CHEMISTRY NEWSLETTER

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Happy St. Patrick's Day March 17/04

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VISITING SPEAKERS

*** TODAY ***

Dr. R. Tom Baker, Chemistry Division, Los Alamos National Laboratory will speak on "Precious metal phosphenium complexes as potential bifunctional catalysts" on Friday, March 12, 2004 at 2:00 p.m. in E3-25.

Department of Chemistry, University of Alberta 2004 Merck Frosst Lecture series presents, **Prof. Alois Fürstner**, Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr, 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.

Prof. Jed Harrison, Department of Chemistry, University of Alberta, CSC lecture series, will speak on "microchip technologies for biochemical analysis" on Wednesday, March 17, 2004 at 7:00 p.m. in V-110.

The Department of Chemistry, University of Alberta Analytica Division presents **Prof. Richard Oleschuk**, Department of Chemistry, Queen's University, Kingston, Ontario who will speak on "Low cost polymeric microfluidic devices: Fabrication, surface modification and detection" on Friday, March 19, 2004 at 4:00 p.m. in V-106.

The Department of Chemistry, University of Alberta Analytica Division presents **Prof. Kevin Thurbide**, Department of Chemistry, University of Calgary who will speak on "Chromatographic detection using acoustic signals from an oscillating frame" on Friday, March 26, 2004 at 4:00 p.m. in V-106.

502 SEMINAR

Yong Zeng. will speak on Miniaturized gas ionization ssensor using carbon nanotubes" on Wednesday, March 17/04 in V-107 at 11:00 a.m.

Science News

CBC News – March 10/04

SASKATOON - Leon Katz, a key player in the development of Doppler radar, the weather forecasting tool, has died at age 94.

Katz was a professor emeritus in nuclear physics at the University of Saskatchewan.

He was a driving force behind the university's linear accelerator, which produces radiation for cancer therapy. The device helped researchers investigate the forces at work in the atomic nucleus.

Notices

Looking for your March pay cheque later this month? The remittance advices given out at the end of each month will now be accessible through Bear Tracks. Stay tuned for more info on how to access your remittance advices...

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

Graduate Student/Post-doc Career Advice: The UofA Library has a subscription to Science's Next Wave, a weekly online publication that covers scientific training, career development, and the science job market. It can be accessed through the library or at nextwave.sciencemag.org/ca/

Students interested in Pharmaceutical Sales and Marketing jobs should search for vacancies online at http://www.sciencejobs.com

National Institute for Nanotechnology requires a Electron Microscopy Technical Officer. Contact person Thelma Finch, Human Resources Systems Coordinator (780492-8695

University College of Cariboo requires full-time, ongoing faculty position for chemical biology.

University of Kansas, Lawrence KS has post doctoral positions in biochemistry/biophysics and microbiology, Department of Medicinal Chemistry. Send application to sdavid@ku.edu.

Brandon University, the Department of Chemistry has an opening for a tenure track position for biochemistry. E-mail wrightj@brandonu.ca

Alberta Sulpher Research Ltd. Located in the Department of Chemistry at the University of Calgary is seeking to appoint a physical chemist.

Bayer Pharmaceuticals Corporation, Department of Chemistry, West Haven facility is seeking a synthetic organic chemist.

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 ChemKitsTM

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

<u>chemroutes@worldnet.att.net</u> . 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.

Outreach Activities can be accessed at:

www.ualberta.ca/Outreach/whats%20new.htm#science

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

History of St. Patrick

The person who was to become St. Patrick, the patron saint of Ireland, was born in Wales about AD 385. His given name was Maewyn, and he almost didn't get the job of bishop of Ireland because he lacked the required scholarship.

Far from being a saint, until he was 16, he considered himself a pagan. At that age, he was sold into slavery by a group of Irish marauders that raided his village. During his captivity, he became closer to God.

He escaped from slavery after six years and went to Gaul where he studied in the monastery under St. Germain, bishop of Auxerre for a period of twelve years. During his training he became aware that his calling was to convert the pagans to Christianity.

His wishes were to return to Ireland, to convert the native pagans to Christianity. But his superiors instead appointed St. Palladius. But two years later, Palladius transferred to Scotland. Patrick, having adopted that Christian name earlier, was then appointed as second bishop to Ireland.

Patrick was quite successful at winning converts. And this fact upset the Celtic Druids. Patrick was arrested several times, but escaped each time. He traveled throughout Ireland, establishing monasteries across the country. He also set up schools and churches which would aid him in his conversion of the Irish country to Christianity.

His mission in Ireland lasted for thirty years. After that time, Patrick retired to County Down. He died on March 17 in AD 461. That day has been commemorated as St. Patrick's Day ever since.

Much Irish folklore surrounds St. Patrick's Day. Not much of it is actually substantiated.

Some of this lore includes the belief that Patrick raised people from the dead. He also is said to have given a sermon from a hilltop that drove all the snakes from Ireland. Of course, no snakes were ever native to Ireland, and some people think this is a metaphor for the conversion of the pagans. Though originally a Catholic holy day, St. Patrick's Day has evolved into more of a secular holiday.

One traditional icon of the day is the shamrock. And this stems from a more bona fide Irish tale that tells how Patrick used the three-leafed shamrock to explain the Trinity. He used it in his sermons to represent how the Father, the Son, and the Holy Spirit could all exist as separate elements of the same entity. His followers adopted the custom of wearing a shamrock on his feast day.

The St. Patrick's Day custom came to America in 1737. That was the first year St. Patrick's Day was publicly celebrated in this country, in Boston.





University of Alberta Department of Chemistry Achievements and Recognitions

Congratulations to Tom Brisbane on winning the 2004 Inaugural Faculty of Science Service Award. This Award is given to recognize outstanding contributions by an individual staff member for service to the Department, Faculty, University and/or Community.

Congratulations also to Christopher Harrison who was presented with the R. Norman Jones Award to attend the Pittcon conference. This award has been set up to help students expand their education by attending conferences.

****** This Weekend in History

March 13

<u>Joseph Priestley</u> born 1733: pioneer pneumatic chemist; discovered <u>oxygen</u> (O, element 8, which he called "dephlogisticated air"), ammonia, hydrogen chloride, carbon monoxide, sulfur dioxide, and <u>nitrogen oxides</u>; <u>Experiments and Observations on Different Kinds of Air</u>; advocate of the phlogiston theory.

<u>John Hasbrouck van Vleck</u> born 1899: electric and magnetic properties of solids; crystal field and ligand field theory; electron correlcation; Nobel Prize (Physics), 1908.

March 14

<u>Ronald Breslow</u> born 1931: organic chemistry (<u>aromaticity</u> and <u>antiaromaticity</u>) and biochemistry (reaction mechanisms and artificial enzymes). (<u>Click here</u> to see research interests.)

<u>Paul Ehrlich</u> born 1854: immunity and chemotherapy; discovered <u>Salversan and neosalversan</u>; improved laboratory staining techniques; <u>Nobel Prize (Medicine)</u>, 1908

Albert Einstein born 1879: <u>fundamental contributions in physics</u> including <u>theory of relativity</u>; <u>photoelectric effect</u>; <u>spontaneous</u> and <u>stimulated emission</u>; fundamental contributions to quantum and statistical physics (<u>Bose-Einstein distribution</u>); Nobel Prize (Physics), 1921

Ernst Späth [pdf] born 1886: synthesis of <u>alkaloid natural</u> products including <u>nicotine</u> and harmaline

<u>Thomas Wilson</u> born 1860: electrothermal furnace; manufacture of <u>calcium carbide</u>