

Energy Efficiency and Green House Gas Management

Objectives

Greenhouse gases (GHG) have been known as the direct cause of global warming, which, if left unbated, will eventually lead to the destruction of the planet Earth. GHG is the by-product of the combustion of fossil fuels, which are still the major source of energy for all mankind. Thus, the reduction of GHG and the control of these gases are certainly one of the great challenges that the mankind has faced.

Energy is consumed, however, in the form of electric power in our household and most industries regardless of whether the energy sources to generate the electric power are renewable or non-renewable. Therefore, not only is the efficiency of power plants, overall industrial facilities and their component devices to convert the electric power to useful duties important, but also our domestic appliances as well. These all have a critical impact on the sustainability of our current civilization.

This Symposium will provide scientists and engineers in both the U.S. and Korea with the opportunities to exchange information and development on the means of contributing to solutions for these important issues.

Scope

To meet the objectives, the Symposium will focus on the following two areas:

- 1) Efficiency Improvement
- 2) Control of the GHG

Topics and Sessions

The following sessions and a Workshop are offered to cover the scope of topics above:

- 1) Energy Saving Technologies
 - a. ORC
 - b. Cogeneration
 - c. Drying and other processing
 - d. High efficiency heat pump
 - e. Energy storage
 - f. Other novel technologies (AMTEC, Solid-State Power Generator)
- 2) Light Emitting Diode (LED)
- 3) GHG Control
 - a. Capture
 - b. Storage
 - c. Photo/Electro materials
 - d. Hydrogen economy
Hydrogen/Green Fuels, Gen IV Nuclear power plant

4) Energy Policy

The 2-day Symposium is divided into two parts: the one-day regular sessions and another one-day Energy R&D Workshop.

Symposium Chair and Co-Chairs & Committee Members

Chair	
Yong Nak Lee (NTRD Ltd.)	
United States	Korea
Co-Chairs	
Jong-Hee Park (Alion Research)	Ki-Woo Lee (KIER) Kyeong-Ik Min (Samsung) Byoung-Moo Min (KIER) Joo-Seok Park (KIER)