda

The president of JACG

## To the Member of JACG (2)

April 22, 2011

The huge damage by the North Japan Great Earthquake and Tsunami and Problems of the Fukushima N-power plants are really a crisis of Japan. Worries and efforts in the suffering area are far beyond our imagination. We do hope quick recovery of the suffering area and people there, and to the other area further efforts and development of are required to save the whole Japan from retardation.

As the 2nd action of JACG, we conduct exemption and payback of the 2011 annual membership fee of the suffering member of JACG.

We hope your understanding and cooperation on this action.

### To the members with no damage

- 1) We ask you donations from the regular, student, and supporting members.

Using the donation together with donation (3000 Euro) from the German Association and Polish Association for Crystal Growth, we exempt the suffered members from the 2011 annual membership fee.

- 2) Please transfer more than one unit (5,000 Yen/unit) to the Bank Account below;

Bank of Tokyo-Mitsubishi UFJ,  
Ikebukuro Branch,  
1-5-6 Higashi Ikebukuro, Toshima-ku, Tokyo 170-0013, Japan  
NIHON KESSHO SEICHOU GAKKAI  
Account No. 7735548  
SWIFT CODE : BOTKJPJT356

The JACG Office: the Japanese Association for Crystal Growth  
2-62-8 Higashi Ikebukuro, Toshima-ku, Tokyo 170-0013, Japan  
(Notification of your membership number and name is helpful.)

If the donations are more than enough to cover the membership fees, the admission fee to NCCG-41 is exempted from the suffering members. If there still is remaining money, it is donated to the suffering people through Red Cross and others.

#### To the members with damage

- 1) Please send a letter to the JACG office below together with a letter of your institution, supervisor, or local government, which certifies your damage suffered by the north Japan great earthquake and tsunami. E-mail and attached file of the letters are also accepted.
- 2) If you have already paid the membership fee, it is paid back to your bank account. In this case, please inform your bank and account to the JACG office together with letters in 1).
- 3) If you have not paid 2011 membership fee, send letters in 1).
- 4) If you have not paid membership fee(s) before 2010, please send the membership fees of and before 2010.

Y. Takeda

The President of JACG

**But, very few people applied. Why?**

## To the Member of JACG

### -the JACG Actions on the East Japan Great Earthquake and Tsunami Hazards-

[Message \(2\) from the JACG President \(22 April, 2011\)](#)

[Message \(1\) from the JACG President \(17 March, 2011\)](#)

### -Support from Overseas-

[3,000Euro/German Association of Crystal Growth\(DGKK\) and Polish Society for Crystal Growth\(PTWK\)](#)

· 1,000\$/T.P. Pearsall (General Secretary EPIC 17, rue Hamelin 75783  
Paris Cedex 16 France)

· 5,000\$/Dr. & Mrs. Chernov(Lawrence Livermore National Laboratory)

**–Reports on the JACG Action –  
With sincere gratitude for your support**

## Relief-Fund Raising for the East Japan Great Earthquake(for suffered JACG members)

		Yen
<b>Donations in Total</b>		<b>1,168,860</b>
Items		
JACG Members	365,000	
In Detail (University 19 (includng OBs), Research Institute 1, Company 10)		
DGKK and PTWK	350,250	€ 3,000
European Photonics Industry Consortium(Thomas Pearsall)	80,360	US\$1,000
Dr. Chernov	373,250	US\$5,000

		Yen
<b>Supports in Total</b>		<b>1,168,860</b>
Items		
Exemption from Membership Fee(2011-2013)	444,000	
Regular Member 12 (Tohoku Univ. 8, JST Miyagi 1, NIMS 3)		
Student Member 13 (Tohoku Univ. 13)		
Handling Fee( $262 \times 19 + 420 \times 1$ )	2,778	
Special Lecture(Report on Tohoku Univ. Case and Measures: Jul. 10, 2011)	52,110	
Support for Registration Fee and Travelling Cost	490,236	
International Conferences(444,236: Tohoku Univ. 5)		
Domestic Conferences(46,000 : Tohoku Univ. 2, JST(Miyagi) 1)		
Handling Fee( $262 \times 1 + 420 \times 6$ )	2,782	
International Crystal Growth School in Sendai (Jul. 25-28, 2012)	176,534	
Handling Fee	420	

Annual Membership Fee: Regular 8,000, Student 4,000

# Breaking News!!

# 2014 Physics Prize



III: N. Elmehed. © Nobel Media 2014

## 2014 Nobel Prize in Physics

The [Nobel Prize in Physics 2014](#) was awarded jointly to [Isamu Akasaki](#), [Hiroshi Amano](#) and [Shuji Nakamura](#) "for the invention of efficient blue light-emitting diodes which has enabled bright and energy-saving white light sources".

→ [Press release](#)



The Nobel Prize  
"I was so happy. ..."

SOUNDCLOUD



3:53

▶ 7,085

[Cookie policy](#)

## Physics Laureate Shuji Nakamura: "I was so happy. And I was so surprised!"

Shuji Nakamura was asleep in California when he got the call that he had been awarded the 2014 Nobel Prize in Physics together with Isamu Akasaki and Hiroshi Amano. But now there's "No time for sleep. No time for rest.". Hear how he reacted when he got the call from Stockholm.

→ [Transcript of the interview](#)

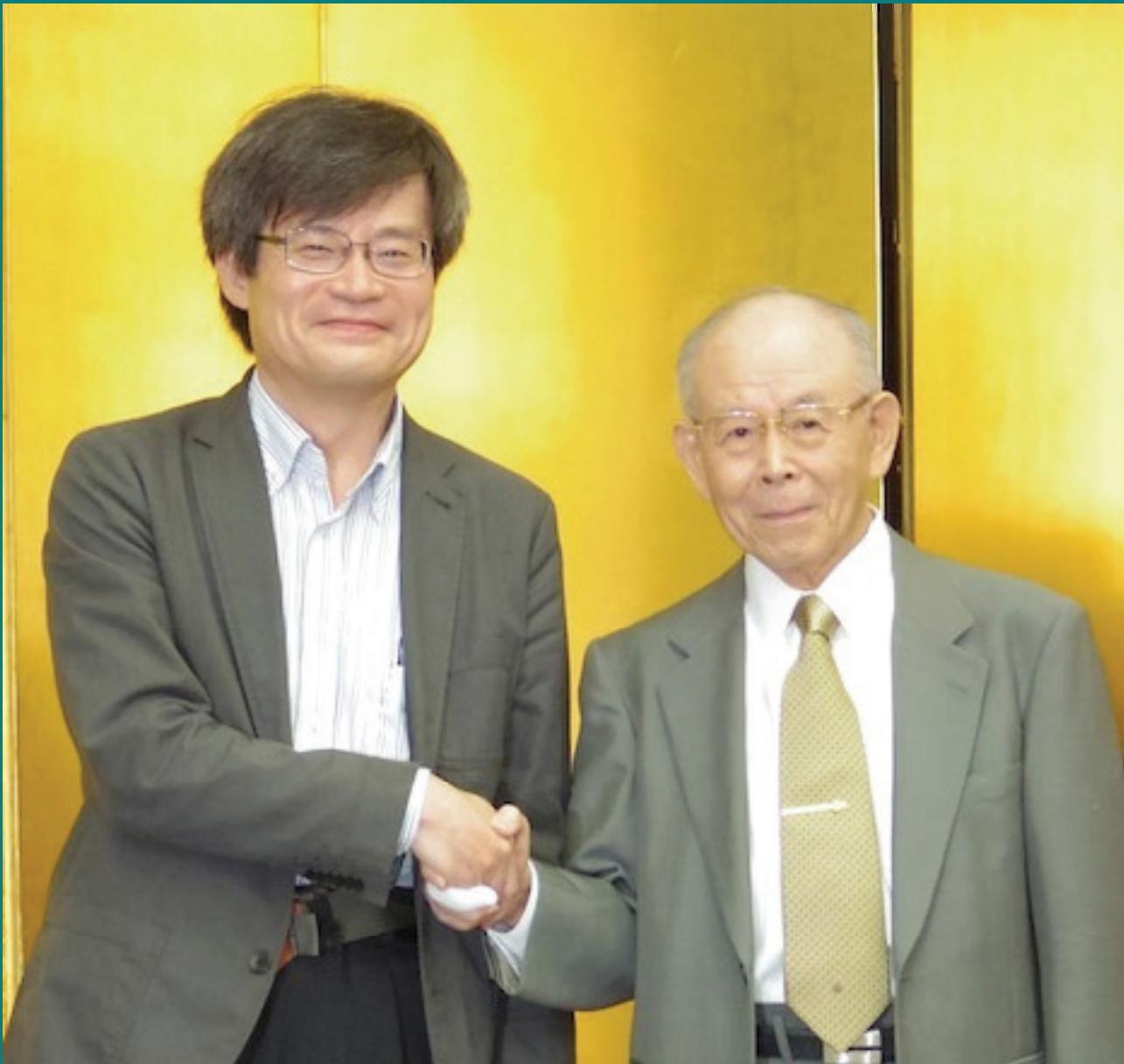


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Isamu Akasaki: "I was overwhelmed."

Hear Isamu Akasaki talk about his reaction and the many congratulatory messages he received: "This shows the authority and greatness of the Nobel Prize".

→ [Transcript of the interview](#)



**Professor Isamu AKASAKI  
and Professor Hiroshi Amano  
are active member of JACG.**

**At the press conference, Nagoya University (Oct. 10, 2015)**

# PRIZES AND AWARDS (Reds are by JACG or IOCG)

- 1989 The Best Paper Award of JACG (Akasaki)
- 1991 The Chunich Culture Prize (Akasaki)
- 1994 The Optoelectronics Conference Special Award (Akasaki, Amano, Nakamura)
- 1995 The JACG Technological Contribution Award (20<sup>th</sup> Anniversary of JACG)  
(Akasaki)
- 1995 The GaAs Symposium Award and the Heinrich Welker Gold Medal (Akasaki)
- 1994 The IEEE/LEOS Engineering Achievement Award (Akasaki, Amano, Nakamura)
- 1995 The Medal with Purple Ribbon (Akasaki)
- 1996 The Inoue Harushige Award (Akasaki, TG)
- 1998 The Laudise Prize (Akasaki)
- 1998 Outstanding Review Paper Award (JSAP) (Akasaki, Amano)
- 1998 The C&C Prize (Akasaki, Nakamura)
- 1998 The IEEE Jack A. Morton Award (Akasaki, Nakamura)
- 1998 The Rank Prize (Nakamura, Akasaki, Amano, Pankove)
- 1999 The ECS Solid State Science & Technology Award (Akasaki)
- 2000 The Toray Science and Technology Prize (Akasaki)
- 2001 The Asahi Prize (Akasaki, Nakamura)
- 2001 The Marubun Academic Award (Amano)

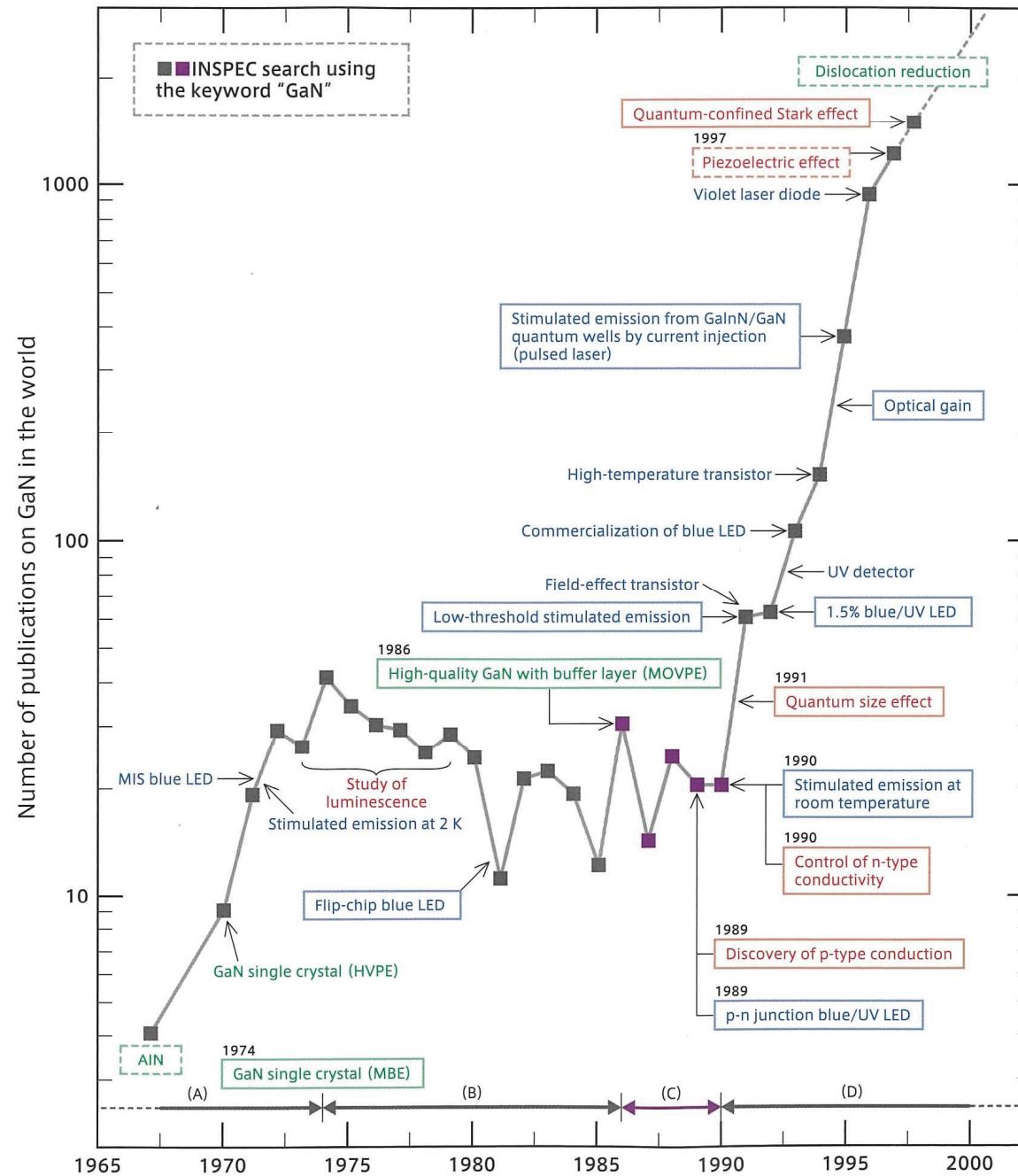
- 2002 The Fujihara Prize (Akasaki)
- 2002 The Order of the Rising Sun, Gold Rays with Neck Ribbon (Akasaki)
- 2002 Honorable Member of JSAP (Akasaki)
- 2002 The Takeda Award (Akasaki, Amamo, Nakamura)
- 2003 The President's Award of the Science Council of Japan (Akasaki)
- 2003 The SSDM Award (Akasaki, Amano)
- 2004 Acknowledged as Person of Cultural Merits (Akasaki)
- 2004 The Tokai TV Culture Prize (Akasaki)
- 2006 The TMS John Bardeen Award (Akasaki)
- 2006 The Outstanding Achievement Award of JACG (Akasaki)
- 2007 The Honorable Lifetime Achievement Award of the 162<sup>nd</sup> Research Committee on Wide Bandgap Semiconductor Photonic and Electronic Devices of JSPS (Akasaki)
- 2008 The Best Paper Award of JACG (Amano)
- 2009 The Kyoto Prize (Akasaki)
- 2010 Akasaki Prize was established in JACG (Akasaki)
- 2011 The IEEE Edison Medal (Akasaki)
- 2011 The Minami-Nippon Culture Prize–Honorable Prize (Akasaki)
- 2011 The Order of Culture (from the Emperor in person) (Akasaki)
- 2011 Honorable Member of The Japan Society of Applied Physics (Akasaki)

- 2012 The Technological Award of the JACG (Toyoda Gosei: Shibata, Uchida, Saito, and Okuno, Nichia: Mukai, Nagahama, Moritya, and Narukawa)
- 2013 IEEE Life Fellow ([Akasaki](#))
- 2013 Honorable Member of The Chemical Society of Japan ([Akasaki](#))
- 2013 Honorable Member of The Physical Society of Japan ([Akasaki](#))
- 2013 The SID K. F. Braun Prize ([Akasaki](#))
- 2014 The Okawa Publication Prize ([Akasaki](#))
- 2014 Imperial Prize·The Japan Academy Prize ([Akasaki](#))
- 2014 The Nobel Prize in Physics ([Akasaki, Amano, Nakamura](#))

## Significant Achievements in Research and Development of Group-III Nitride Semiconductor Materials and Devices

The achievements in □ are by Akasaki and Amano, and their group.

It is clearly seen that fabrication of p-n junction LED initiated the steep and continuing increase of publication.



Prof. S. Nakamura

Relation to us:

2001

ICCG-13

International Advisory Committee

S. Nakamura (USA),

ICVGE-11 Committee

Chair: K. Takahashi (Teikyo Univ. of Sci. & Tech.) H. Amano (Meijo Univ.)

S. Nakamura (Univ. of California Santa Barbara),

2007

Czochralski Award (E-MRS; Polish Society of Crystal Growth is a cosponsor.)

# **ICCGE-18**

**Nagoya, Japan**

# **ISSCG-16**

**Otsu, Shiga, Japan**



# Committee

## ICCGE-18 Organizing Committee



**Co-Chair:**  
Prof. Koichi KAKIMOTO  
Kyushu University



**Co-Chair:**  
Prof. Yasuhiko ARAKAWA  
The University of Tokyo



**Secretary:**  
Prof. Yusuke MORI  
Osaka University



**Program Committee, Chair:**  
Prof. Hiroshi FUJIOKA  
The University of Tokyo



**Publication Committee, Chair:**  
Prof. Satoshi UDA  
Tohoku University



**Local Arrangement Committee, Chair:**  
Prof. Hiroshi AMANO  
Nagoya University

## ISSCG-16 Organizing Committee



**Chair:**  
Prof. Gen SAZAKI  
Hokkaido University



**Vice Chairs:**  
Prof. Shigeya NARITSUKA  
Meijo University



**Dr. Hiroki NADA**  
AIST



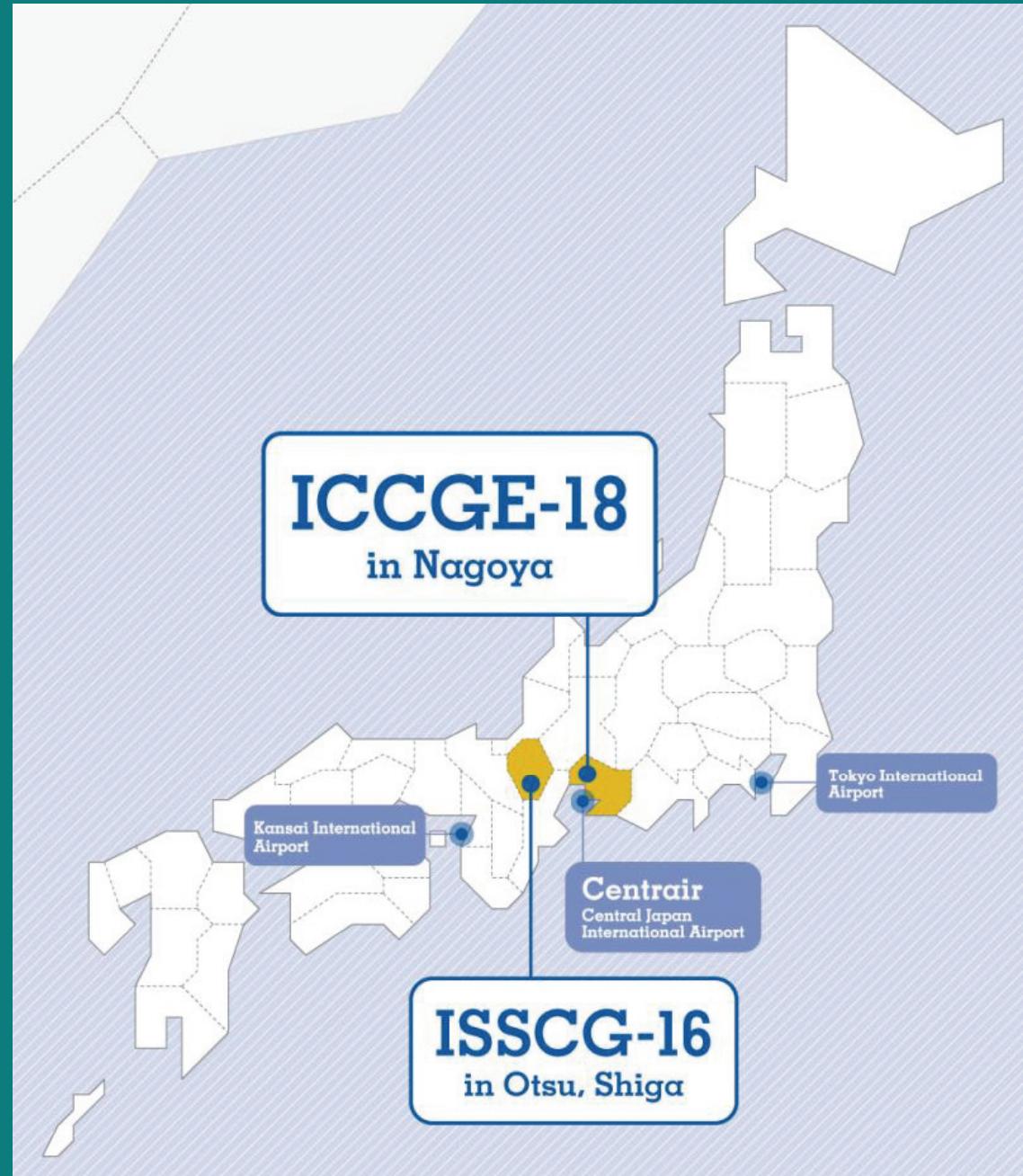
**Special Adviser:**  
Prof. Emeritus Tatau NISHINAGA  
University



**Special Adviser:**  
Prof. Emeritus Tadashi OHACHI  
Doshisha University

# Geography of venue – center of Japan

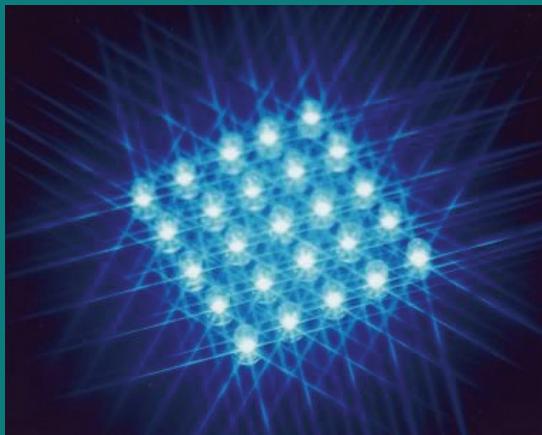
**ICCGE-18**  
**Central position in**  
**Japan**



# Nagoya perfect conference city – science & industry



◆ Birth place of blue light-emitting diodes



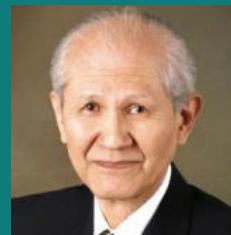
◆ World-class research excellence—Four Nobel Prize laureates from Nagoya—



Dr.  
Ryoji  
NOYORI



Dr.  
Toshihide  
MASKAWA



Dr.  
Osamu  
SHIMOMURA

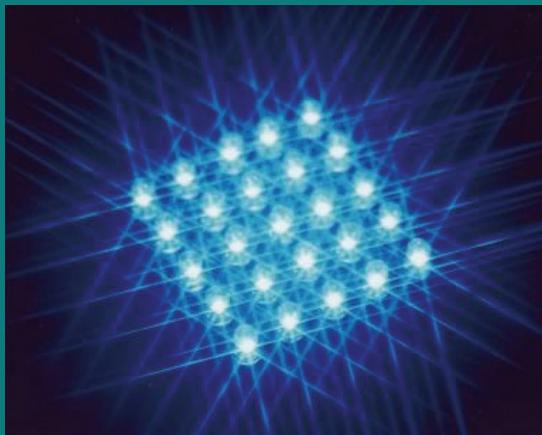


Dr.  
Makoto  
KOBAYASHI

# Nagoya perfect conference city – science & industry



◆ Birth place of blue light-emitting diodes



LED array



BlueLED

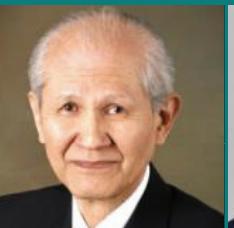
◆ World-class research excellence—~~Four~~ Six Novel Prize laureates from Nagoya—



Dr.  
Ryoji  
NOYORI



Dr.  
Toshihide  
MASKAWA



Dr.  
Osamu  
SHIMOMURA



Dr.  
Makoto  
KOBAYASHI



Dr.  
Isamu  
AKASAKI



Dr.  
Hiroshi  
AMANO

# Venue

## ISSCG-16 Doshisha Biwako Retreat Center



Planted by ISSCG in 2001.

