



## Third Circular 20<sup>th</sup> Science Council of Asia Conference



# The Age of New Materials: Innovation for Sustainable Society

May 13-15, 2021 Guangzhou, Guangdong, China

## Organized by

Science Council of Asia (SCA)

China Association for Science and Technology (CAST)
Shanghai Institute of Microsystem and Information Technology (SIMIT) CAS
Department of Science and Technology of Guangdong Province
Guangdong Provincial Association for Science and Technology
People's Government of Guangzhou Nansha District

## **Co-Organized by**

Advanced Materials Alliance of CAST Member Societies (AMAC)

## Supported by

Chinese Academy of Sciences (CAS)
People's Government of Guangdong Province

#### GENERAL INFORMATION

"Transforming our world: the 2030 Agenda for Sustainable Development" was unanimously adopted at the UN General Assembly in 2015. Under the common principle of no one left behind for the 7 billion people living in the world, this Agenda has set forth 17 Sustainable Development Goals (SDGs) and 169 targets to be achieved within 15 years from 2016.

As one of the three pillars in modern civilization, material science is considered not as a single scientific discipline, but as a broad and vital field of knowledge and techniques. People and cultures affect the extraction, processing, design, engineering, innovation, selection and application of materials in myriad ways that have enormous impacts on the environment, economy, human health, and quality of life. Critical development in innovative materials has become the foundation and the impetus for new technological revolution, which will potentially lead to increased efficiency, sustainability, or environmental improvements. The 20th Science Council of Asia Conference will focus on how emerging materials and processes can be developed and implemented beneficially for advancing sustainable society development, while at the same time to develop new understandings of our engagement and inter-dependence with the material world.

The Science Council of Asia (SCA) is an international scientific organization founded in 2000 by Asian science academies and other national scientific organizations. SCA aims to provide scientists in all fields, including cultural and social as well as natural sciences and technology, with a collaborative platform for promoting scientific exchange and cooperation in Asia, and to develop and promote a holistic vision focusing on sustainable development and improvement in quality of life. At present, SCA is comprised of 32 academic organizations in Asia, and SCA Conference has been held annually since 2001.

The China Association for Science and Technology (CAST) is the largest non-governmental organization of scientific and technological professionals in China, serving as a bridge that links the domestic and international science and technology communities. As founding institute, CAST has been member of SCA for more than 20 years and made significant contributions to the prosperity and development of science and technology, and to the overall economic and social development.

#### **MAIN TOPICS**

#### **KEYNOTES**

- The Impact of COVID-19 on Society
- Sustainable Development in Aging Society
- Materials Innovation for Carbon Neutrality
- Circular Economy and Eco-materials
- Atom Scale Manufacturing and Nanomaterials
- Degradable Plastics for Sustainability
- Education in New Century for SDGs
- Topological Materials for Quantum Computation
- Materials for BioTech-InfoTech
- Policy and Strategy for a Sustainable Society

#### **SESSIONS**

- Sustainability, Social Diversity and Gender Equality
- Green and Intelligent Materials
- Functional Materials for Informatics
- Smart Transformation in Agriculture and Local Community

- New Frontiers for Materials Design
- Advanced Energy Materials

#### **CHAIR**

#### **WANG Xi**

President of SCA, Vice President of CAST, Deputy Governor of Guangdong Province, Academician of CAS

#### **CO-CHAIRS**

#### **WANG Weihua**

Director of Guangdong Songshan Lake Materials Laboratory, Academician of CAS

#### **XIE Xiaoming**

Deputy Director of SIMIT CAS, Director of State Key Laboratory of Functional Materials for Informatics

#### KEYNOTE SPEAKERS

(The speakers are listed in order of speeches.)

#### (1) ZHONG Nanshan

Director of National Clinical Research Center for Respiratory Disease, Academician of CAE

Title: The Impact of COVID-19 on Society

#### (2) SHIRAHASE Sawako

Professor of the University of Tokyo, Director of UTokyo Center for Contemporary Japanese Studies

Title: Social Inclusion to Achieve the Sustainable Society, Focusing on the Superaged Society, Japan

#### (3) Gavin TOWLER

Vice President and Chief Technology Officer at Honeywell Performance Materials and Technologies, member of the United States National Academy of Engineering

Title: New Materials as a solution for Carbon Neutrality

#### (4) Victoire de MARGERIE

Vice Chair of World Materials Forum, France

Title: 10 Technologies for decoupling economic growth and the use of our natural resource

#### (5) WANG Enge

Chair of Governing Board of Guangdong Songshan Lake Materials Laboratory, Academician of CAS

Title: Quantum Devices Designed Atom-by-Atom

#### (6) K Sudesh KUMAR

Professor of Universiti Sains Malaysia

Title: Bio-based and biodegradable plastics for a sustainable future

#### (7) R.P.H. CHANG

Professor of Northwest University, Founding President of IUMRS

Title: Education in New Century for SDGs

#### (8) XUE Qikun

President of Southern University of Science and Technology, Academician of CAS

Title: Atomic-Level Control of Quantum Materials

#### (9) LIU Changsheng

President of Shanghai University, Academician of CAS

Title: Biomaterials for endogenous regeneration: Opportunities and challenges in tissue engineering

#### (10) Gabriel CREAN

Advisor to Deputy Prime Minister & Minister of the Economy Luxembourg

Title: Strategy for a Competitive and Sustainable European Union Economy and Society

#### PARALLEL SESSIONS AND CHAIRS

#### (1) Sustainability, Social Diversity and Gender Equality

#### Marieta Bañez SUMAGAYSAY (International Chair)

Executive Director of National Research Council of the Philippines

#### **CHEN Ying** (Local Chair)

Vice Director of Research Centre for Sustainable Development, Chinese Academy of Social Sciences (CASS)

#### (2) Green and Intelligent Materials

#### Jin-Ho CHOY (International Chair)

Academician of World Academy of Ceramics, Academician of National Academy of Science, Korea

#### **ZHAO Dongyuan** (Local Chair)

Director of Advanced Materials Laboratory at Fudan University, Academician of CAS

#### (3) Functional Materials for Informatics

#### Than Zaw OO (International Chair)

Pro-Rector of the University of Yangon

#### XIE Xiaoming (Local Chair)

Deputy Director of SIMIT CAS, Director of State Key Laboratory of Functional Materials for Informatics

#### (4) Smart Transformation in Agriculture and Local Community

#### SHIBUSAWA Sakae (International Chair)

Secretary/Treasurer of SCA, Professor of Tokyo University of Agriculture and Technology

#### YUAN Peng (Local Chair)

Vice-Chancellor of Rural Development Institute, CASS

#### (5) New Frontiers for Materials Design

#### Abu Bakar JAAFAR (International Chair)

Vice President of the Academy of Sciences Malaysia

#### **ZHANG Tongyi** (Local Chair)

Professor Emeritus of The Hong Kong University of Science and Technology, Founding Dean of The Materials Genome Institute at Shanghai University, Academician of CAS

#### (6) Advanced Energy Materials

#### **Kampanart SILVA** (International Chair)

Researcher of National Energy Technology Center, Thailand

#### **SUN Shigang** (Local Chair)

Professor of Xiamen University, Academician of CAS

#### **CONFERENCE MODE**

The meeting will be held in a hybrid mode. The attendees can choose to join in the conference on-site or via on-line conference system.

Latest regulation with regards to COVID-19 prevention and local control is updated on the conference website and please check it for guidelines before travelling to Guangzhou. In consideration of the regulation, participants outside of mainland China are suggested to attend the conference virtually and remotely.

With the e-mail registered as the only identity, on-line participants can watch the live webcast by following links:

Opening Ceremony, Keynote Speeches, Closing Ceremony

http://live.vhall.com/437851733

Session: Sustainability, Social Diversity and Gender Equality

http://live.vhall.com/616370369

Session: Green and Intelligent Materials

http://live.vhall.com/790039389

Session: Functional Materials for Informatics

http://live.vhall.com/758461519

Session: Smart Transformation in Agriculture and Local Community

http://live.vhall.com/939005965

Session: New Frontiers for Materials Design

http://live.vhall.com/334999637

Session: Advanced Energy Materials http://live.vhall.com/470340798

#### **DATE**

May 13-15, 2021

#### **VENUE AND HOTEL**

LN Garden Hotel Nansha Guangzhou

Address: No.1 Dajiao 2nd Road, Nanshan District Guangzhou, China

Telephone: (+86) 020-32108888

http://en.nansha-grand.cn/

#### **FINANCIALS**

- Registration is free.
- Participants will need to cover their own lodging and travel expenses.
- With confirmed registration information, participants can get hotel discount.

#### **WEBSITE**

Welcome to check more detail and view the e-posters on the conference website:

http://sca2020materials.csp.escience.cn/

### **ENQUIRES**

YU Wenjie, General Secretary

Director of Laboratory of Si-based Substrate and Integrated Device, SIMIT CAS

& 20<sup>th</sup> SCA Conference Secretariat

Email: sca20@mail.sim.ac.cn

## 20th SCA CONFERENCE AGENDA

DATE	TIME	PROGRAM	HOST	ROOM
May 13	8:00-9:30	Registration		
	9:30-9:50	Opening Ceremony	Chair	Main Venue
	9:50-10:20	Group Photo		
	10:20-12:00	Keynote Speeches	Co-Chairs	
	Lunch			Café Flora
	13:00-16:30 Parallel Sessions	Sustainability, Social Diversity and Gender Equality	Session Chairs	Room A
		Green and Intelligent Materials	Session Chairs	Room B
		Functional Materials for Informatics	Session Chairs	Room C
	16:30-18:00	Poster Presentation		Hall
	16:30-18:00	SCA Board Meeting	SCA Secretariat	Room D
	18:00-20:00	Reception		Grand Ballroom
May 14	9:30-12:00	Keynote Speeches	Co-Chairs	Main Venue
	Lunch			Café Flora
	13:00-16:30 Parallel Sessions	Smart Transformation in Agriculture and Local Community	Session Chairs	Room A
		New Frontiers for Materials Design	Session Chairs	Room B
		Advanced Energy Materials	Session Chairs	Room C
	16:30-17:30	Poster Presentation		Hall
	16:30-17:30	SCA General Assembly	SCA Secretariat	Room D
	17:30-18:30 Closing Ceremony	Declaration of SCA Statement	Chair	Main Venue
		Greeting from President-Elect		
		Introduction on ICSSR		
	19:00-20:30 Banquet		Café Flora	
May 15	Scientific and Cultural Tour			