

No. : 098/TSEA-EVENT/VI/2025

Subject : Invitation to Public Lecture on "Celebrating 100 Years: International Year of Quantum Science and Technology Public Lecture. The Tiny Tech That Changed the World: The Story of Semiconductors"

Prof. Ir. I Ketut Sudarsana, S.T.,Ph.D. Rector of Udayana University

Dear Prof. Ir. I Ketut Sudarsana, S.T., Ph.D.,

Tsinghua University is proud to present the conference "Light-Induced Emergent Phenomena in Low-Dimensional Materials", organized by the Department of Physics, bringing together over 80 distinguished professors and academics from around the world at the Tsinghua Southeast Asia Center from 16–20 June 2025. This conference aims to advance interdisciplinary discourse on cutting-edge discoveries in quantum materials and foster international research collaboration.

In conjunction with the conference, we are honored to host a special academic event at our Southeast Asia Center in Bali to celebrate **100 years of quantum mechanics on the International Year of Quantum Science and Technology**: a **Public Lecture** featuring **Prof. Chang Kai**, one of the most distinguished physicists and currently Chair Professor at the School of Physics, Zhejiang University. This public lecture forms part of our ongoing commitment to fostering scientific dialogue, advancing curiosity-driven research, and strengthening regional collaboration in higher education and innovation. Prof. Chang will explore the historical and future trajectory of semiconductors, from the invention of the transistor to cutting-edge research in quantum materials, emphasizing their critical role in powering modern technologies and national innovation ecosystems.

We are pleased to extend this cordial invitation to you to attend the **Public Lecture** and **Conference Dinner Reception** as our distinguished guest. The event details are as follows:

- Date: Friday, 20 June 2025
- Time: 16:00 18:00 WITA (Public Event) and 18:00 - 20:00 WITA (Dinner Reception)
- Venue: Awan Auditorium, UID Bali Campus, Kura-Kura Island, Serangan, Bali



We would be deeply honored by also inviting 10 others participants from your institution; Professors, Dean Faculties, Lectures, Researchers, and Top Performing Students to attend the public lecture. However, kindly note that the dinner reception invite is valid for one (1) person only.

For any further information or coordination, please feel free to contact Rian Setianto at <u>rian.setianto@tsea.asia</u> or Whatsapp at +62 857-2999-9127. We look forward to welcoming you to an afternoon of exploration and insight.

Best regards,

Ed Crawley_

Prof. Edward F Crawley Senior Advisor Tsinghua Southeast Asia Center

Tembusan Kepada Yth.

- 1. Prof. Ir. Linawati, M.Eng., Sc. Ph.D. (Dean of the Faculty of Engineering, Udayana University)
- 2. Prof. Dra. Ni Luh Watiniasih, M.Sc., Ph.D (Dean of the Faculty of Mathematics and Natural Sciences, Udayana University)
- 3. Prof. Ir. I Wayan Budiasa, SP., MP., IPU ASEAN Eng (Director of Graduate Program, Udayana University)
- 4. Dr. Ir. Ida Bagus Putu Adnyana, ST., MT., IPU., ASEAN Eng (Study Program Coordinator of Engineer Profession, Udayana University)



Celebrating 100 Years:

International Year of Quantum Science and Technology Public Lecture

The Tiny Tech That Changed the World: The Story of Semiconductors

20 June, 2025; 16.00 – 18.00 hours | Tsinghua Southeast Asia Center, UID Bali Campus, Kura Kura Bali SEZ

INTRODUCTION

Tsinghua Southeast Asia Center (TSEA) is committed to fostering innovation, knowledge sharing, and collaboration through academic and public engagements. In line with this mission, TSEA is hosting a public lecture featuring **Prof. Chang Kai**, a world-renowned physicist, as part of the workshop "The Tiny Tech That Changed the World: The Story of Semiconductors." The lecture will delve into the transformative role of curiosity-driven research in addressing complex global challenges and advancing scientific understanding.

This lecture also takes place during the **global physicists' gathering in celebration of the Year of Quantum,** making it a timely and unique opportunity for the public to engage with cutting-edge ideas.

The story of semiconductors is essential knowledge as it forms the foundation of modern technology, powering everything from smartphones and computers to AI systems and medical equipment. Tracing its evolution from the invention of the transistor to today's cutting-edge research in quantum materials reveals a journey marked by major scientific and technological breakthroughs. Semiconductors are at the heart of our digital economy and play a critical role in national security, global supply chains, and innovation ecosystems.

Audiences may be surprised to learn how much of today's technology—and even tomorrow's—stems from breakthroughs in basic physics decades ago. This knowledge bridges the past and the future, helping us understand how historical advancements in semiconductor physics continue to shape and inspire the next generation of technological progress.

EVENT DETAILS

Agenda	: Public Lecture		
Date	: Friday, June 20, 2025		
Time	: 16:00 – 18:00 (GMT+08/WITA)		
Location	: Awan Auditorium, 3rd Floor - UID Bali Campus, Kura Kura Bali		
https://maps.app.goo.gl/MXBvyJSJHW9hqohHA			
Registration	: https://tsea.asia/onsite-physics2025/		

TARGET PARTICIPANTS

Public Lecture (200 participants)

1. Students, faculty, and staff from universities across Indonesia.



2. Representatives from government, academia, and the private sector are interested in the intersection of scientific research and societal impact.

PUBLIC LECTURE AGENDA (20 JUNE 2025)

Time	Activity	Location
15.45 - 16.00	Registration	Awan Auditorium, 3rd Floor UID Bali Campus
16.00 - 16.05	Opening by the MC	
16.05 - 16.10	Opening Remarks by Senior Government Patron	
16.10 - 17.00	Public Lecture with Prof. Chang Kai (Chair Professor at the School of Physics, Zhejiang University, and doctoral supervisor)	
17.00 - 17.30	Q&A Session	
17.30 - 17.45	Closing	

DINNER RECEPTION AGENDA (20 JUNE 2025)

Time	Activity	Location
18.00 - 18.15	Welcoming Invited Guests for Dinner	Amphiteather of Tsinghua SEA Gate, UID Bali Campus
18.15 - 18.20	Welcoming Remarks for Dinner by Cherie Nursalim (Co-Founder of United In Diversity Foundation and Co-Chairman of Tsinghua Southeast Asia Center)	
18.20 - 18.40	Balinese Dance	
18.40 - 18.50	Remarks by the representatives of the professors of the Department of Physics, Tsinghua University	
18.50 - 19.55	Dinner and Networking Session	
19.55 - 20.00	Closing	