



Department of Energy
Washington, DC 20585

July 9, 2009

Dear Colleague,

The Office of Science's Office of Fusion Energy Science (SC/OFES), the National Nuclear Security Administration (NNSA), and the Office of Nuclear Energy (NE) are planning to hold a workshop focusing on the technical aspects of Fusion-Fission Research (FFR). The workshop is scheduled to take place from September 30 until October 2, 2009 at the Gaithersburg Hilton, 620 Perry Parkway, Gaithersburg, Maryland.

From the OFES perspective, this workshop is one of several that are taking place during 2009 to obtain community input that will help OFES to develop a long range strategic plan to guide the OFES program during the next 15-20 year period.

Professor Jeffrey P. Freidberg of the Massachusetts Institute of Technology's Plasma Science and Fusion Center and Dr Phillip Finck, Associate Laboratory Director for Nuclear Energy at the Idaho National Laboratory, have generously agreed to serve as the Chair and Co-Chair, respectively, for this activity. The elements of the workshop structure including the individuals who will serve as members of the workshop team have not yet been established. We will communicate those details to you as soon as they become available.

The purpose of the workshop will be to carry out an assessment of the areas in which fusion-fission devices might be useful such as the production of fuel for fission reactors, direct electricity production, and closing the nuclear fuel cycle by transmuting spent nuclear fuel from fission reactors. In carrying out this assessment, comparisons to other options that might be used for the same purposes (e.g., fast reactors, accelerator-driven transmutation, etc.) will be necessary.

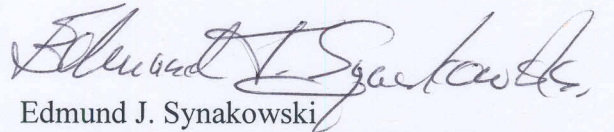
In this assessment, the workshop will explore technical aspects of various fusion-fission concepts and the research needed to further develop them. This will assist DOE in clarifying the long-term potential of combining aspects of fusion and fission, in identifying research thrusts needed to develop the knowledge for a fusion-fission device, and in identifying the scientific grand challenges associated with fusion-fission.

While the FFR workshop itself will take place over three days, preparation will be critical if it is to successfully meet its aims. These preparations will take place over the next three months with the formation of Working Groups. They will carry out conference calls and possibly smaller workshops dealing with specific portions of the FFR field. The workshop will produce a report that will be available for general distribution. A key objective of developing the report is to



provide an updated overview of the technical challenges and research opportunities and needs associated with fusion-fission hybrids. It will also highlight the potential as well as the limitations associated with fusion-fission hybrid concepts. The leading near-term target for this information will be to provide technical information that can be used by OFES in developing the strategic plan as described above.

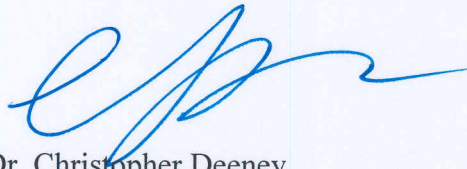
A website to keep the members of the fusion and fission research communities updated on the progress of this activity will soon be up and running. We will distribute the address of this website to everyone who may be interested.



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