

The 23rd IAEA FUSION ENERGY CONFERENCE

October 10th~16th, 2010
Daejeon Convention Center, KOREA



Organized by  **IAEA**
International Atomic Energy Agency

Hosted by  **MEST**
MINISTRY OF EDUCATION,
SCIENCE AND TECHNOLOGY

Managed by  **NFRF** 국가핵융합연구소  **대전광역시**
DAEJEON CONVENTION CENTER DAEJEON METROPOLITAN CITY

FUSION:

Future Vision of Green Energy

Fusion is the energy mechanism of the sun and the stars. On earth, Fusion research is aimed at demonstrating that this energy mechanism can be used to produce electricity in a safe and environmentally benign way, with abundant fuel resources, to meet the needs of a growing world population.





Energy for the Next Generation

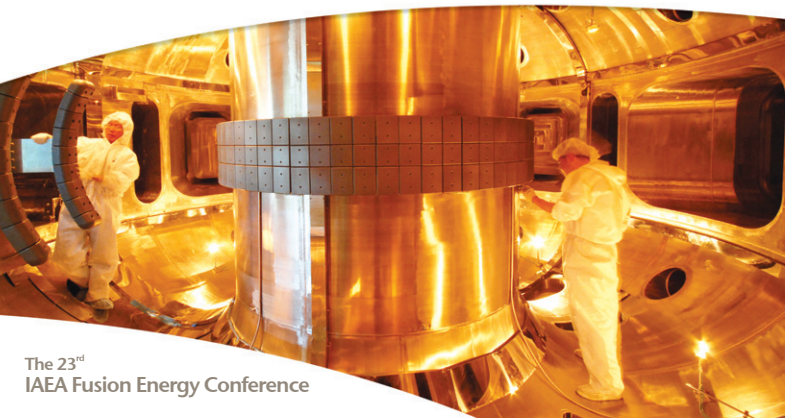
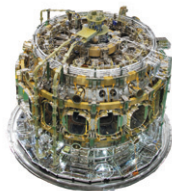
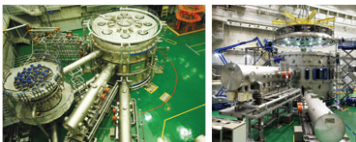
The optimum alternative to overcome energy depletion and global warming is development of fusion energy. Fusion energy is an unlimited, clean, high efficiency, safe and peace energy that promises affluent future to mankind. Fusion researchers around the world are endeavoring for better future. Fusion energy will give mankind abundance and happiness in the 21st century and so its development is a valuable consideration for the next generation.

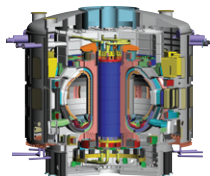
The 23rd
IAEA Fusion Energy
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KSTAR

Korea Superconducting Tokamak Advanced Research

KSTAR, the most recently built among global tokamak facilities, is a superconducting tokamak facility developed in Korea with the purposes of 'long-term fusion plasma operation' and 'acquisition of controlling technology,' which are tasks that must be solved in order to commercialize fusion energy. To be operated as an international joint research facility for fusion, KSTAR is expected to take the role of performing preceding research using pilot devices during the construction phase of International Thermonuclear Experimental Reactor(ITER) and the role as a satellite during the operation phase of ITER as the first tokamak facility in the world developed using the same superconducting material as ITER, Nb₃Sn, and as a hub for the global fusion research.





ITER

International Thermonuclear Experimental Reactor

ITER is an international collaborative research and development project. Korea and six other technologically advanced countries have created to jointly construct and operate the ITER fusion reactor.

These countries which represent over half the world's population, have created this project with the aim of demonstrating the scientific, technological, and commercial feasibility of fusion power.

ITER is expected to achieve its first plasma by the end of 2018.

In Latin, ITER refers to a 'way' or 'passage' thus giving additional meaning to the project as "the path to fusion power generation". Korea, one of the leading countries in fusion energy research, is expected to become a self-sustaining energy producing country by participating in the ITER Project.



European Union



Russia



Korea



China



Japan



India



United States
of America

The 23rd IAEA FUSION ENERGY CONFERENCE (FEC)



Period | October 10th~16th, 2010 / Pre-conference Activity : October 7th~9th, 2010

Venue | Daejeon Convention Center, KOREA

Organized by International Atomic Energy Agency (IAEA)

Hosted by Ministry of Education, Science and Technology (MEST)

Managed by National Fusion Research Institute (NFRI), Daejeon Metropolitan City

Recognizing the prominent global role of nuclear energy, and based on the expectation that nuclear fusion will be able to provide an abundant source of energy, the International Atomic Energy Agency (IAEA) supports the exchange of scientific and technical information on fusion research through conferences, meetings and projects. The 23rd IAEA Fusion Energy Conference (FEC 2010) provides a forum to present and discuss current progress and developments in fusion experiments, theory and technology.



You can meet the cutting edge of Fusion Technology

Daejeon, The City of Science and Technology

Daejeon is located in the center of South Korea and has a pivotal function as the second administrative capital of Korea. It is Korea's hub for national defense and is an international and innovative city with a high priority on science and technology. It is also a major transportation hub.

Daejeon has become known as a leading city of science and technology, not only in Korea but also around the world, particularly with the establishment of the World Technopolis Association (WTA). The city is equipped with superb infrastructure including state-of-the-art convention facilities, convenient transportation and a wide selection of tourist attractions.



EXPO Park



Daejeon Culture & Art center



Daejeon O-World



The 23rd IAEA Fusion Energy Conference (FEC)

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