

Outline of Selected Project Comments by Program Committee

Host institution name	Kyushu University
Title of center project	Carbon-Neutral Energy Research Institute: The Grand Highway for a Carbon-Neutral Energy Fueled World
Chief entire-project officer (Head of host institution)	Setsuo Arikawa
Chief center-project officer	Yukitaka Murakami (Trustee and Vice President, Kyushu University)
Prospective center director	Petros Sofronis (Professor, University of Illinois at Urbana-Champaign, USA)
<p><Project Summary></p> <p>To provide sufficient energy for future generation requires a holistic approach to energy production, storage and usage that utilizes renewable resources, is sustainable and leaves no carbon footprint. Success requires rapid technological breakthroughs of unprecedented magnitude in numerous disciplines. The proposed Carbon-Neutral Energy Research Institute based on hydrogen seeks to determine the fundamental nature of these barriers and to discover solutions to overcoming them. Challenges facing implementation include production of sufficient quantities of hydrogen, delivery and storage of the hydrogen and capture and sequestration of any CO₂ generated during the production process. The Institute at Kyushu University along with the satellite institute at the University of Illinois will provide the facilities and environment needed to foster the inter- and multi-disciplinary research between national and international scientists. The leadership and management system of this Institute constitutes a paradigm shift for Japanese research centers that will transform our research enterprise.</p> <p><Remarks></p> <p>The proposal builds upon the existing strengths of Kyushu University for its hydrogen energy research, and its goals and expected accomplishments are well defined. Further, the committee recognized the strong commitment by the host institution to support the project while reforming the system of Japanese university administration in a way that will facilitate its implementation. The appointment of an energetic and enthusiastic non-Japanese director will give the project a strong international flavor.</p>	