



Nanotechnology for Teachers CHEM 570

The Center for Biological and Environmental Nanotechnology (CBEN) at Rice University is offering a spring course on Nanotechnology for Chemistry, Physics and IPC teachers.

PROGRAM DATES: January 15 – April 16, 2009
Thursday evenings

Time: 6 PM – 8:30 PM
Location: Rice University Campus
Instructors: Dr. John Hutchinson, Professor of Chemistry,
CBEN Director for Education
Dr. Carolyn Nichol, CBEN Associate Director
for Education

Program Benefits

- No fees or costs
- Receive class materials, 45 CPE credit hours plus a \$300 stipend*
- Light dinner provided along with free and convenient parking
- Connect core physics and chemistry concepts to ongoing research in nanotechnology.
- Acquire new lecture strategies to engage middle school and high school students in science.
- Learn about cutting-edge scientific research.
- Try out new classroom demos and laboratory protocols to stimulate your students' interest in the physical sciences
- Interact with scientists in the field of nanotechnology.
- Network with fellow teachers Program participants are eligible to return to Rice University for a summer research internship
- If desired, teachers can register to receive 3 hours of Rice University graduate at a reduced tuition rate of \$575.

Program Audience

- The program is designed for high school science teachers, although middle school teachers are welcome. Nanotechnology is an interdisciplinary field that encompasses physics, chemistry, biology and environmental sciences.

Program Structure

- A presentation on a recent application of nanotechnology
- A round table discussion and light dinner to address questions and focus on integration of content into the classroom
- Discourse on approaches to teaching science with examples and curricular materials

QUESTIONS?

Visit <http://cben.rice.edu> or contact Dr. Carolyn Nichol cnichol@rice.edu

Please apply to matt.huff@rice.edu by December 20, 2008(see application below). We will be accepting applications on a rolling admissions basis, so please apply early.

What *IS* Nanotechnology?

- Materials that are stronger and more flexible than steel
- Electronics in computers and gaming consoles
- Materials for the detection and treatment cancer
- New materials that help bones heal and replace teeth
- Particles that can lead to inexpensive water purification systems
- Additives to cosmetics and sunscreens

**Must be a U.S. Citizen or Permanent Resident to receive the stipend for the course*



Application for
Nanotechnology for Teachers
CHEM 570

Spring Semester, 2009
Email to matt.huff@rice.edu

Mail to: Chem 570 Nanotechnology Teacher Program, CBEN-MS 63, Rice University, P.O. Box 1892, Houston, TX 77251-1892
Due: December 20, 2008

Name: _____ E-mail: _____

Telephone number(s) for leaving a message: _____

School: _____ School Telephone: _____

School District: _____ School FAX: _____

Home Address: _____

What subject(s) are you teaching now? _____

What other subjects have you taught? _____

How long have you taught? _____

Science, mathematics, and technology background (You may attach a resume):

College courses:

Workshops/summer programs

Previous career or other technical experience:

What do you hope to gain from this course?

**Must be a U.S. Citizen or Permanent Resident to receive the stipend for the course*