

VISITING SPEAKERS...TODAY...

**Yingming Zhao, Pence, Alberta Regional Centre seminar series 2003/2004**, Biochemistry, University of Texas Southwestern Medical Center, Dallas, Texas will speak on "Novel proteomics technologies for probing organelles and protein modifications" on Friday, February 27/04 at 11:00 p.m. in V-107

The University of Alberta Department of Chemistry *organic division visiting speaker presents Prof. Dirk Trauner*, Department of Chemistry, University of California-Berkeley who will speak on "Chemistry mimicking nature – and taking it a step further" on Monday, March 1, 2004 at 11:00 a.m. in V-107.

**Prof. Robert Schurko**, Department of Chemistry and Biochemistry, University of Windsor, Windsor, Ontario will speak on "Solid-state NMR of quadrupolar nuclei in metallocenes" on Wednesday, March 3, 2004 at 2:00 p.m. in E3-25. *An information session about graduate studies at the University of Windsor for interested undergraduate students will be held by Prof. Schurko Wednesday, March 3, 2004 from 13:00-13:50 in E3-25.*

The University of Alberta Department of Chemistry *analytical division visiting speaker presents Prof. Luis Colon*, Department of chemistry, State University of New York (SUNY) Buffalo, New York, who will speak on "Chromatographic materials and very high pressure approaches for liquid chromatography" on Friday, March 5, 2004 at 4:00 p.m. in V-106.

The University of Alberta Department of Chemistry *Alberta Ingenuity Centre for Carbohydrate Sciences presents visiting speaker Dr. Robert A. Field*, Centre for carbohydrate Chemistry, School of Chemical Sciences and Pharmacy, University of East Anglia, Norwich, Great Britain, who will speak on "from glycosides and sugar nucleotides towards chemical genomics" on March 5, 2004 at 11:00 a.m. in V-107

Department of Chemistry, University of Alberta 2004 Merck Frosst Lecture series presents, **Prof. Alois Furstner**, Max-Planck-Institut fur Kohlenforschung, Germany who will speak on "Recent advances in alkene and alkyne metathesis" on Monday, March 15, 2004 at 11:00 a.m. in V-107.

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**Bilkiss B. Issack**, will speak on "The dynamics of glassy systems" on Wednesday, March 3, 2004 at 11:00 a.m. in V-107.

NOTICES**Graduate Students who are on Study Permits**

If your current social insurance card does not have an expiry date on it, please see Ilona by the end of February.

**NMR Newsletter on the web with the following content:** d600 - printing and plotting , Data station for remote access to ibdw , NMR-related forms on the web , ibd5: registration for access , Use of spectrometers without on-line reservations , Data time axe for gennmr and ch461

EMPLOYMENT OPPORTUNITIES

ARE POSTED ON THE BULLETIN BOARD  
ACROSS FROM THE ELEVATORS ON THE THIRD FLOOR  
PLEASE DO NOT REMOVE THE EMPLOYMENT NOTICES FROM  
THE BULLETIN BOARD

**Employment opportunities are posted on a new internet site:**  
<http://www.careerowl.ca>

**ChemRoutes Corporation** is a new Edmonton-based chemical contract synthesis company supplying intermediates, proprietary kits and tools to the pharmaceutical, biotechnology, chemical and genomic industries.

To cope with the recent growth, our development and production laboratory facility has immediate requirements for highly motivated and creative candidates who can interact effectively in a team environment.

**Industrial Post-Doc Scientists:** Recent Ph.D. graduate in medicinal/organic chemistry responsible for route development, optimization and synthesis of new ChemKits™

**Organic/Medicinal Chemists:** As a member of a dedicated team, you will participate in the design, synthesis and characterization of target molecules. Candidates with Ph.D./MSc/B.Sc. degrees in Organic and Medicinal Chemistry and experience in multi-step synthesis of complex organic molecules in the biotech or pharmaceutical industry are encouraged to apply. Strong interpersonal and communication skills are required.

Please respond in confidence by email stating desired position, experience, education and salary expectation to [chemroutes@worldnet.att.net](mailto:chemroutes@worldnet.att.net).

Resumes can also be faxed to 780-496 9307.

**University of Notre Dame**, postdoc position in computational sciences, in the Department of Chemistry and Biochemistry.  
**Eastern Kentucky pending approval**, Department of Chemistry requires Assistant Prof. Of Chemical Education (tenure track); Assistant Prof. Of Organic Chemistry (tenure track); visiting prof. Of Chemistry (non-tenure track)  
**York University** is seeking candidates for two tenure track assistant Professor positions in the area of organic and inorganic chemistry.

**Outreach Activities** can be accessed at:

[www.ualberta.ca/Outreach/whats%20new.htm#science](http://www.ualberta.ca/Outreach/whats%20new.htm#science)

...Notices continued...

**Cumulative Exams:** The next cumulative examination will be held on Saturday, March 6, 2004 at 11:00 a.m. in Room E5-36.

**Chemical Biophysics Symposium 2004** — March 12 - 21, 2004 in Toronto. The abstract submission deadline is TODAY (Friday, February 6). Please note that abstracts for the invited speakers are now available on the web site at

[www.chem.utoronto.ca/symposium/biophys/cbp2k4/](http://www.chem.utoronto.ca/symposium/biophys/cbp2k4/)

*A warm Chemistry welcome goes to Corolla Ellis in purchasing who will be with us until mid-April.*

....more exciting news on next page...

## A Month on Physics Education/Participation

The *IONCMASTE Discussion Group* starts a new series with the book **They're not Dumb, They're Different: Stalking the Second Tier** by Sheila Tobias. (An occasional paper on neglected problems in science education published by Research Corporation.)

Wednesday, March 3, 2004 (Paper 3 of a series)

### 3. Towards a More Conceptual Way of Teaching Physics

Does physics always have to be quantitative? Can't it be qualitative? Can you know physics if you just know it quantitatively? What does qualitative/conceptual have to offer?

<http://www.ioncmaste.ca/> and [ioncmaste@ualberta.ca](mailto:ioncmaste@ualberta.ca)

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### Song of the elements

There's antimony, arsenic, aluminum, selenium,  
And hydrogen and oxygen and nitrogen and rhenium  
And nickel, neodymium, neptunium, germanium,  
And iron, americium, ruthenium, uranium,  
Europium, zirconium, lutetium, vanadium  
And lanthanum and osmium and astatine and radium  
And gold, protactinium and indium and gallium (inhale)  
And iodine and thorium and thulium and thallium.

There's yttrium, ytterbium, actinium, rubidium  
And boron, gadolinium, niobium, iridium  
And strontium and silicon and silver and samarium,  
And bismuth, bromine, lithium, beryllium and barium.

There's holmium and helium and hafnium and erbium  
And phosphorous and francium and fluorine and terbium  
And manganese and mercury, molybdenum, magnesium,  
Dysprosium and scandium and cerium and cesium  
And lead, praseodymium, platinum, plutonium,  
Paladium, promethium, potassium, polonium,  
Tantalum, technetium, titanium, tellurium, (inhale)  
And cadmium and calcium and chromium and curium.

There's sulfur, californium and fermium, berkelium  
And also mendelevium, einsteinium and nobelium  
And argon, krypton, neon, radon, xenon, zinc and rhodium  
And chlorine, cobalt, carbon, copper,  
Tungsten, tin and sodium.

- Tom Lehrer

# This Week in History

## February 27

- [Alice Hamilton](#) born 1869: industrial toxicology; hazards of [carbon monoxide](#), [mercury](#), [tetraethyllead](#), [benzene](#), and others; first woman professor at [Harvard](#).
- [James Chadwick](#)'s note announcing the [possible discovery of the neutron](#) is published in [Nature](#), 1932.
- Carl Friedrich Wenzel **died** 1793 (birth date unknown c. 1740): stoichiometry; concentration determines the speed of chemical reactions.
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## February 28

- [Edward Goodrich Acheson](#) receives [US patent number 492,767](#) for production of artificial [silicon carbide \("Carborundum"\)](#), 1893.
- [Steven Chu](#): laser cooling and trapping of atoms; [Nobel \(physics\)](#), 1997.
- [Edmond Frémy \(pdf\)](#) born 1814: plumbates, stannates, and ferrates; preparation of anhydrous [hydrogen fluoride](#); coloring of flowers and [saponification of fats](#)
- [Philip Showalter Hench](#) born 1896: [hormones of the adrenal cortex](#); [Nobel Prize \(Medicine\)](#), 1950
- [Linus Carl Pauling](#) born 1901: molecular structure, bonding, valency, and resonance ([The Nature of the Chemical Bond](#)); [Nobel Prize](#), 1954; [Nobel Peace Prize](#), 1962
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*If anyone would like to announce Chemistry achievements and/or recognitions of our professors and/or Graduate Students in our "Achievements and Recognitions Section" please e-mail [jeannette.loiselle@ualberta.ca](mailto:jeannette.loiselle@ualberta.ca)*