

Sensing Our World Go Green at Notre Dame 2009



The Joint Institute of Nuclear Astrophysics (JINA) has sponsored the 'Sensing Our World' summer science camp for middle school students at The University of Notre Dame since 2006. Each year, twenty boys and girls from local middle schools have participated in a variety of science experiments relating to sensing instrumentation. In order to stimulate these students' interest in physical science, familiar objects that operate by important, basic physical principles have been utilized. Through demonstrations, experiments, hands-on activities, and building projects, students learned science using different kinds of sensors used in everyday life.

Starting in 2007, the overarching concept was expanded - 'Sensing Our World in Color' incorporated topics like color-coded earthquake magnitudes, fine art, and optics - analyzing the mechanics we use to perceive color and how this knowledge is used by astrophysicists and engineers alike. The now-thoroughly interdisciplinary program included presentations about understanding the sensory worlds of other species, the sensory aspects of art and music, cross-cultural communication, and gender-specific sensory perceptions.

This year's program - Sensing Our World Go Green - involved students in understanding and responding to some of the most serious problems threatening our planet. With the help of Notre Dame faculty and teaching assistants, students familiarized themselves with the fundamental forces underlying super-conductivity, solar radiation, the physics of energy, how chemists are developing biodegradable alternatives to consumer goods, the malaria parasite in human evolution, environmental philosophy, and ecological adaptation. They also investigated the lakes and forested areas on the Notre Dame campus, and toured the ND power plant. 'Sensing Our World Go Green' culminated on Friday, July 17, with the Summer Science Camp Symposium. The students demonstrated their research and new-found skills to families and friends in the Galleria of the Jordan Hall of Science, followed by a DVT screening of "Heart of the Sun".

Faculty and research centers have asked about sponsorship and participation in 2010 and, even though the dates haven't been determined yet, four applications have been received for next year's 'Sensing Our World' program.



Related Web Sites:

<http://www.jinaweb.org/outreach/SOW/2009/>

<http://www.jinaweb.org/outreach/SOW/>

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