

SCIENCE IS FUN

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WISCONSIN INITIATIVE FOR SCIENCE LITERACY

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August 12, 2009 ~ Madison Club ~ Madison, WI

WISCONSIN INITIATIVE FOR SCIENCE LITERACY

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A National Initiative Headquartered at the
University of Wisconsin-Madison

GOALS

Promote literacy in science, mathematics and
technology among the general public

Attract future generations to careers in research,
teaching and public service

WISCONSIN INITIATIVE FOR SCIENCE LITERACY

- Science is Fun!
- Science on the Web
- Capitol Science
- Conversations in Science
- Professional Development
for Teachers & Faculty
- Women in Science
- Science, the Arts & Humanities
- Science, Religion & Ethics
- Science & Health
- Science in the City
- Science, Politics & the Economy
- Research & Development in
Chemical Demonstrations
- Once Upon a Christmas Cheery,
In the Lab of Shakhashiri
- Science on the Radio

New Discoveries

Enlightenment

Societal Progress

Societal Problems

Science-rich Sector

Science-poor Sector

Scientific Literacy

Science Literacy

Science literacy does not imply detailed knowledge of chemistry or physics or biology, but rather a broad understanding and appreciation of what science is capable of achieving and, equally important, what science cannot accomplish.

Science literacy will enable the public to make informed choices and to reject shams, quackery, unproven conjecture, and to avoid being bamboozled into making foolish decisions where matters of science and technology are concerned.

Science literacy is for everyone:

**chemists, artists, humanists,
teachers, all professionals,
the general public, youth
and adults alike.**

Clarity of Purpose

The Purpose of Education:

**To enable individuals to fulfill
their human potential.**

The Purpose of Research:

To advance knowledge.

The Purpose of Technology:

To advance the human condition.





Greenhouse Gases

- Water Vapor
- Carbon Dioxide
- Methane
- Dinitrogen Oxide

CLARITY OF PURPOSE

WHAT

WHY

HOW

WHEN

WHERE

ASSESSMENT

- PURPOSE
- TOOLS
- DOCUMENTATION
- INDICATORS OF PROGRESS
- INFLUENCE ON STUDENTS
- AFFECT ON INSTRUCTOR
- VALUE

- **Chemical Facts & Phenomena**

- Chemical Models & Theories
- Chemical Facts & Phenomena

- Chemical Skills
- Chemical Models & Theories
- Chemical Facts & Phenomena

Attitude and Motivation

Good Teachers Are:

Competent in their disciplines

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Committed to their disciplines and to the profession of teaching

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Comfortable with the methods and techniques they use

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Comfortable with the methods and techniques they use

Compassionate with students (and colleagues)

“To me, teaching is the ultimate performing art, and all performing arts are interactive. You always have to connect with the people... You don’t just present, you have to connect. And I find it difficult [online]... It’s one thing to give students the illusion that the teacher is really there. What’s much harder is to give the teacher the sense that the students are really there.”

Jaron Lanier,

Computer scientist who coined the term “virtual reality”

“Teachers owe it to themselves to teach what they love. In so doing, they nourish their students. They owe it to themselves to show their students who they are. To do this, they need to know what they love, and who they are – not a simple task, but surely the anchor without which they’ll drift.”

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Diane Chapman Walsh
President of Wellesley College

“Great teachers are the ones who weave webs of life-affirming connection for their students. Proficiency with technology, tightly framed learning outcomes, even multicultural awareness are secondary to the passion teachers bring to their subject matter, the compassion, awe, and joy they embody and communicate. Great teaching comes from spirit, not from technique.”

Diane Chapman Walsh
President of Wellesley College

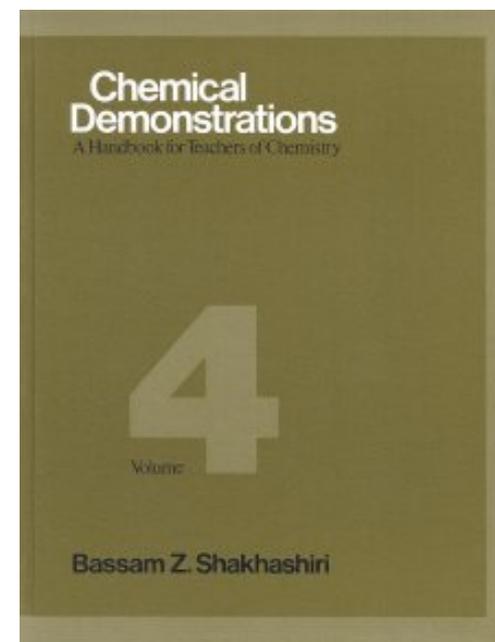
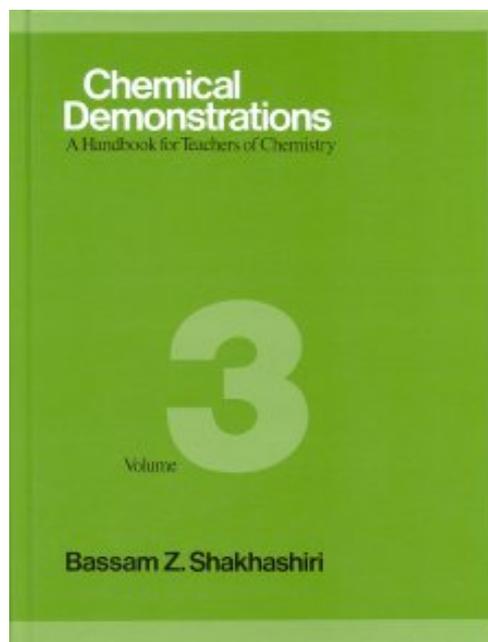
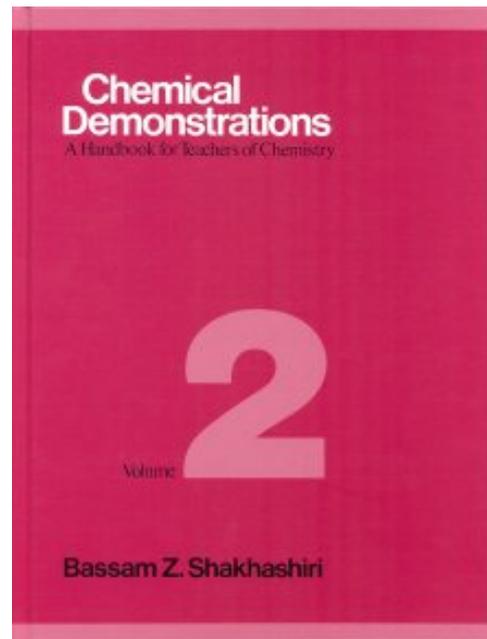
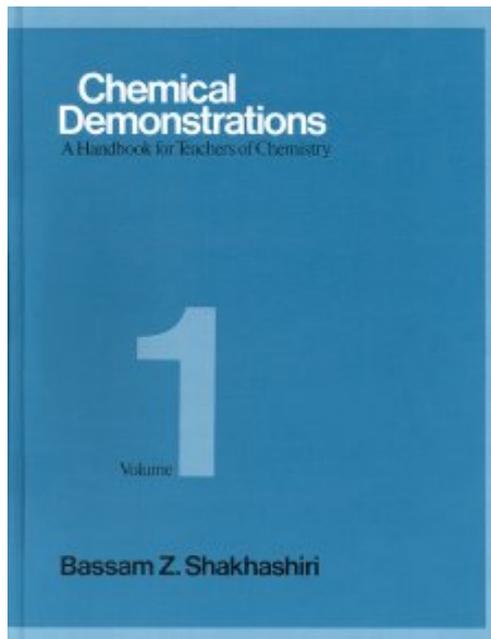
Humane

Humane

Humanitarian

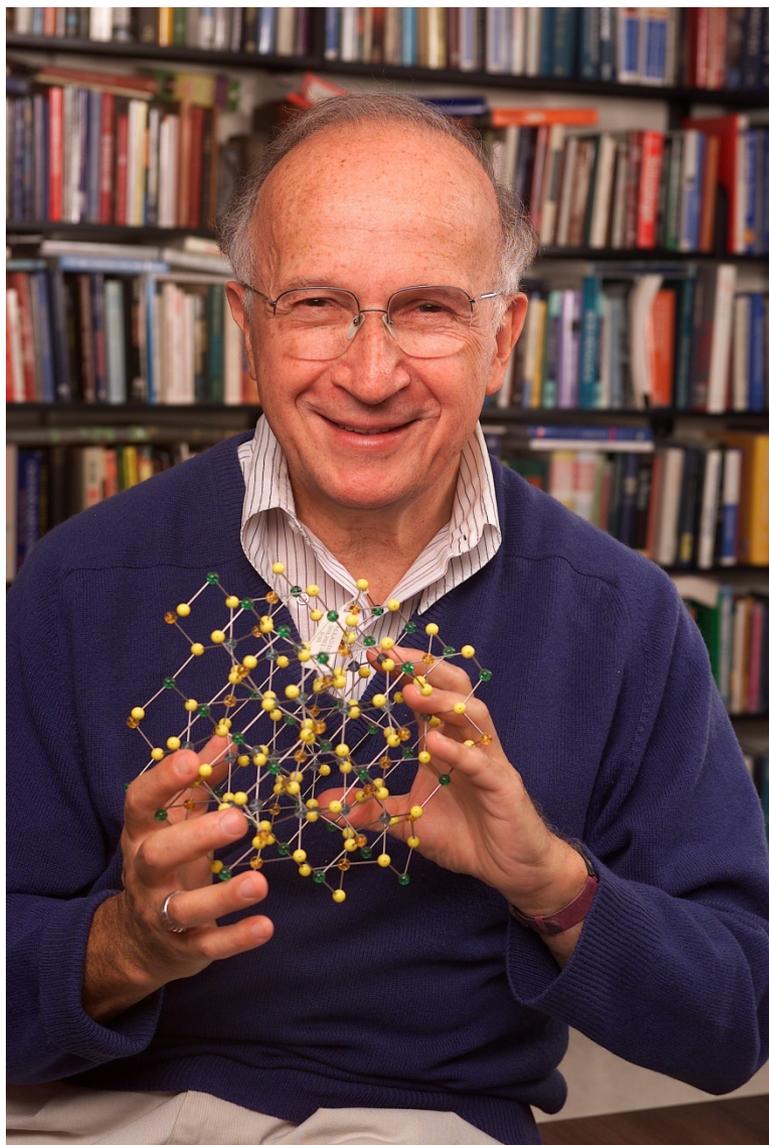
**There is no higher or lower
knowledge, but one only,
flowing out of
experimentation.**

Leonardo

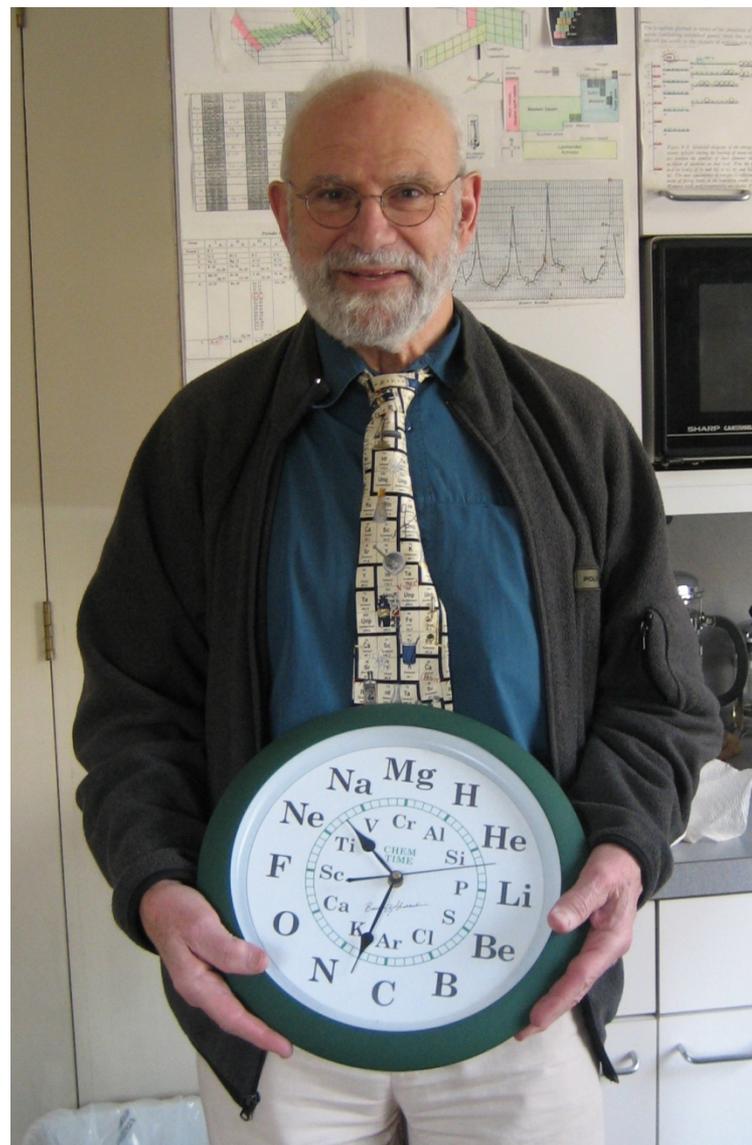






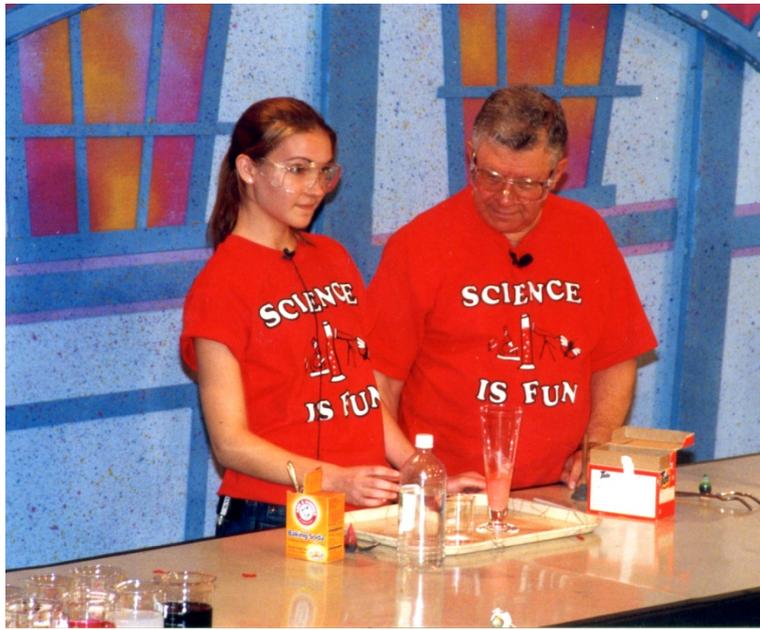


Roald Hoffmann



Oliver Sacks





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