

# REPORT FROM WORKING GROUP ON CRYOGENICS , CRYOMODULE & SUPERCONDUCTING TECHNOLOGY FOR ACCELERATOR PROGRAMME IN ASIA



**Prof. T S Datta, IIT. Kharagpur. India**  
&  
**Prof. Hirotaka Nakai, KEK, Japan**



**Sorry, Not able to Join you  
In this meeting**

**A Proposal by Dr T S Datta to have Asian School on  
Superconductivity & Cryogenics for Accelerator with Hands on  
Training ( Similar of Asian Accelerator School in 1999 )**

**Was Approved by ACFA**

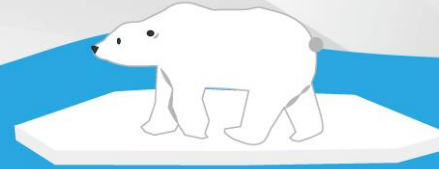
**At Kyoto Meeting ( 2016 ) ( Chair : Prof Yifang Wang )**

**2<sup>ND</sup> ASSCA School was organized Successfully at KEK,  
Japan During Dec 10- 17, 2017 ( Prof. Nakai san)**

**3<sup>rd</sup> School at IHEP, Beijing in Dec. 2018 ( Prof Gao Jie)**

**4<sup>th</sup> School was at Korea University ( Sejong) in February  
2023 ( Prof. Eun - San Kim ) : Delayed because of COVID**

**5<sup>th</sup> School was again at KEK. Japan in February 2024**



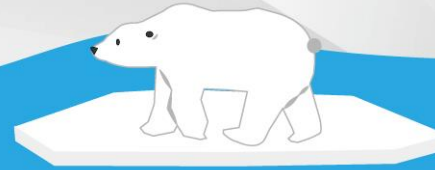
# **The 5th Asian School on Superconductivity and Cryogenics for Accelerators (ASSCA 2023)**

- Date : Jan. 28 – Feb. 5, 2024
- Venue : High Energy Accelerator Organization (KEK), Tsukuba, Japan

## **Funds :**

1. Funds from (IINAS-NX), High Energy Accelerator Research Organization (KEK)
2. Contributions from 10 companies in Japan and China





- **International Advisory Committee**
  - Prof. Yasuhiro OKADA (KEK, Japan), Chair
  - Prof. Jie GAO (IHEP, China)
  - Prof. Tripti Sekhar DATTA (IIT Kharagpur, India)
  - Prof. Eun-San KIM (Korea Univ., Korea)
  - Dr. Zong-Kai LIU (NSRRC, Taiwan)
  - Prof. Nattawut THARAWADEE (Silpakorn Univ., Thailand)
- **Local Organizing Committee**
  - Prof. Hirotaka NAKAI (KEK, Japan), Chair
  - Prof. Eiji KAKO (KEK, Japan)
  - Prof. Yasuhiro MAKIDA (KEK, Japan)
  - Ms. Gin ISHIKAWA (KEK, Japan), Secretary



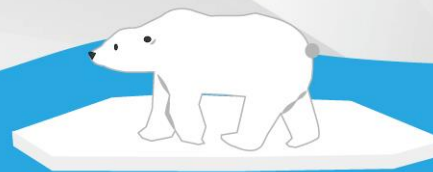
# Program

- **Morning : Lectures on Superconducting Cavity/ Magnet/ Cryogenics for Accelerator**
- **Evening : Hands on Training**
- **Special Lectures / Facility Visit**
- **Excursion, Welcome Dinner & Banquet**

School Time Table (as of November 27, 2023)

Time	Jan. 28, 2024 Sunday	Jan. 29, 2024 Monday	Jan. 30, 2024 Tuesday	Jan. 31, 2024 Wednesday	Feb. 1, 2024 Thursday	Feb. 2, 2024 Friday	Feb. 3, 2024 Saturday	Feb. 4, 2024 Sunday	Feb. 5, 2024 Monday	
- 8:30	Arrival Day	Breakfast							Excursion	Departure Day
8:30 - 8:40 (10 min.)		Welcome	Information / Announcement							
8:40 - 10:10 (90 min.)		Introduction 1 (SC & Cryo) Tripti Sekhar DATTA IIT Kharagpur, India	SCMagnet (1) Michinaka SUGANO KEK, Japan	SCMagnet (4) Yasuhiro MAKIDA KEK, Japan	SCCavity (2) Takeshi DOHMAE KEK, Japan	Special Talk 2 (SCCavity) Alexander NAVITSKI R, Germany	Cryogenics(3) Hirotaka NAKAI KEK, Japan			
10:10 - 10:30 (20 min.)		Group Photo	Coffee Break							
10:30 - 12:00 (90 min.)		Introduction 2 (SCMagnet) Toru OGITSU KEK, Japan	SCMagnet (2) Yasushi ARIMOTO KEK, Japan	Special Talk 1 (SCMagnet) Masami IIO, Makoto YOSHIDA KEK, Japan	SCCavity (3) Jun TAMURA JAEA, Japan	Cryogenics (1) Tripti Sekhar DATTA IIT Kharagpur, India	Cryogenics(4) Xilong WANG IASF, China			
12:00 - 13:10 (70 min.)		Lunch								
13:10 - 14:40 (90 min.)		Introduction 3 (SC Cavity) Eiji KAKO KEK, Japan	SCMagnet (3) Kento SUZUKI KEK, Japan	SCCavity (1) Hiroaki UMEZAWA Tokyo Denkal, Japan	SCCavity (4) Naruhiko SAKAMOTO RIKEN, Japan	Cryogenics (2) Rui GE IHEP, China	Special Talk 3 (Cryogenics) Taekyung KI IBS, Korea			
14:40 - 15:00 (20 min.)		Coffee Break						Closing		
15:00 - 16:00 (60 min.)		Training A Introduction	Training A	Training B Introduction	Training B	Training C Introduction	Training C			
16:00 - 18:30 (150 min.)		Training A		Training B		Training C				
18:30 -		Welcome Party	ACFA Meeting. NSRRC. April 19, 2024 Dinner					Banquet		

# Countries



Country	Student	Lecturers	Total
Belarus	0	1	1
China	12	2	14
France	1	0	1
India	8	1	9
Japan	3	13	16
Korea	3	1	4
Nepal	1	0	1
Taiwan	2	0	2
Thailand	10	0	10
<b>Total</b>	<b>40</b>	<b>18</b>	<b>58</b>





## Lectures



## Superfluid Helium



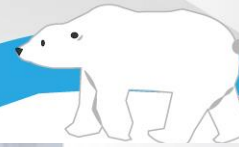
## Superconducting Cavity Training

## Superconducting Magnet





# Group Photo



## 5th Asian School on Superconductivity and Cryogenics for Accelerators (ASSCA 2023)



Jan. 28 - Feb. 5, 2024





**Thanks Organiser for a Wonderful  
Banquet and Excursion to Nikko  
Toshogu Shrine**

**6<sup>th</sup> ASSCA will be in CHINA**



**Thanks ACFA for your Kind attention**