Goals of the "Town Meeting"

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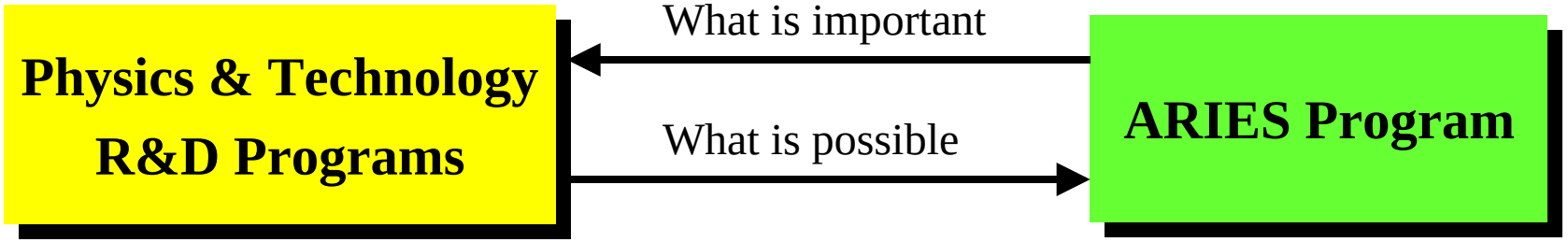
ARIES Tritium Town Meeting
March 6-7, 2001
Livermore, CA

Do we need another meeting?

The ARIES program organizes town meetings to provide a forum for discussions between scientists from R&D programs and power plant studies:

- To help guide experimental programs towards solutions that lead to an attractive fusion power plant
- To help design studies develop concepts that are consistent with the understanding of scientists developing those technologies.



➢ **ARIES Mission Statement:**

Perform advanced integrated design studies of the long-term fusion energy embodiments to identify key R&D directions and provide visions for the program.

Past ARIES Town Meetings have proven very valuable

Mar. 2-3, 1995	ANL	Workshop on Liquid Target Divertors	
May 10, 1995	ANL	Starlite Town Meeting on Structural Materials	*Starlite*
Jan. 31, 1996	UCSD	Starlite Town Meeting on Low Aspect Ratio Spherical Tokamaks	
June 19, 1997	UW	ARIES Town Meeting on Designing with Brittle Materials	*ARIES-RS*
May 6-7, 1998	UCSD	ARIES Town Meeting on ST Physics	*ARIES-ST*
Jan. 18-19, 2000	ORNL	International Town Meeting on SiC/SiC Design & Material Issues for Fusion Systems	*ARIES-AT*

SiC/SiC Town Meeting, January 2000

Objective: To bring together the international SiC/SiC design and materials communities to exchange information, identify design-related critical issues, discuss latest R&D results, and provide guidelines to help focus future effort (reference properties, R&D goals, *etc*.)

Organizers: M. Billone, R. Raffray

Attendance: EU (5), Japan (9), US (17)

Output: Summary findings on the 4 main discussion topics:

- **Material**: fiber, interface, matrix, architecture
- **Fabrication**: processes, complex shapes, evaluation, cost
- **Joining**: fiber, interface, matrix, architecture
- **Properties***: k, stress limits, temperature limits, lifetime

FED journal article

http://aries.ucsd.edu/MEETINGS/SiCSiC

Tritium is pervasive in fusion power plants; understanding and controlling it is essential for the success of fusion energy

- Fuel self-sufficiency — 10% margin
- Routine release — 10 mrem/yr, 2-3 Ci/d
- Accidental release — 1 rem
- Inventory & recovery — 4 kg on site (ITER)
  from blanket, PFC's, target factory

Tritium Town Meeting

Objective: To bring together the design and R&D communities to exchange information, identify design-related critical issues, discuss latest R&D results, and provide guidelines to help focus future effort.

Organizers: D. K. Sze, M. Gouge

Output: Findings and recommendations on the 4 main discussion topics:

- **Fuel cycle**: fuelling, pumping, tritium processing
- **Safety**: routine release, accidental release
- **PFC & blanket**: inventory, recovery, containment & control
- **IFE-specific**: target factory inventory

Summary presentation at the ARIES project meeting

Archive: *http://aries.ucsd.edu/MEETINGS/TTM*