Promoting Science Education Using an Energetic Multi-faceted Program

RICHARD LEE, General Atomics, ALEX NAGY, Princeton Plasma Physics Laboratory — The Fusion Education Program at General Atomics is beginning its 13th year of interaction with teachers and students and continues to be a fundamental source of information and activities covering states of matter, fusion science and technology, and classroom demonstrations. DIII-D facility field trips by students and classroom visits by scientists offer students close interaction with professional scientists and engineers and hands-on demonstrations. Educator workshops allow teachers to build items for their classroom that allow clear demonstration of specific science concepts found in basic plasma science and science measurements using devices such as DVMs, compasses, and pressure gauges. Materials for teaching plasma and fusion science in the class are readily available and formats include notebook, videotape, CD, and DVD. In recent summer ‘Build-it Day’ workshops teachers built a 300 turn coil used in magnetic field mapping exercises and a 200 turn coil used in a magnetic levitation demonstration. Teachers also harvested a small coil from a standard relay to make a magnetic field pickup coil for making quantitative field measurements. Demonstration equipment will be present for review and interaction.

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