John A Rogers

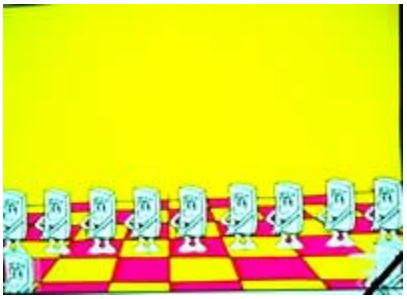
From: Materials Research Society (MRS) [enews2@lucy.mrs.org]
Sent: Friday, December 01, 2006 1:21 PM
To: jrogers@uiuc.edu
Subject: 2006 MRS Fall Meeting Scene - Day 5

MRS 2006 MRS FALL MEETING

MRS Meeting Scene
Day 5 - Thursday, November 29, 2006
Daily dispatch from Boston. Bringing you the very best of MRS.

BOSTON, MA 2006 MRS FALL MEETING

Contents



The 2006 MRS Fall Meeting reached its penultimate day on Thursday. This was again a full day of talks, the fourth day of posters and the final day of the exhibit. One of the highlights of the day was the first MRS scientific film festival.

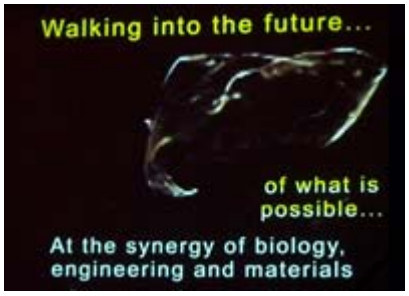
Symposium X - Frontiers of Materials Research
MRS Scientific Film Festival

The Materials Research Society inaugural materials film festival announced winners of the top three films in two categories: amateur and professional. Voting was done during the week of the meeting by meeting attendees. The announcements and viewing of the winning films were held as part of Symposium X on Thursday, November 30.

Amateur Category
1st place:

"Gecko . On Shape and Function of Gecko Foot-Hair", by Jose Berengueres, Tokyo Institute of Technology

2nd place:

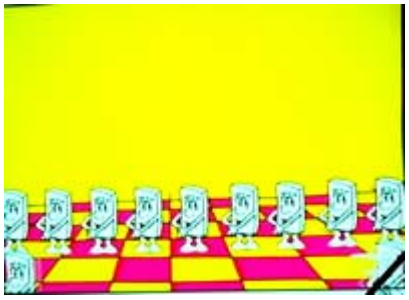


"Muscular Thin Films: Biohybrid Materials for Soft Robotics" by Adam Walter Feinberg, Harvard University

3rd place:

"Material Combat", by Jonathan Lee Hollander, University of Cambridge

Professional Category
1st place:

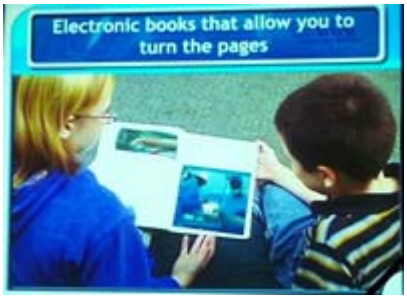


"Get Perpendicular" by Zvonimir Bandic, Hitachi Research

2nd place:

"When Things Get Small" by Ivan Kohn Schuller, University of California, San Diego

3rd place:



"Stretchable Silicon", by Alex Jerez, Beckman Institute, University of Illinois

Poster Awards

D15.17
Far-Field Arrangement of Proteins in a Zero-mode Waveguide for Single Molecule Imaging
Takashi Tanii1, Hironori Sonobe1, Rena Akahori1, Takeo Miyake1, Taro Ueno2, Takashi Funatsu2, Naonobu Shimamoto1 and Iwao Ohdomari1; 1School of Sci. & Eng., Waseda University, Tokyo, Japan; 2Graduate School of Parmaceutical Sciences, The University of Tokyo, Tokyo, Japan.

K10.1
Ferromagnetic Ordering at Room Temperature in Co:ZnO Nanoparticles
Sujeet Chaudhary , Kanwalpreet Bhatti, Shankhamala Kundu, Subhash C Kashyap and Dinesh K Pandya; Thin Film Laboratory, Department of Physics, Indian Institute of Technology, New Delhi 110 016, India.

Technical Presentations - A Sampling

Symposium KK
Imaging Magnetic Nanocrystals in Bacteria using Electron Holography and Tomography
Magnetotactic bacteria are aquatic bacterial species that orient and migrate along geomagnetic field lines. This behavior has been traced to the presence of intracellular ferrimagnetic nanosized mineral grains of magnetite (Fe_3O_4, Iron Oxide) or greigite (Fe_3S_4, iron sulfide). Different strains of bacteria have different crystal sizes, shapes and arrangements. In his presentation in symposium KK (9.3), Rafal Dunin-Borkowski of the University of Cambridge, United Kingdom, presented a study of the magnetic microstructures, chemical compositions, and three-dimensional morphologies and positions of iron oxide and iron sulfide crystals in air-dried cells of magnetotactic bacteria. The researchers used electron holography and tomography primarily along with other transmission electron microscopy techniques including energy-filtered imaging, selected-area el! ectron diffraction, and high-resolution imaging to characterize the specimens.