Festival Activity



News from SonS 2011

April 16th Copenhagen 350 science teachers from all over Europe gathered to present their most innovative teaching ideas, workshops and performances. Participants were chosen from 27 countries. Science on Stage aims to stimulate the interest of young people through the school teachers, who can play a key role in reversing the trend of falling interest in science and current scientific research. Science on Stage aims to facilitate the exchange of good practice and innovative ideas among Europe's science teachers and to provide a forum for a broad debate among educators about the key challenges in science education today. The goal is to strengthen the awareness and interest of young people in science and technology by increasing the attractiveness of science lessons through the promotion of exciting ideas. The ultimate objective is creative and inspiring science teaching, raising interest in science and a scientific career among European students.

The Science on Stage Festival was structured by the following guiding themes:

Interdisciplinary teaching Inquiry-based learning Experiments New technologies in science teaching

Experiencing science in pre-school and kindergarten

The Irish Team consists of

Eilish McLoughlin CASTeL, Dublin City University, Dublin 9 Paul Nugent IoPI and Dominican College, Santa Sabina, Sutton, Dublin 13 Catherine Tattersall, Sutton Park School, Dublin Michelle Dunne, St. Josephs College, Lucan, Dublin Stephanie Holden, Intermediate School Kilorgin, Co. Kerry, David Keenahan, IoPI and Gonzaga College, Ranelagh, Dublin 6

This team was sponsored by CASTel:Centre for the Advancement of Science Teaching and Learning IoPI: Institute of Physics in Ireland PDST: The Professional Development Service for Teachers

The team is now busy preparing resources and planning workshops to share many of the ideas from the Festival. News of these and previous booklets and videos can be found at <u>www.scienceonstage.ie</u>

IRISH TEACHER WINS AWARD at SonS



Catherine Tattersall from Sutton Park School, St Fintan's Road, Sutton, Dublin 13, won one of the awards at Science on Stage for her project entitled "Colourful Science-Introducing Aqua Beads"

Aqua Beads are hydroponic gel beads that can absorb up to 150 times their volume in water. Chlorella algae can be grown on their surfaces and then used in photosynthesis experiments using CO_2 or O_2 sensors linked to a PC or a datalogger. Beads soaked in Universal Indicator solution allow pH experiments to be conducted. Put Aqua Beads in lengths of Visking tubing and they can simulate red blood cells and diffusion at tissues. As the beads are very elastic they can be used to measure the coefficient of restitution. Smaller ones can be put in a tight plastic bag or plastic cup and placed on a speaker linked to a sound generator - they vibrate showing conversion of sound energy to kinetic energy. The beads can be soaked in starch solution then put in a test tube with iodine solution - the blue black reaction gradually starts as a ring at the outer edge of the bead and increases until the whole bead turns black.

