## US ITER Forum Activity Proposal Form

Your name: Alfred Y. Wong Your institution: University of California, Los Angeles Your E-mail address: awong@physics.ucla.edu Your phone number: (310) 825-1642

What is the scope of your proposed activity? Develop symmetric neutralized ion beams (e.g. composed of D+ and D-) of MeV energies, suitable for use in heating, current drive, diagnosis, and phase space control of magnetically confined fusion plasmas. Our concept has received excellent reviews by DOE appointed scientists and engineers.

In which phase(s) would the activ x Pre-construction (2003-5)	vity be conducted? x Construction (2006-13)	x Research (2014-34)
In which phase(s) would the US x Pre-construction (2003-5)	benefit be realized? x Construction (2006-13)	x Research (2014-34)

What do you see as the US interest in the programmatic area of your proposed activity? The activity offers an opportunity to address a vital need of ITER, namely MeV beams to fuel, heat, and diagnose the central plasma. It will also serve to revitalize the U.S. beam program by developing a versatile, compact beam module that can complement and, in some cases, supplant conventional neutral beam injector systems.

For design and fabrication activities, what do you see as the US interest in performing the design and fabrication scope in your proposed activity? *Substantial beam heating and current drive is an integral part of the ITER design but has not yet been fully addressed by present international efforts. The opportunity exists for alternative approaches to contribute to realizing the ITER design goals. Design work would carry over to other applications requiring beam injection.* 

Indicate the nature(s) of the proposed activity:

- x US preparations for Negotiations
- x US preparations for the Construction Phase
- x US preparations for the Research Phase
- x R&D and design work
- **G** Fabrication of US components/systems
- Preparation of tools for the Research Operations Phase
- Other: