CUUTE-2

The Second Symposium on Carbon Ultimate Utilization Technologies for the Global Environment

Date: Tue 12-Fri 15, November, 2024
Venue: Nara Kasugano International Forum Nara, Japan
URL: https://cuute2.com

CUUTE-2 Website

The major themes of CUUTE-2 will be ultimate carbon utilization and the establishment of carbon-neutral industries and society. CUUTE-2 intends to gather domestic and international knowledge for the development of new low-carbon technologies and low-carbon processes. This conference will showcase innovation and technology, provide details of the latest industrial solutions to carbon utilization issues, and will demonstrate how industries and researchers are meeting the many challenges related to the issues.

Plenary Lectures

A novel closed-carbon-loop technology based on inprocess carbon dioxide splitting for decarbonsing energy-and-carbon-intensive industry

Prof. Yulong Ding
University of Birmingham

Prof. Yulong Ding is the founding Chamberlain Chair of Chemical Engineering at the University of Birmingham and director of Birmingham Centre for Energy Storage. His research covers liquid air storage, latent heat storage, chemical heat storage, and thermochemical closed carbon looping. His h-index is over 90 (Google Scholar) A novel closed-carbon-loop technology will be reported.

Strategies and Challenges for the Global Steel Industry to Achieve Carbon Neutrality in Japan

Prof. Takeo Hoshino The University of Tokyo

Former Deputy Director-General in charge of International Resources, Energy Strategy, and Industrial Technology Policy of the Ministry of Economy, Trade and Industry. Appointed Leader of ISIJ committee of carbon neutral iron & steelmaking . He develops methods for quantitatively analyzing resource efficiency and environmental impact of base metal materials, considering their entire life cycle from production to use, recycling, and disposal after use, using objective evaluation indicators, and exploring optimal solutions for material use. The progress of public and private sector strategies to achieve carbon neutrality in the steel industry, domestically and internationally, and the challenges faced will be presented.

The Challenge of Japanese Steel Industry to achieve Carbon Neutrality

Dr. Seiji Nomura
Nippon Steel Corporation

Dr. Seiji Nomura is the project leader of the Green Innovation in Steelmaking (GREINS), the Green Innovation Fund Project of "Hydrogen Utilization in Iron and Steelmaking Processes" in Japan, and the Head of Process Research Laboratory at Nippon Steel Corporation. He has made remarkable achievements in the field of ironmaking, particularly in research related to coal and coke. He is set to report on the progress and future prospects of achieving a low-carbon society in the Japanese steel industry.

Plenary Lectures

Climate Change and the Global Steel Industry

Mr. Andrew Purvis

Director Sustainable Manufacturing at World Steel Association

Mr. Andy Purvis leads industry association with a strong focus on sustainability at the World Steel Association. In his role Mr. Purvis leads world steel programmes relating to Environment, Safety, Technology and Industry and Product Sustainability. Mr. Purvis has worked in and around the steel industry for almost 30 years in roles increasing focused on environmental performance, sustainability and greenhouse gas abatement technology and policy. He will mention about relationship between climate change and the global steel industry based on his wonderful special knowledge.

Update on the development of POSCO's hydrogen-based ironmaking process, HyREX

Dr. Myoung-Gyun Shin

Low-Carbon Iron and Steel making R&D Center, POSCO

Dr. Myung-Gyun Shin is Head of Low Carbon Iron & Steel Making R&D Center of the POSCO, Republic of Korea. He has great achievement in new process development and commercialization of FINEX. He will give a lecture on the recent development of HyREX which is the hydrogen ironmaking technology using fluidized bed reactor.

The Northern Lights project

Mr. Fredric Spiegel

Technical Director in the Tokyo office, Equinor

As for implementing CCS, Norway is one of the most experienced countries in the world. Equinor is a leading company of CCS and is investing in the Northern Lights project that stores CO_2 storage on the Norwegian continental shelf near Bergen as a part of the Longship Project. Mr. Fredric Spiegel, the Technical Director in the Tokyo office of Equinor, will introduce the entire picture of this big project and present the latest report on it.

Development of a New Pattern of Low-carbon Green Ironmaking In China

Prof. Jianliang Zhang

University of Science and Technology Beijing

Prof. Jianliang Zhang is a professor at University of Science and Technology Beijing and has outstanding achievements in a wide range of fields including ironmaking, environmental-friendly metallurgy, complex ferroalloys. He also serves as vice-chairman of the key section of The Chinese Society of Metals. He will talk about current state of Chinese steel industries, world biggest steel producer, and its future prospects for sustainable steel production.