

Science Saturdays

This and other Science Saturday programs are brought to you by the Wisconsin Initiative for Science Literacy (WISL), directed by Prof. Bassam Z. Shakhshiri of the UW-Madison Chemistry Department, who is well known for his "Science is Fun" and "Science on the Radio" programs.

Exploring the Physical World

Science Saturdays: Exploring the Physical World is prepared and presented by Dr. Rod Schreiner and Dr. Linda Zelewski of the Chemistry Department, Prof. Marc Fink of the School of Music, and Prof. Wendy Crone of the Department of Engineering Physics.

February 14: Polymers

The world is full of polymers, both natural and artificial. Wood, muscle, and fur are all polymers, and so are the plastics we use everyday. You'll examine some of the remarkable properties of polymers and you'll even make some of your own polymers to study and take home.

February 21: How Does It Sound?

In this session, you'll examine how musical sounds are produced, with a special focus on wind instruments. You'll explore how sound is produced on a "double-reed" which you'll make yourself. You'll experiment with the use of wind in producing tone on your instrument with results that may surprise you. You'll be introduced to principles basic to playing any woodwind instrument, investigating finger technique, articulation, and tone quality. You'll learn how "circular breathing" is used to play a long time without pause.

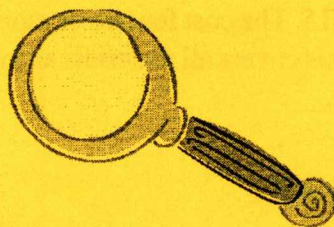
February 28: Nanotechnology

Nanotechnology is the study and design of materials at the nanoscale, the scale of atoms. Nanotechnology is responsible for products that we use daily, including light-emitting diodes (LEDs) and storage devices in computers. Come learn about nanotechnology and experience the excitement of new technology first hand! You'll have fun learning about metal that remembers its shape, a liquid that can be moved and shaped from afar, and much more.

What is WISL?

The Wisconsin Initiative for Science Literacy (WISL) at the University of Wisconsin-Madison has two goals: to promote literacy in science, mathematics, and technology among the general public; and to attract future generations of researchers, educators, and entrepreneurs to scientific fields. Our offerings include not only locally known programs such as "Science is Fun," but also science outreach to urban children (the Science in the City project), outreach to science teachers (Conversations in Science), and collaborative programs between the sciences, arts and humanities.

For more information,
visit our "Science is Fun" website at
www.scifun.org



**Watch for announcements
of more
"Science Saturday"
sessions!!**

Spring 2004

Science Saturdays

Exploring the Physical World



For middle school students
and their parents

Saturday Mornings

February 14, 21, and 28
9:00 a.m. to 12:00 noon
at

University of Wisconsin-Madison

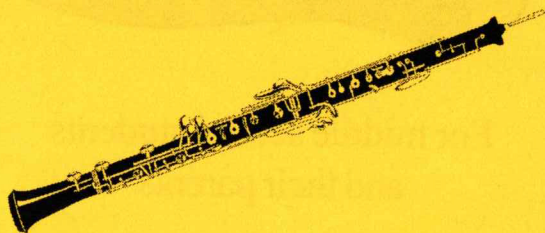
www.scifun.org

Are you Ready for Fun?

Are you in grades six to eight — or the parent of a student in those grades — and are the two of you ready for three Saturdays of fun? Are you ready to build your own scientific apparatus and use it to investigate the world around you? Then you need *Science Saturdays: Exploring the Physical World!*

Build and Experiment

Each Saturday students and parents work together on different and challenging science projects. For example, in the February 14 session, you'll examine the remarkable properties of polymers and even make some of your own to take home. In the February 21 session, you'll make your own musical instrument and use it to learn how sound is produced. In the February 28 session, you'll investigate the atomic arrangements of new high-tech materials and learn how that affects their behaviors.



The sessions may be taken as a series, or you can choose just the sessions you want. During each of the Saturday sessions, you will conduct and observe fun experiments in university laboratories. You will also receive instructions for performing additional experiments at home.

Learn New Skills

As you record your observations, you will also learn how to draw to scale and how to make your own special observation tools such as hand-made magnifiers. You will be doing real science—raising questions, making observations, and conducting experiments to find answers. You will be responsible for keeping good records in your own personal notebook so that you can share all your exciting findings with the group at the next session.

For Children *and* Their Parents

This program is for one child and one parent together. In fact, we *require* that the parent (or grandparent or guardian) make a firm commitment to attend all selected sessions and fully participate in the hands-on activities. Parents will be paired with their children in small teams aided by staff. Child and parent will get more out of the session because the other is present.

Cost

Cost for one session for one child and parent together is \$15. The cost for two or more sessions is \$10 each. This covers all materials and a snack at each session.

Questions?

Contact us at

Wisconsin Initiative for Science Literacy

Department of Chemistry
1101 University Ave.
Madison, WI 53706
(608) 263-2424
scifun@chem.wisc.edu

Registration for Physical World

Parents should complete the form below and also write a brief statement about what your child and you hope to gain from the Saturday Sessions. **We must receive your application by January 30.** You will be notified of selection during the following week and will receive directions to the program site.

We wish to attend:

☐ **Polymers**
Feb 14

☐ **Sound**
Feb 21

☐ **Nanoworld**
Feb 28

Child's name (please print):

(first)

(last)

Child's age: _____ years Child's grade: _____

School name: _____

Name of participating parent or guardian:

(first)

(last)

Address:

(street)

(city)

(zip code)

Parent's phone: _____

Parent's email: _____

Parent's signature: _____

Clip and mail with your letter and check (\$15 for 1 session, \$10 each for 2 or more) **before January 30 to: Wisconsin Initiative for Science Literacy, Department of Chemistry, 1101 University Ave., Madison, WI 53706-1396.**