## 13th HOPE MEETING &

with Nobel Laureates





## **Objective**

HOPE Meetings are held for excellent graduate students and young researchers specially selected from countries/areas around the Asia-Pacific and Africa region. These meetings give an opportunity for the participants to engage in interdisciplinary discussions with Nobel laureates and other distinguished scientists pioneering the frontiers of knowledge. They also give the participants, who lodge together over the course of the event, a chance to make friends and form collegial networks with peers from the regions.



# 7-11 March, 2022

13th HOPE Meeting will be held online via web conferencing system



## Organizer

JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE



Office of the HOPE Meetings, JSPS

E-mail hope-meetings@jsps.go.jp

Tel: +81-3-3263-2414

https://www.jsps.go.jp/english/e-hope/index.html





## Organizing Committee of the 13th HOPE Meeting

#### **■**Chair



KAJITA Takaaki
Nobel Laureate in Physics 2015
Distinguished University Professor, The University of Tokyo
Director, Institute for Cosmic Ray Research (ICRR), The University of Tokyo

## **■**Organizing Committee Members

See: https://www.jsps.go.jp/english/e-hope/sosiki13.html

## **Participants**

About 100 doctoral students and young researchers from the following countries/areas:

Australia, Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Kenya, Korea, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Philippines, Senegal, Singapore, South Africa, Taiwan, Thailand, Turkey, Vietnam

## **Program of the 13th HOPE Meeting**

The program is planned with consideration for time differences between domestic and overseas participants. For programs (mainly lectures) that are held at times when it is difficult to attend due to time differences, videos will be distributed on demand.

*day before e.g.) Tokyo: Monday → Boston: Sunday Tentative (as of July 2021)										
Auckland	12:00	13:00	14:00-15:00		20:00	21:00	22:00		23:00-24:00	)
TOKYO	09:00	10:00	11:00-12:00		17:00	18:00	19:00		20:00-21:0	0
Bangkok	07:00	08:00	09:00-10:00		15:00	16:00	17:00		18:00-19:00	
Delhi	05:30	06:30	07:30-08:30		13:30	14:30	15:30		16:30-17:30	
Cairo	02:00	03:00	04:00-05:00		10:00	11:00	12:00		13:00-1400	
London	24:00 (00:00)	01:00	02:00-03:00		08:00	09:00	10:00		11:00-12:00	)
Boston	*19:00	*20:00	*21:00-22:00		03:00	04:00	05:00		06:00-07:00	
San Francisco	*16:00	*17:00	*18:00-19:00		24:00 (00:00)	01:00	02:00		03:00-04:00	D
MONDAY <b>7</b> March					Opening Ceremony	Lecture 1	Group Discussion	5	Poster Sessi	on
TUESDAY <b>8</b> March					Lecture 2	Group Discussions	Lecture 3		Poster Sessi	on
WEDNESDAY <b>9</b> March	Lecture 4	Group Discussions	Lecture 5		Group Discussions	Cultural Program	Lecture 6		Poster Sessi	on
THURSDAY <b>10</b> March	Lecture 7	Group Discussions	Lecture 8		Group Discussions	Lecture 9	Preparation for Team Presentations			
FRIDAY 11 March					Team Presentat	tions		Clos	ing emony	





The conference program will be held <u>online</u> and will feature the following:

- Lectures by Nobel laureates, distinguished researchers and cultural authorities
- Small group discussions with the lecturers (seminar style)
- Poster session including oral presentation by each participant
- Oral presentations by multinational participant teams
- Cultural experience program, introduction to the research facility



## **Selection Criteria**

#### **HOPE** Meeting participants are selected based on the following criteria:

Please note: People selected to participate in the 12th HOPE Meeting are eligible to attend the 13th Meeting even if they no longer satisfy the requirements stipulated in items a) and/or b) below.

- Be a PhD student or young researcher (who received a PhD after 2 April 2016) with a record of excellent academic performance <sup>a)</sup>
- Have not been selected to participate in a past HOPE Meeting b)
- Have an excellent record of research and a high level of interest in the societal influence of scientific knowledge and its application
- Have a strong interest in a wide scope of science and research
- Be expected to go on to advance future research in the Meeting's subject field(s)
- By participating in the meeting, be expected to initiate joint research and/or build collegial networks in the future
- Have a strong desire to participate actively in the Meeting's exchanges and discussions
- Possess ample English proficiency to do so
- Be able to participate in the entire Meeting program from 7 to 11 March.





## **Cost Sharing**

- JSPS covers the costs of holding the meeting.
- JSPS will not cover the cost of the participants' internet environment, internet connection, or meals during the conference.

## Schedule (tentative)

2021	July	Send out nomination requests to cooperating institutions				
2021	30 September	Nomination deadline (for overseas cooperating institutions)				
	Early December	Notify cooperating institutions of the selection results				
	Late December	Participants prepare for their participation in the meeting				
		(1) Submit registration forms, photos, poster presentation				
		abstracts				
2022	Mid-January	(2) Submit posters and slides for poster presentation				
	7-11 March	13th HOPE Meeting (Online)				
	Late March	Participants submit reports to JSPS				
	April -	JSPS sends participants' reports to cooperating institutions				

**Nomination Deadline** 

30 September, 2021

E-mail: hope-meetings@jsps.go.jp



## Outline of the Previous HOPE Meetings



#### 1st HOPE Meeting, 2008

#### **Lecturers:**

Leo Esaki (Physics, 1973) Chair

Heinrich Rohrer (Physics, 1986)

Robert B. Laughlin (Physics, 1998)

Hideki Shirakawa (Chemistry 2000)

Alan Heeger (Chemistry, 2000)

and other distinguished researchers.

#### **Date and Venue:**

Februeary 25-28, 2008 (Tsukuba, Japan)

#### **Subjected Fields:**

Nanoscience and Nanotechnology

#### **Participants:**

**81** PhD students and young scientists

from the 13 countries/areas in the Asia-Pacific region:

Australia, China, India, Indonesia, Japan, Korea,

Malaysia, New Zealand, Philippines, Singapore, Taiwan,

Thailand, Vietnam

#### 2nd HOPE Meeting, 2009

#### **Lecturers:**

Leo Esaki (Physics, 1973)

Makoto Kobayashi (Physics, 2008)

Yuan Tseh Lee (Chemistry, 1986)

Ryoji Noyori (Chemistry, 2001) Chair

Koichi Tanaka (Chemistry, 2002)

Peter Agre (Chemistry, 2003)

Susumu Tonegawa

(Physiology or Medicine, 1987)

and other distinguished researchers.

#### **Date and Venue:**

September 28-October 1, 2009 (Hakone, Japan)

#### **Subjected Field:**

Chemisty (and related fields)

#### **Participants:**

100 PhD students and young scientists

from the 14 countries/areas in the Asia-Pacific region:

Australia, Bangladesh, China, India, Indonesia, Japan,

Korea, Malaysia, New Zealand, Philippines, Singapore,

Taiwan, Thailand, Vietnam

#### 3rd HOPE Meeting, 2011

#### **Lecturers:**

Leo Esaki (Physics, 1973),

David J. Gross (Physics, 2004),

Makoto Kobayashi (Physics, 2008) Chair

Toshihide Maskawa (Physics, 2008)

Richard R. Ernst (Chemistry, 1991)

Hideki Shirakawa (Chemistry, 2000)

Ryoji Noyori (Chemistry, 2001)

Koichi Tanaka (Chemistry, 2002),

Ada Yonath (Chemistry, 2009)

and other distinguished researchers.

#### **Date and Venue:**

March 7-11, 2011 (Tokyo, Japan)

**Subjected Field:** Physics (and related fields)

#### **Participants:**

99 PhD students and young scientists

from the 14 countries/areas in the Asia-Pacific region:

Bangladesh, China, India, Indonesia, Israel, Japan, Korea,

Malaysia, New Zealand, Philippines, Singapore, Taiwan,

Thailand, Vietnam

#### 4th HOPE Meeting, 2012

#### **Lecturers:**

Leo Esaki (Physics, 1973)

Makoto Kobayashi (Physics, 2008) Chair

John Ernest Walker (Chemistry, 1997)

Ryoji Noyori (Chemistry, 2001)

Roderick Mackinnon (Chemistry, 2003)

Akira Suzuki (Chemistry, 2010)

Ei-ichi Negishi (Chemistry, 2010)

Dan Shechtman (Chemistry, 2011),

and other distinguished researchers.

#### **Date and Venue:**

March 7-11, 2012 (Tsukuba, Japan)

Theme: Chemistry for Creating the Future

#### Participants:

100 PhD students and young scientists from the 17 countries/areas in the Asia-Pacific and Africa region: Australia, Bangladesh, China, Egypt, India, Indonesia,

Israel, Japan, Korea, Malaysia, Mongolia, New Zealand,

Philippines, Singapore, Taiwan, Thailand, Vietnam

## Outline of the Previous HOPE Meetings



### 5th HOPE Meeting, 2013

#### **Lecturers:**

Leo Esaki (Physics, 1973)

Makoto Kobayashi (Physics, 2008) Chair

Hideki Shirakawa (Chemistry, 2000)

Ryoji Noyori (Chemistry, 2001)

Aharon Jehuda Ciechanover (Chemistry, 2004)

Susumu Tonegawa

(Physiology or Medicine, 1987)

Mario Renato Capecchi

(Physiology or Medicine, 2007)

and other distinguished researchers.

#### **Date and Venue:**

February 26-March 2, 2013 (Tokyo, Japan)

#### **Subjected Field:**

Life Sciences (and related fields)

#### **Participants:**

98 PhD students and young scientists from the 16 countries/areas in the Asia-Pacific and Africa region: Australia, Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, South Africa, Taiwan, Thailand

#### 6th HOPE Meeting, 2014

#### Lecturers:

Makoto Kobayashi (Physics, 2008) Chair

Braian P. Schmidt (Physics, 2011)

Hideki Shirakawa (Chemistry, 2000)

Martin Chalfie (Chemistry, 2008)

Ei-ichi Negishi (Chemistry, 2010)

Richard J. Roberts

(Physiology or Medicine, 1993)

and other distinguished researchers.

#### **Date and Venue:**

March 11-15, 2014 (Tokyo, Japan)

Subjected Field: Physics, Chemistry, Physiology/Medicine (and related fields)

#### Participants:

106 PhD students and young scientists from the 19 countries/areas in the Asia-Pacific and Africa region: Australia, Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Kenya, Korea, Malaysia, Mongolia, New Zealand, Philippines, Singapore, South Africa, Taiwan, Thailand, Vietnam

#### 7th HOPE Meeting, 2015

#### **Lecturers:**

Johannes Georg Bednorz (Physics, 1987)

Douglas Dean Osheroff (Physics, 1996)

Makoto Kobayashi (Physics, 2008) Chair

Hideki Shirakawa (Chemistry, 2000)

Ei-ichi Negishi (Chemistry, 2010)

Dan Shechtman (Chemistry, 2011)

and other distinguished researchers.

#### **Date and Venue:**

March 1-5, 2015 (Tokyo, Japan)

Subjected Field: Physics, Chemistry, Physiology/Medicine (and related fields)

#### Participants:

97 PhD students and young scientists from the 17 countries/areas in the Asia-Pacific and Africa region: Australia, Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand, Vietnam, Turkey

#### 8th HOPE Meeting, 2016

#### Lecturers:

Makoto Kobayashi (Physics, 2008) Chair

Serge Haroche (Physics, 2012)

Shuji Nakamura (Physics, 2014)

Jean-Marie Lehn (Chemistry, 1987)

Ada Yonath (Chemistry, 2009)

Barry J. Marshall

(Physiology or Medicine, 2005)

and other distinguished researchers.

#### **Date and Venue:**

March 7-11, 2016 (Tsukuba, Japan)

Subjected Field: Physics, Chemistry, Physiology/Medicine (and related fields)

#### Participants:

107 PhD students and young scientists from the 18 countries/areas in the Asia-Pacific and Africa region: Australia, Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, South Africa, Taiwan, Thailand, Vietnam, Myanmar

## Outline of the Previous HOPE Meetings



#### 9th HOPE Meeting, 2017

#### **Lecturers:**

Klaus von Klitzing (Physics 1985)

Makoto Kobayashi (Physics, 2008) Chair

Takaaki Kajita (Physics, 2015)

Ryoji Noyori (Chemistry, 2001)

Jean-Pierre Sauvage (Chemistry, 2016)

Edvard I. Moser (Physiology or Medicine, 2014)

and other distinguished researchers.

#### **Date and Venue:**

February 26-March 2, 2017 (Tokyo, Japan)

**Subjected Field:** Physics, Chemistry, Physiology/Medicine (and related fields)

#### **Participants:**

110 PhD students and young scientists from the 22 countries/areas in the Asia-Pacific and Africa region: Australia, Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Kenya, Korea, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Philippines, Singapore, South Africa, Taiwan, Thailand, Turkey, Vietnam

#### 10th HOPE Meeting, 2018

#### **Lecturers:**

J. Georg Bednorz (Physics, 1987)

Makoto Kobayashi (Physics, 2008) Chair

Takaaki Kajita (Physics, 2015)

K. Barry Sharpless (Chemistry, 2001)

Ada Yonath (Chemistry, 2009)

J. Fraser Stoddart (Chemistry, 2016)

Tim Hunt (Physiology or Medicine, 2001) and other distinguished researchers.

#### **Date and Venue:**

March 10-15, 2018 (Yokohama, Japan)

**Subjected Field:** Physics, Chemistry, Physiology/Medicine (and related fields)

#### Participants:

108 PhD students and young scientists from the 21 countries/areas in the Asia-Pacific and Africa region: Australia, Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Kenya, Korea, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Philippines, Singapore, South Africa, Taiwan, Thailand, Turkey

#### 11th HOPE Meeting, 2019

#### Lecturers:

Hiroshi Amano (Physics, 2014)

Takaaki Kajita (Physics, 2015) Chair

Aaron Ciechanover (Chemistry, 2004)

Ada Yonath (Chemistry, 2009)

Ben L. Feringa (Chemistry, 2016)

Tim Hunt (Physiology/Medicine, 2001)

and other distinguished researchers.

#### **Date and Venue:**

March 4-8 2019 (Okinawa, Japan )

**Subjected Field:** Physics, Chemistry, Physiology/Medicine (and related fields)

#### **Participants:**

104 PhD students and young scientists from the 19 countries/areas in the Asia-Pacific and Africa region: Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Kenya, Korea, Malaysia, Myanmar, Nepal, New Zealand, Philippines, Singapore, South Africa, Taiwan, Thailand, Vietnam

#### 12th HOPE Meeting, 2020

#### TEATTION E MOORING,

Lecturers:

J. Georg Bednorz (Physics, 1987)

Takaaki Kajita (Physics, 2015) Chair

Barry C. Barish (Physics, 2017)

Johann Deisenhofer (Chemistry, 1988)

Gregory Winter (Chemistry, 2018)

Tim Hunt (Physiology/Medicine, 2001)

Randy W. Schekman

(Physiology/Medicine, 2013)

#### \*Cancelled due to concern about COVID-19 epidemic.

#### **Date and Venue:**

March 9-13 2020 (Tsukuba, Japan )

**Subjected Field:** Physics, Chemistry, Physiology/Medicine (and related fields)

#### **Participants:**

109 PhD students and young scientists from the 22 countries/areas in the Asia-Pacific and Africa region:
Bangladesh, China, Egypt, India, Indonesia, Israel, Japan, Kenya, Korea, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Philippines, Senegal, Singapore, South Africa, Taiwan, Thailand, Turkey, Vietnam