

COLLABORATION IN TOKAMAK PHYSICS

The IEA Implementing Agreements (IA) have been vital links among the world tokamaks. Over the past 15 years the intensive collaborations in the following three IAs on tokamaks have provided significant progress in their field.

- IEA Implementing Agreement for a Programme of Research and Development on Plasma-Wall Interaction in TEXTOR.
- IEA Implementing Agreement on a Cooperative Programme for the Investigation of Toroidal Physics in, and Plasma Technology of, Tokamaks with Poloidal Divertors.
- IEA Implementing Agreement on Large Tokamaks, involving JET in Europe, JT-60 in Japan, and TFTR in the U.S.



International Collaboration and Coordination of Research is an Essential Part of Fusion Research

The collaborative activities range from personnel exchanges for a few weeks of durations to joint design, fabrication, and research with experimental hardware, and coordination of research activities.

In addition to multi-national collaborations within each agreement, the collaboration under these agreements has increased substantially during the past years:

- These IAs are liaising closely with the International Tokamak Physics Activity (ITPA) in implementing the High Priority Research tasks identified to study Burning Plasma Physics and for ITER;
- The world tokamak programmes are involved, assisted by their collaborations in the IAs, in the planning and implementation of joint experiments identified by ITPA.

Participants to the Implementing Agreements:

- Large Tokamaks: European Union, Japan, USA
- Toroidal Physics and Plasma Technologies of Tokamaks with Poloidal Field Divertors: European Union, Korea*, USA
- Plasma–Wall Interaction in Textor: Canada, European Union**, Japan, USA
- * Korea joined the Agreement in 2001
- ** Switzerland is a partner of the European Union in this Agreement