2021.10.28
Kyushu University
Mitsui Chemicals, Inc.

Mitsui Chemicals, Inc. − Carbon Neutral Research Center Established at Kyushu University's I^{2}CNER

Kyushu University and Mitsui Chemicals form agreement for comprehensive collaboration

Kyushu University (Fukuoka; President: ISHIBASHI Tatsuro) and Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: HASHIMOTO Osamu) have formed a comprehensive collaboration agreement to develop and acquire cutting-edge environmental infrastructure technologies that contribute to carbon neutrality, as well as pursue practical use and commercialization of these technologies in relevant fields. Coinciding with this, Mitsui Chemicals has established the Mitsui Chemicals, Inc. − Carbon Neutral Research Center（MCI-CNRC）within Kyushu University's International Institute for Carbon-Neutral Energy Research (I^{2}CNER).

Overview:

1. Date of agreement: October 28, 2021

2. Focus of collaboration: The establishment and joint operation of the Mitsui Chemicals, Inc. − Carbon Neutral Research Center

3. MCI-CNRC
   1) Purpose
      [1] To develop and acquire cutting-edge environmental infrastructure technologies that contribute to carbon neutrality
      [2] To pursue the practical use and commercialization of these technologies in relevant fields
   2) Period
      November 1, 2021 – March 31, 2031
   3) Location
      International Institute for Carbon-Neutral Energy Research, Kyushu University, Fukuoka, Fukuoka Prefecture
   4) Main fields of research
      [1] Production and use of green hydrogen
      [2] CO2 separation and recovery
      [3] CO2 conversion and fixation
      [4] Advanced analysis and evaluation

Exterior view of the I^{2}CNER research buildings

Leaning on the history and tradition it has built up as a major university since its establishment in 1911, Kyushu University contributes to society in broad fashion through its provision of education and research. This sees the university develop outstanding human resources for both Japan and abroad, as well as output cutting-edge research, medicines and highly specialized research results. Kyushu University's I^{2}CNER facilities were selected and established in 2010 as part of the World Premier International Research Center Initiative (WPI)[*1] under Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), then became a WPI Academy Center under this initiative in 2020. I^{2}CNER is the first research facility in the world to bear "carbon-neutral" in its name.

Mitsui Chemicals declared in November 2020 that it will endeavor to achieve carbon neutrality by 2050. To this end, Mitsui Chemicals is pursuing a carbon neutrality strategy based on the two-pronged approach of reducing the Mitsui Chemicals Group's Scope 1 and 2 greenhouse gas emissions while also maximizing the ability of the Group's products to reduce greenhouse gas emissions, with aims through all this to operate as a chemical company that makes significant contributions to social change.

MCI-CNRC is set to take the world-leading expertise that I^{2}CNER has built up for carbon-neutral and carbon-negative technologies – including green hydrogen as well as carbon capture, utilization and storage (CCUS) – and combine this with the development- and industrialization-related expertise that Mitsui Chemicals has built up in aim of getting its environmentally friendly technologies into practical use. This combination will then be used as the groundwork from which to conduct joint research. Further, by carrying out focused and efficient research into the elemental technologies needed to achieve carbon neutrality, the center will speed up the process of getting these technologies adopted in society.

Both Kyushu University and Mitsui Chemicals are endeavoring to bring about a sustainable society. With this in mind, both parties aim to create cutting-edge technologies for real-world implementation as they pursue efforts to help solve social issues and bring about carbon neutrality.

[*1] The World Premier International Research Center Initiative was established to dramatically improve Japan's basic research capabilities and bolster the country's global competitiveness by providing dedicated support to projects that aim to form world-leading research centers based around groundbreaking researchers.