

NSF Research Experience for Teachers (RET) Poster Session/Reception



3/27/2008 4:30 – 6:30 PM

Seaport World Trade Center, Beacon Hill II/III

RET programs, found at many universities throughout the country, are changing the face of science education in the United States and abroad. Please join us to learn about research conducted by RET participants across the country.

Posters

Columbia University

1. DNA Double Strand Breaks: Life, Death, and Disease (Rachel Lytle)
2. pH Effects on Nanocrystalline Cerium Oxide Catalyst Supports (Leslie Glinoga)

Florida State/South Florida/University Wisconsin-Madison

3. Transferring the RET Experience to the Classroom (Farrell Rogers)

Harvard University

4. Electronics in High School (Aaron Osowieki)
5. Soft Lithography: Microcontact Printing at the Nanometer Scale (Christina Talbot)

National Radio Astronomy

6. Resolved Galaxies in the Spitzer Survey of the Taurus Molecular Cloud (Timothy Spuck)
7. The Spitzer Space Telescope Research Program for Teachers and Students: The Wiki (Timothy Spuck)

Northeastern University

8. A study of the effect of heat exposure on fiber reinforced aluminum matrix composites using non-destructive and destructive evaluation techniques (Carrie-Anne Sherwood, Michael Maloney)
9. The effect of cell removal on the Young's Modulus for Joint Compound-Filled Aluminum Honeycomb Structures (Carrie-Anne Sherwood, Santino Carnevale)
10. Theory and Production of Laminate Composites (Matthew Corcoran, Matthew Costa)
11. Synergistic Response of PC-12 to Immobilized Laminin and Nerve Growth Factor (Rocco Cieri, Kristina Unger)
12. Electrokinetic Remediation: Electrolysis of Iron Anodes for Treatment of Contaminants (Susan Agger, Jessica Quinn)
13. Three Dimensional Assembly of Silvery Nanoparticles Using Dielectrophoresis (Erica Wilson)
14. Nanotechnology (Pakamas Tongcharoensirikul)

Coordinated by RET Programs at Northeastern University in collaboration with the South Dakota School of Mines & Technology (SDSM&T)

Northwestern University

15. Light in the Nanoscale (Keyvan Sadigh)

South Dakota School of Mines & Technology (SDSM&T)

16. Tangential Flow Ultrafiltration for Recovery of Biopharmaceutical Products from Agricultural Plant Extracts (Angel Lee-Jewett)
17. Mokume Gane: A Replication of Traditional Japanese Metal Fabrication Using Modern Technology (Daniel G. Snethen)
18. Design and Optimization of Neat Thin-layer Epoxy and Incorporation with a Nanoparticle Additive (Greg Diersen)
19. Cellulose Degrading Kinetics and Identification of Microorganisms in a Soil Sample Using 16s rDNA Molecular Gene Marker (Nicole Keegan)
20. Making Pine Wine: Enhancing Hydrolysis of Cellulose using Surfactants (David Ireland)
21. Microwave Sintering of Alumina Nanocomposites (Erin Larson)
22. The Isolation and Genomic Analysis of Cellulose Degrading Bacteria (Bobbie Hix)
23. Distributed Health Monitoring Sensors with Time Domain Reflectometry (Steve Gabriel)
24. Use of Thin-Film Piezoelectric Materials for Vibration Damping (Kurt Amundson)
25. Cellulose Degrading Kinetics Using Bacteria from the Deep Underground Homestake Mine, SD (Douglas Shreves)

University of Akron

26. Surface Coating of Electrospun PI Nanofibers with Erbium using Physical Plasma Vapor Deposition (Connie Hubbard)

University of Massachusetts Lowell

27. Transfer of Self-assembled Template-guided Polyaniline onto a Flexible Substrate (Ryan Hoffman, Mark Lawrence)
28. Template-guided Self-assembly of Conductive Plastic in an Electric Field during Injection Molding (Paul Chanley, Ryan Hoffman, Jim Megysey, Jessica Quinn)

University of Wisconsin-Madison

29. Van der Waals Forces and Animal Adhesion: A Gecko Inspired Lesson Plan (Jennifer Ehrlich)

U.S. Dept. of Energy ACTS

30. Data Analysis of Algal Photosynthetic CO₂ Fixation, and H₂ and O₂ Production (Randall Dunkin)

Vanderbilt University

31. Concentration Gradient and Autofluorescence in vitro Concentrations for Age Related Macular Degeneration in Klotho Mice (Jennifer Berry-Rickert)
32. Multimodal Molecular Imaging Agents for In Vivo pH Profiling (Mark Gonyea)