Comments Received from Named Scientists

Department of Chemistry, York University
4700 Keele Street, Toronto, ONTARIO M3J 1P3, CANADA

For suggestions, corrections, additional information, and comments please send e-mails to c1000@careerchem.com

http://www.chem.yorku.ca/NAMED/

Jacob Bigeleisen
Joseph Bunnett
Greg Choppin
Wallace Cleland
Jack Dunitz
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Ernest Grunwald
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Robert M. Williams

Jacob Bigeleisen

Date: Wed, 27 Sep 2000 21:22:32 -0400
From: jbigeleisen@notes.cc.sunysb.edu
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

I am responding to your request about my scientific genealogy. I received my Ph.D. at the University of California, Berkeley in 1943. My thesis advisor was Gilbert N. Lewis, who received his Ph.D. at Harvard in 1899. His thesis advisor was Theodore William Richards.

I have looked at your genealogy page with the description of Lewis'

researches. Lewis was not the first to measure a thermodynamic isotope effect. In the 1920s Keesom and Haantjes measured the difference in vapor pressures of the neon isotopes. In the work that led to the discovery of deuterium in 1931, Urey, Brickwedde and Murphy achieved a partial separation of HD from H2 by fractional distillation. Lewis first works appeared in 1933 in a long series of papers with Ronald T. MacDonald. I have documented this in a paper published in J. Chem. Ed. in the 1980s.

The research I did for my thesis was concerned with the photo-production of semiquinones and free radicals and the measurement of their absorption and fluorescence spectra. Some of the work involved the use of polarized light.

My research since I received my doctorate has been the chemistry of isotopes - experimental and theoretical in both equilibrium and kinetic systems.

Jacob Bigeleisen

Joseph Bunnett

Date: Wed, 23 Aug 2000 14:31:23 -0700 (PDT)
From: Joe Bunnett <bunnett@chemistry.ucsc.edu>
To: jandraos@yorku.ca
Subject: genealogy

Dr. John Andraos
Dear Dr. Andraos:

I started this letter and inadvertently hit the [Send] box before I was really finished, and before your e-address was properly in place. And so I'm sending it again, more complete.

For your scientific genealogy trees project, I contribute the following information:
(1) I did graduate work to the Ph.D. at the University of Rochester, and my Ph.D. research advisor was Prof. Dean Stanley Tarbell.
(2) Tarbell did his graduate work at Harvard University and his Ph.D. research advisor was Paul D. Bartlett.
(3) Richard A. Bartsch, now Professor and Chemistry Dept. Chairman at Texas Tech University was my Ph.D. student at Brown University.

To complicate your project, I suggest that you should also heed the professors with whom chemists did postdoctoral work. In many cases the postdoctoral research experience has had more impact on the career of a chemists than has experience as a graduate student.

I faintly recall that in earlier years genealogy trees of the sort you are constructing were assembled. Maybe the Chemical Heritage Foundation in Philadelphia has copies of them.

Good luck with the project.

Yours, J. F. Bunnett

Greg Choppin

Date: Thu, 31 Aug 2000 13:05:48 -0400

From: Greg Choppin <gchoppin@chemmail.chem.fsu.edu>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

Dear Dr. Andraos
My PhD professor was George W. Watt who received his PhD from W. C. Fernelius. Watt's PhD was from Ohio State U. but I don't know where Fernelius' did his PhD work. Hope this helps as this is an interesting project and I enjoyed your web page.
Greg Choppin

Wallace Cleland

Date: Wed, 23 Aug 2000 13:10:28 -0600
From: Wallace Cleland <cleland@enzyme.wisc.edu>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

My doctoral advisor was Marvin J. Johnson of the Biochemistry Dept. at the University of Wisconsin.
His major professor was W. H. Peterson, also of the Biochemistry Dept. at U. Wisconsin.
Sincerely, W. W. Cleland

W. Wallace Cleland Cleland@enzyme.wisc.edu
1710 University Ave phone 608-262-1373
Madison, WI 53705 FAX 608-265-2904

Jack Dunitz

Date: Mon, 28 Aug 2000 17:40:12 +0200
From: J.D.Dunitz <dunitz@org.chem.ethz.ch>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

Dear Dr. Andraos,

In reply to your questions: my doctoral advisor was Professor John Monteath Robertson (1900-1989), and his doctoral advisor was G. G. Henderson (1862-1942), both Glasgow University. After obtaining his Ph.D. at Glasgow, Robertson went to the Davy-Faraday Laboratory of the Royal Institution in London, where he worked for several years with Sir William Henry Bragg in X-ray crystallography. He then held posts at Sheffield before returning to Glasgow as Gardiner Professor of Chemistry in 1942, a post that he held until his retirement in 1970.

After my Ph.D. work with Robertson, I held post-doc positions at Oxford University (Dorothy Crowfoot Hodgkin), Caltech (Linus Pauling and Verner Schomaker) and the Royal Institution (Sir William Laurence Bragg) before coming to the ETH in Zurich as Professor in 1957.

I wish you every success in your endeavour!

Jack Dunitz

Prof. Jack D. Dunitz
dunitz@org.chem.ethz.ch

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ETH-Zentrum
CH-8092 Zurich
Switzerland
http://www.chem.ethz.ch/D-CHEM-Prof/dunitz/dunitz.html

Date: Wed, 30 Aug 2000 17:26:33 +0200
From: J.D.Dunitz <dunitz@org.chem.ethz.ch>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

Dear Dr. Andraos,

I got my Ph.D. in early 1947 and had already left Glasgow to join Dorothy Hodgkin's group in Oxford (Oct 1946-July 48, Sept 51-August 53). I was at Caltech from Sept 48-Aug 51 and from Sept 53-Aug 54. There was then a period as Visiting Scientist at NIH with Alex Rich (Sept 54-December 55) before joining Bragg at the Royal Institution (Jan 56-Aug 57). I was then Professor of Chemical Crystallography at the ETH from Oct 57 until my official retirement in April 90. I still have an office here and try to keep busy.

Best regards,

Jack Dunitz

Prof. Jack D. Dunitz
dunitz@org.chem.ethz.ch

Organic Chemistry Laboratory phone: +411 632 2892
Swiss Federal Institute of Technology FAX: +411 632 1109
ETH-Zentrum
CH-8092 Zurich
Switzerland
http://www.chem.ethz.ch/D-CHEM-Prof/dunitz/dunitz.html

William H. Graham

Date: Thu, 31 Jan 2002 22:29:15 -0600
From: William Graham <whgram@worldnet.att.net>
To: jandraos@yorku.ca
Subject: Correction of reference for the Graham Reaction

Parts/Attachments:

Dear Dr. Andraos:

You cannot imagine how flattered I am to be listed on your American Tree #4 and the inclusion of the so-called Graham Reaction among your name reactions. To be listed with the historic giants of chemistry is an honor for which I hardly feel worthy.

The purpose of my email is to correct the reference that is listed for the Graham Reaction. The reference shown is for a different diazirine synthesis, but the Graham Reaction is considered to be the one-step synthesis of halo-diazirines from amidines. This latter reference is: Graham, W. H., J. Am. Chem. Soc. 1965, 87, 4396. Professor Robert A. Moss of Rutgers Univ. seems to have coined the name for the reaction, and he has reviewed it in M. T. H. Liu's book, Chemistry of Diazirines, Vol. I.

A side note that might be of interest to you is that my father was born on Vancouver Island, British Columbia, Canada, but of American parents, and they returned to the United States when he was just two years old.

Your site is surely one of the most interesting I have seen concerning the history of chemistry and I would hope that you will expand it even more! Congratulations for the very great amount of labor that must have gone into it.

William Hardin Graham

Ernest Grunwald

Date: Sat, 26 Aug 2000 14:11:55 EDT
From: EEGrun@aol.com
To: jandraos@yorku.ca
Subject: Scientific Genealogy Project

Dear Dr. Andraos:

Here's the info I believe you want:

Ernest Grunwald
PhD, 1947, University of California at Los Angeles
Advisor: Saul Winstein

Saul Winstein
PhD., 1938, Cal. Tech.
Advisor: Howard J. Lucas

Good luck with your project.
Sincerely,

Ernest Grunwald

Date: Thu, 31 Aug 2000 13:52:06 EDT
From: EEGrun@aol.com
To: jandraos@yorku.ca
Subject: Re: Scientific Genealogy Project

Dear Dr; Andraos:

N.J. Holness was a student of Saul Winstein's whose thesis was published in JACS in 1954. I would infer that he got his Ph.D. in 1953. We did not overlap at UCLA, but I knew him. His PhD thesis was a groundbreaking study of the reactivity of conformational isomers. Good luck.

Ernest Grunwald

Edward Kosower

Date: Sun, 3 Sep 2000 20:31:18 +0300
From: ed kosower <kosower@post.tau.ac.il>
To: John Andraos <jandraos@yorku.ca>
Cc: ed kosower <kosower@post.tau.ac.il>
Subject: Scientific genealogy project

Dear John, In response to your request, I send the following information. The dates may be off by a year, and I am not absolutely sure that Frank Westheimer worked with Conant. I hope this is sufficient for your purposes. I found your lists fascinating, although I have not yet had the time to look at all. Also, I did not choose to look for a solvent parameter because of my training with Winstein, but came across the phenomenon underlying the parameter in the course of completely unrelated work. With best wishes, Ed Kosower

Chemical genealogy

Edward M.Kosower
Date & Place of Birth: Brooklyn, New York (USA), February 2, 1929
Academic Training:
Mass. Inst. Technology (MIT), 1945-48; B.Sc.
B.Sc.Thesis:Reacns. Li Diethylamide w.Chlorotoluenes (Prof.J.D.Roberts)

University of California at Los Angeles, 1948-52; Ph.D.
Ph.D. Thesis: Homoallylic (i-sterol) Rearrangement (Prof. S. Winstein)

National Institutes of Health Postdoctoral Fellow, 1952-54
Org. Chem. Inst., Univ. of Basel, Switzerland, 1952-53 (Prof.C.A. Grob) Dept.Chem. Harvard Univ., Cambridge, Mass. 1953-54 (Prof.F.H.Westheimer)

John D. Roberts, Ph.D. at UCLA [University of California at Los Angeles] in 1944 under he direction of William G. Young on Allylic

Grignard Reagents.
NRC Fellow at Harvard (with P.D.Bartlett) 1945-6

Saul Winstein, Ph.D. at California Institute of Technology (Caltech) 1938/9 under the direction of Howard J. Lucas
NRC Fellow at Harvard (with P.D.Bartlett) 1939-40

William G. Young, Ph.D. at California Institute of Technology (Caltech) 1932? under the direction of Howard J. Lucas

The bulk of the information comes from J.D.Roberts, "The right place at the right time", series on Profiles, Pathways, and Dreams, 1990.

Cyril A. Grob, Ph.D. under the direction of Prof. T. Reichstein, Organic Chemistry Institute, University of Basel, Switzerland. Postdoctoral fellow with Saul Winstein, UCLA. Now emeritus professor at University of Basel.

Frank H.Westheimer, Ph.D. at Harvard under the direction of James A.Conant?, 1935
NRC Fellow at Columbia Univ. (L.P.Hammett?) 1935-6 Now emeritus professor at Harvard University

Edward M.Kosower
Emeritus Professor of Chemistry tel 972-3-6408556
School of Chemistry fax 972-3-6409293
Tel-Aviv University kosower@post.tau.ac.il
Tel-Aviv 69978 ISRAEL

Barry Lever

Date: Sun, 12 Nov 2000 10:49:08 -0500
From: Barry Lever <blever@yorku.ca>
To: jandraos@yorku.ca
Cc: Serge Gorelsky <serge@yorku.ca>
Subject: Genealogy

John: I visited your genealogy site- very nice indeed. I might quibble that I am on a direct line in Hoffman tree #1 and I am not noted so !!!!
Linstead ---> Elvidge (Ph.d. stud Linstead, then Reader Imp. Sci) --> ABPL
Was it your intention to show how Chem Dept York people link to these lines ?? Obviously that would be very nice to do.

Barry

Reginald B. Little

Date: Mon, 27 Aug 2007 10:55:06 -0700 (PDT)
From: Reginald Little <redge_little@yahoo.com>

To: jandraos@yorku.ca
Cc: Reginald Little <redge_little@yahoo.com>
Subject: Fwd: Direct Confirmation of the Little Effect for both Covalence and Electron Transfer Reactions

Dear Professor Andraos,

In the lineage of G. N Lewis (valence, covalence, odd electron magnetism, triplet and photomagnetism ect...) , M. Kasha Effect (triplet and photomagnetism, heavy metal induced triplet, faster nonradiative vs intersystem crossing) , M El-Sayed Rule (selection rules for nonadiabatic intersystem crossing), there is RB Little Effect (adiabatic multi spin orbital dynamics and rehybridization during chemical reactions for covalence and electron transfer).

I noticed your idea trees. I am in the lineage Lewis
- Kasha - El-Sayed - RB Little.

Thanks,
RB Little

Dear Friends,

Below Prof. Clause Lapinte (#1 below) gives direct supporting evidence of the Little Effect for the two type of chemical bond formations (covalence and ionic). Prof Lapinte's work will be presented with my work at the ACS meeting in Boston, Mass. this week.

I have demonstrated the Little Effect in the covalence of diamond and graphene (#2 below) as well as in electron transfer reactions (#3 below). If you will be at the National Meeting of the American Chemical Society this week in Boston Mass, then I invite you to attend my seminar on Thursday Afternoon.

Still productive although unemployed!

With eternal gratitude,
Reginald B. Little, Sr.

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#1
Magnetic perturbation of the redox potentials of
localized and delocalized mixed-valence complexes.
Lapinte, Claude. UMR 6226 Sciences Chimiques de
Rennes, CNRS - Universite de Rennes 1, Rennes, Fr.
Abstracts of Papers, 234th ACS National Meeting,
Boston, MA, United States, August 19-23, 2007 (2007),
INOR-011. Publisher: American Chemical Society,
Washington, D. C CODEN: 69JNR2 Conference; Meeting
Abstract; Computer Optical Disk written in English.
AN 2007:882387 CAPLUS

Abstract

In mixed-valence complexes electron transfer between the metal centers can be induced thermally or photochem. Evaluation of the intensity of the coupling between the metal centers

can be achieved by the detn. of the free energy of comproportionation, DGc, which corresponds to the equil. Of comproportination. Usually, the magnitude of DGc can be adequately described by four factors: DGs, DGe, DGi, and DGr which represent the statistical distribution, the electrostatic repulsion, the inductive factor and the free energy of resonance exchange. In particular examples, it has also been shown that addnl. terms to represent the ion pairing energy or the antiferromagnetic interaction must be included. We report here that magnetic exchange interaction plays a key role in mixed-valence systems with a carbon rich bridge between the remote metal ends.

#2
On quantum hall effects and relativistic dirac spins for carbon nanotube and nanodiamond formation mechanics.

Little, Reginald B. Department of Chemistry, Florida A&M University, Tallahassee, FL, USA.
Abstracts of Papers, 234th ACS National Meeting, Boston, MA, United States, August 19-23, 2007 (2007), INOR-1009.
Publisher: American Chemical Society, Washington, D. C CODEN: 69JNR2 Conference; Meeting Abstract; Computer Optical Disk written in English. AN 2007:883365 CAPLUS

Abstract

While studying the formation of carbon nanotubes (CNT), transient magnetic order in mesoscopic carbon was discovered. Furthermore, intrinsic quantum Hall Effects and relativistic Dirac spin effects on the CNT formation mechanism have been detd. In fact, different magnetic environments can shift carbon bonding, creating materials as different as nano-graphenes, SWCNT, MWCNT, and nano-diamonds. Such ferrochem. for many-body bond rearrangements results from dense spin induced orbital dynamics for nano-scale multi-at. covalence transformations: the Little Effect. Dynamical magnetic fields on thenanometer length-scale can organize CNT formation, but suitable dynamic fields on the AO length scale can organize the diamond allotrope.

#3
International Journal of Physical Sciences

Intl. J. Phys. Sci.

Vol. 1 No. 4

Little RB

Other links:
PubMed Citation

International Journal of Physical Sciences Vol. 1 (4), pp. 175-200, December 2006
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Full Length Research Paper

Magnetocatalytic adiabatic spin torque orbital transformations for novel chemical and catalytic reaction dynamics: The Little Effect

*Reginald B. Little

Department of Chemistry Florida A&M University
Tallahassee, Florida 32307. E-mail:
redge_little@yahoo.com.

Accepted 11 December, 2006

Abstract

In this manuscript the theory and some phenomena associated with the Little Effect are introduced as the spin induced orbital dynamics of confined fermions under strong magnetic and thermal environments. This Little Effect is considered in details for the electron transfer reactions associated with redox processes of Cu-Ag alloy within de-ionized water and for the orbital dynamics during the iron catalyzed covalent bond rearrangements associated with amorphous carbon conversion to diamond. Furthermore, prolong extreme conditions of 74,000 amps, 403 V, strong Lorentz compression, and thermal stresses upon this Cu-Ag- H2O system on the basis of the Little Effect of high spin and thermally induced orbital dynamics are predicted and demonstrated to cause the magnetically organized reverse beta, electron capture, proton capture and neutron capture processes for various infrequent pycnonuclear transmutations within the Cu-Ag coil. The general experimental verification and the broad implications of this Little Effect on chemistry are demonstrated within these two ideal systems: an ionic case and a molecular case. The Little Effect is contrasted with the Hedvall Effect as a dynamical phenomenon causing the kinematics of the Hedvall Effect. The compatibility of the Little Effect with the Woodward-Hoffmann Rule is demonstrated. The Little Effect provides greater understanding of order in systems far from equilibrium. The implications of the Little Effect for other interesting phenomena such as ferromagnetism, unconventional magnetism, superparamagnetism, superconductivity, and pycnonuclear effects are concluded.

Key words: chemical reaction dynamics, magnetic field, magnetism, pycnonuclear reactions, magnons, rotons, phonons.

#4
Additionally, (Archive of #3)

Magnetocatalytic adiabatic spin torque orbital transformations for novel chemical and catalytic reaction dynamics: the Little Effect.

Little, Reginald B.. Department of Chemistry, Florida A&M University, Tallahassee, FL, USA. Los Alamos National Laboratory, Preprint Archive, Condensed Matter (2006), 1-29, arXiv:cond-mat/0608071.
Publisher: Los Alamos National Laboratory, CODEN: LNCMFR

http://arxiv.org/ftp/cond-mat/papers/0608/0608071.pdf
Preprint; General Review written in English. CAN
145:196556 AN 2006:814349 CAPLUS

Abstract

A review; in this manuscript the theory and phenomena assocd. with the Little Effect are introduced as the spin induced orbital dynamics of confined fermions under strong magnetic and thermal environments. This Little Effect is considered in details for the electron transfer reactions assocd. with redox processes of Cu-Ag alloy within deionized water and for the orbital dynamics during the iron catalyzed covalent bond rearrangements assocd. with amorphous carbon conversion to diamond. Furthermore, prolong extreme conditions of 74,000 amps, 403 V, strong Lorentz compression, and thermal stresses upon this Cu-Ag-H2O system on the basis of the Little Effect of high spin, thermally induced orbital dynamics are predicted and demonstrated to cause the magnetically organized reverse beta, electron capture, proton capture and neutron capture processes for various infrequent pycnonuclear transmutations within the Cu-Ag coil. The general exptl. verification and the broad implications of this Little Effect on chem. Are demonstrated within these two ideal systems: an ionic case and a mol. case. The Little Effect is contrasted with the Hedvall Effect as a dynamical phenomenon causing the kinematics of the Hedvall Effect. The compatibility of the Little Effect with the Woodward-Hoffmann Rule is demonstrated. The Little Effect provides greater understanding of order in systems far from equil. The implications of the Little Effect for other interesting phenomena such as ferromagnetism, unconventional magnetism, superparamagnetism, supercond., and pycnonuclear effects are concluded.

Indexing -- Section 67-0 (Catalysis, Reaction
Kinetics, and Inorganic Reaction Mechanisms)
Section cross-reference(s): 56, 65, 77

Catalysis
Cold fusion
Electron capture
Electron transfer
Electron transfer kinetics
Ferromagnetism
Magnetic field effects
Magnetic properties
Reaction kinetics
Rearrangement catalysts
Spin
Superconductivity
(magnetocatalytic adiabatic spin torque orbital transformations for novel chem. and catalytic reaction dynamics and Little Effect)

Fermions
Role: CPS (Chemical process); PEP (Physical,
engineering or chemical process); PRP (Properties);
PYP (Physical process); RCT (Reactant); PROC
(Process); RACT (Reactant or reagent)
(magnetocatalytic adiabatic spin torque orbital transformations for novel chem. And catalytic reaction dynamics and Little Effect)

Paramagnetism
(superparamagnetism; magnetocatalytic adiabatic spin torque orbital transformations for novel chem. and catalytic reaction dynamics and Little Effect)

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Elmer C. Lupton, Jr.

Date: Thu, 8 Feb 2001 16:58:44 EST
From: TalkingLights@aol.com
To: jandraos@yorku.ca
Subject: Your Chemical Geneaology Pages

Hello,

I was suitably amazed and pleased to learn that my work with Gardner Swain was considered significant enough to put my name on your pages.

At any rate, let me give some additional information for you. I was born in Baltimore Maryland. You probably didn't find a graduation date for me from MIT because the work with Swain was done as a Bachelor's thesis. My graduation date from MIT with an S.B. was 1965. I then received a Ph.D. degree from Yale (with Ken Wiberg) in 1969.

Thank you so much for remembering me and for remembering Gardner whom I do miss. I do appreciate it.
My very best wishes,

Elmer C. Lupton Jr.
Talking Lights LLC
28 Constitution Road
Boston, MA 02129
617-242-0050
FAX 617-242-0046
e-mail: TalkingLights@aol.com

Alfred Redfield

Date: Mon, 11 Dec 2000 12:10:26 -0500
From: Alfred Redfield <redfield@brandeis.edu>
To: jandraos@yorku.ca
Subject: Geneology

My advisor was Robert J. Maurer, Univ. of Illinois Physics Department in the 50's to 80's. He called himself a solid state chemist but I don't know who his advisor was; he worked on color centers in ionic solids, a field developed by the Germans, esp. R. W. Pohl.

However, like many people, my career was more ionfluenced by my postdoc advisor Nicolaas Bloembergen whose advisors were C. J. Gorter in Holland (formally) and E. M. Pucell at Harvard (in fact).

I never took a course in chemistry in my life. You probably missed my

uncle Howard Redfield who published an article combining group theory with graph theory, and probably founded the application of this to enumerating organic compounds. His second paper was rejected and his first 1929 paper anticipated work by the famous mathematician Polya in the 30s. His second paper was posthumously published around 1980. He was a linguist and did not get tenure at Princeton, then worked for the Philadelphia dept of public works, then for reasons to complicated to tell you he became unemployed and died during WW2. He didn't have an advisor, or student, and is as close as one comes to being a "genius".

Some of my real ancestors were scientists and include Wm. C. Redfield, amateur generalist, discoverer of cyclonic mustion of storms, first president of AAAS; his son John Howard Redfdield, botanist, discoverer of the Redfieldiform fish fossils, his son Robert S. Redfield, an early artistic photographer, his son and my father Alfred C. Redfield, an ecologist specialist who pioneered oceanic chemistry, and my first cousin Donald Redfield Griffin, discoverer of bat sonar. In case you were wondering. I am a friend of GKC Roberts of your Univ.

Alfred Redfield

Christian Reichardt

On Thu, 12 Oct 2000, Reichardt wrote:

> Dear Dr. Andraos,
>
> Thank you for your E-Mail of October 9, asking me for the name of my
> doctoral advisor. I did my Ph. D. in 1962 under the tutelage of Prof. Dr.
> Karl Dimroth at the Philipps-University in Marburg/Germany. A complete
> biography of Karl Dimroth (1910-1995) can be found in Liebigs
> Annalen/Recueil 1997, XXIII-XL. I send you acopy of this biography, which I
> wrote (in German) by airmail. Karl Dimroth itself did his Ph. D. under the
> tutelage of Prof. Dr. Adolf Windaus in 1936 at the University of
> Göttingen/Germany (title "Über das Lumisterin"). Windaus has got the
> Nobelprize for Chemistry in 1928 for his work on steroids and their
> relation to Vitamin D (e.g. Cholesterol).
> Windaus (1876-1959) itself did his Ph. D. under the tutelage of Heinrich
> Kiliani (1855-1945) at the University of Freiburg im Breisgau/Germany
> (title "Neue Beiträge zur Kenntnis der Digitalisstoffe"). Dimroth wrote two
> biographies of his "Doktorvater", one in Chemie in unserer Zeit 1976, 10,
> 175-179, and the other in Chemische Berichte 1986, 119, XXXI-LVIII.
> I hope, these informations are sufficient for your interesting work; if
> not, let me know.
>
> With best wishes,
>
> Yours sincerely
>
> Christian Reichardt

Jeff Schwartz

Date: Tue, 31 Oct 2000 10:40:53 -0500
From: jschwartz@chemvax.princeton.edu
To: jandraos@yorku.ca
Subject: scientific genealogy

Dear Dr. Andraos:

Sorry to take so long to reply. My doctoral advisors were Eugene E. Van Tamelen and John I. Brauman, both at Stanford (I worked for both on a joint project). I don't know van Tamelen's or Brauman's advisors. Brauman got his PhD at Berkeley in 1963. Sorry I can't be of more help.
Jeff Schwartz

Robert Shapiro

Date: Wed, 23 Aug 2000 16:19:22 -0400 (EDT)
From: Robert Shapiro <rs2@is2.nyu.edu>
To: jandraos@yorku.ca
Subject: Ph.D. Advisor

Dear Dr. Andraos,
I received my Ph.D. degree from Robert Burns Woodward at Harvard. I do not have the material concerning his Ph. D. advisor, though I know he obtained it at MIT. I suggest that you consult The Beckman Center for the History of Chemistry, 3401 walnut St., Phila, PA, 19104-6228, as they have compiled considerable biographical material on Prof. Woodward.

sincerely,
Robert Shapiro
professor of chemistry

Akira Suzuki

Date: Fri, 29 Sep 2000 14:25:20 +0900
From: Akira SUZUKI <suzuki@chem.kusa.ac.jp>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

Dear Dr. John Andraos.

I have seen your e-mail message of 23 Aug 2000, 13:46:19 -0400 (EDT) this morning, because I was out of town during summer vacation and came back yesterday. Would you please forgive me this late reply. I like to answer you for your query.

Akira Suzuki, received Ph.D. from Hokkaido Univ., Japan, 1959 (doc. advisor, T. Matsumoto)

Takeshi Matsumoto, received Doc. Sci. from Hokkaido Univ., Japan, 1956 (doc. advisor, H. Suginome)

Harusada Suginome, received Doc. Sci. from Manchester Univ., UK, 1927

(doc. advisor, R. Robinson)

Additionally, I would like to let you know about my information.

Bath place: Hokkaido, Japan

Important recent publications: Miyaura, N.; Suzuki, A., Chem. Rev., 1995, 95, 2457-2483.
Suzuki, A., J. Organomet. Chem., 1999, 576, 147-168.

Sincerely,

Akira Suzuki

Jiro Tsuji

Date: Thu, 23 Nov 2000 10:17:15 +0900
From: Jiro Tsuji <jtsuji@zd5.so-net.ne.jp>
To: Andraos <jandraos@yorku.ca>
Subject: Scientific genealogy prject

Dear Dr. Andraos;

I am sending you my personal data by the request of Professor A. Suzuki.

Jiro Tsuji, received Ph.D. from Columbia University in New York in 1960 (adviser, Gilbert Stork)

Books published recently, Jiro Tsuji,"Palladium reagents and catalysts" in 1995, and "Transition metal reagents and catalysts" in 2000 both from John Wiley.

Sincerely

Jiro Tsuji

Edwin Vedejs

Date: Thu, 5 Oct 2000 17:07:13 -0400 (EDT)
From: Edwin Vedejs <edved@umich.edu>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

Mr. Andraos:

My Ph.D. advisor was H. Muxfeldt. I am unsure of his advisor, but my recollection is that he received his degree with Inhoffen, perhaps at Gottingen. Another name in my memory is Brockmann, Braunschweig, so if Inhoffen is not correct, then the other might be. One was the advisor, the other was involved in some other way, perhaps for the Habilitation that was required in Germany. Muxfeldt died many years ago, so I'm afraid

that's all I can tell you.
Good luck with your project.

E. Vedejs

Robert M. Williams

Date: Tue, 10 Oct 2000 10:26:28 -0600
From: Robert M. Williams <rmw@mail.chm.ColoState.EDU>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: scientific genealogy project

Dear John,
I got my PhD from MIT under Dr. William H. Rastetter in 1979. He got his PhD from Robert Burns Burns Woodward of Harvard University. I am sure you will have no trouble tracking Woodward back. I was also a post-doc with Woodward from 1979-1980 the year of his death).
Sincerely,
Robert M. Williams
Professor
--
Robert M. Williams
Professor of Chemistry
Colorado State University
Department of Chemistry
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Comments Received from Students, Professors, and Other Professionals

Prof. David L. Adams, University of Massachusetts
Dr. Gerald Wayne Craig, Syngenta, Switzerland
Prof. Guy Devaux, Professeur émérite à l'Université Victor-Segalen (Bordeaux 2)
Dr. Cyril Dousson, Inexus, France
Omar Escamilla, Acervo Histórico del Palacio de Minería, Mexico City, Mexico
Alan Gall, member of the historical group of the Royal Society of Chemistry and of the Institute of Physics, History of Physics Group
Prof. Carmen Giunta, Le Moyne College, USA
Philip Gorin, UFPR, Brazil
Prof. Andy Hess, Vanderbilt University, TN, USA
Dr. David R. Kelly, Cardiff University, UK
Dr. Robert J. Lancashire, University of the West Indies, Jamaica
Prof. Edward Lee-Ruff, York University, Canada
Dr. Joel Leventhal, Emeritus Scientist, U.S. Geological Survey
Gerhard Oberkofler, Austria
Margaret O' Leary, Laboratory Associate, Hoxworth Blood Center
Bojan Pesek, school teacher, Slovenia

Tue B. Petersen, student, University of California at Santa Barbara, USA
Martin A. Pot, M.Sc., BioSoil R&D B.V., The Netherlands
Dr. Florian M. Schwandner, Institute of Mineralogy and Petrography, ETH-Zurich
Dr. Andy Young, SDSU, USA

Date: Tue, 21 Nov 2000 18:57:31 +0100
From: gerald_wayne.craig@syngenta.com
To: jandraos@yorku.ca
Subject: Lord A.R. Todd Connection

Just a quick note, concerning your genealogy tree showing the British and German connection. It does not yet show Lord A.R. Todd who took two Ph.D.s in chemistry, one with W. Borsche, Frankfurt and Sir R. Robinson, Oxford.

Otherwise, your Webpage is absolutely superb!!!

Regards,

Dr. G. Wayne Craig
Syngenta
Basel, Switzerland

Date: Tue, 24 Oct 2000 19:41:43 -0400
From: Carmen Giunta <giunta@mail.lemoyne.edu>
To: jandraos@yorku.ca
Subject: Anecdotes of Named Chemists

Hello Prof. Andraos,
I just came across your site last week, and I find it most interesting. If you don't mind, I will place a link to it on my "Classic Chemistry" site, in the internet resources section.
I also wanted to point out to you that none of the section headings in your site works. (E.g., clicking on "women in chemistry" near the top of the page does not bring the browser to that section in the body of the page.)
--

Carmen Giunta giunta@mail.lemoyne.edu
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Syracuse, NY 13214-1399 fax 445-4540

Date: Thu, 7 Jun 2001 04:02:41 +0100
From: David Kelly <davidrkelly@ntlworld.com>
To: jandraos@yorku.ca
Subject: Anecdotes of Named Chemists

Dear John,
Great page! I never knew Jack Baldwin was an East Londoner and I worked for him!

Archer and Martin may have done some work on paper chromatography, but their pre-eminent work was on GLC, which at the time revolutionised the analysis of petroleum products. Some gas-solid partitions (using charcoal and similar materials) were attempted prior to their work, but they showed that a gas liquid partition was hugely more efficient.

You might like to add a section in the tidbits on Christopher Ingold. Systematised all the major reaction types in Organic Chemistry (SN1, SN2, E1, E2 etc) and invented the system for the assignment of absolute configuration, yet never got a Nobel prize. As a fascinating trivial happenstance, the postal code for the national research councils main office in Swindon England, commences SN2.

Best Regards

Dave

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Date: Tue, 12 Dec 2000 12:30:35 -0500
From: Dr Robert John Lancashire <rjlanc@uwimona.edu.jm>
To: jandraos@yorku.ca
Subject: Contributors to Chemistry

Dear Dr Andraos,

I am enclosing a list of contributors to chemistry that I have been compiling from information found largely on the Internet.
I discovered that Microsoft Excel and other spreadsheets were unable to sort on dates before 1900 so have split the dates into 3 fields day, month and year for both Birth and Death. The file is ASCII comma separated which will import readily back into Excel etc and as straight text is virus free!

A number of names in the list I think do not appear in your lists and hopefully this may be useful to you.

Thanks for your efforts,
best regards

Robert

ps
by the way any ideas about the Hirsch funnel?

Presumably named after a Hirsch, but who and when?

Dr. Robert J. Lancashire E-mail mailto:rjlanc@uwimona.edu.jm
Sub-Dean, Technology Management and Development
Department of Chemistry Tel (876) 9271910
University of the West Indies, Kingston 7 Fax (876) 9771835
Mona Campus, JAMAICA. http://wwwchem.uwimona.edu.jm:1104/chrl.html

Date: Wed, 25 Oct 2000 18:23:29 -0400 (EDT)
From: Edward Lee-Ruff <leeruff@yorku.ca>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: Edward?

Hi John,
I got the following info for Jack Edward. Note that he got his Ph.D. at McGill in organic chemistry but no mention of his supervisor.
Regards,
Ed

Biographical Sketch of John T. (Jack) Edward

John T. Edward graduated from the Town of Mount Royal High School, Quebec, in 1935 and from McGill University, Honours Chemistry in 1939. He obtained a Ph.D. in Organic Chemistry from McGill in 1942 for research on the high explosive, RDX. After ten months of postdoctoral work at Iowa State on the synthesis of anitmalarial drugs, he joined the Experimental Explosives Division of the National Research Council in Ottawa in 1943. In 1945 he was transferred to CARDE, Valcartier, Quebec, and at the end of the war joined the Department of Chemistry of the University of Manitoba. In 1946 he became a Science Scholar of the Royal Commission for the Exhibition of 1851, and entered the laboratory of Sir Robert Robinson in Oxford, England, where he worked on the constitution of the alkaloid strychnine (D. Phil. 1949). In 1949 he was appointed Imperial Chemical Industries Research Fellow of the Department of Chemistry of the University of Birmingham, England, and in 1952 Lecturer in Organic Chemistry at Trinity College, Dublin. He returned to the Department of Chemistry of McGill University in 1956, and was promoted through the ranks becoming Macdonald Professor of Chemistry in 1973. He has been a visiting research worker or sessional lecturer at the Carlsberg Laboratory, Copenhagen (1953), Universit Pierre-et-Marie Curie, Paris (1972-1973 and 1979-1980), the Czechoslovak Academy of Science, Prague (1977), the University of So Paulo (1978) and Ume University, Sweden (1980, 1982). He was a Fellow of the Royal Society of Canada, Fellow of the Chemical Institute of Canada, a member of the Order of Chemists of Quebec (Vice-President 1971-1972), of the American Chemical Society, and of various other scientific societies. He retired in 1986 and became Emeritus Professor the same year. His publications dealt with topics in the fields of alkaloids, terpenes, steroids, amino-acids and peptides, carbohydrates, heterocyclic compounds, stereochemistry, conformational analysis, molecular volumes, ion mobilities, paper electrophoresis, dipole

moments, electrostatic effects, acidity functions, acid-catalyzed reactions, solvent effects, and graph theory. His "invention" of what is widely known as the anomeric effect or the Edward-Lemieux effect is one of his most important scientific legacies. He was active throughout his long career publishing over 200 peer-reviewed articles including one in the Canadian Journal of Chemistry which came out about a month after his passing. In addition he graduated over two dozen Ph.D. and M.Sc. students.
Professor Edward is survived by his wife, Dierdre and their three sons, Valentine, Jeremy and Julian. On behalf of the Department of Chemistry and the Faculty of Science of McGill University we extend our sincere condolences to the family. His wit and insights will be missed.

David N. Harpp

Date: Wed, 11 Sep 2002 22:10:05 -0700 (PDT)
From: Andrew Young <aty@sciences.sdsu.edu>
To: jandraos@YorkU.CA
Subject: Re: Rayleighs

> Thanks for your information. Can you provide literature references for
> the rayleigh unit?

If you do a Google search for "airglow Rayleigh" you'll find a lot of pages referring to this. I believe the first use of the unit eventually named after the 4th Baron must be the 1930 one on the oxygen green line:

Proc. Roy. Soc. A 129, 458 (1930)

but, not being an airglow person myself, I can't tell you who first decided to name 10^6 photons/sq.cm/sec/sterad after him. (There's a 4 pi factor needed to get the steradians.)

> Sure, I would welcome any other items you may have that could be
> included in the compilation. Please make sure that you also include
> references to the original publications so that they can be traced.

I may be hard pressed to supply the original references, as a lot of the relations have passed into folklore. But there are a number of father-son pairs in astronomy, as well as more extended dynasties, like the Cassinis and the Struves.

Probably the best-known pair in astronomy is the Herschels: William, the father, discovered the planet now known as Uranus (though for a while it was named after him, despite his wish that it be named Georgium Sidus after his patron, King George.) The son, John Herschel, played an important part in spectroscopy and photography as well as astronomy; there is a photographic effect called the "Herschel effect" named after his discovery that far-red or infrared light can bleach a latent image formed by shorter-wavelength light. William's sister Caroline Herschel assisted him in much of his work, and should be included as well.

Actually, some of John Herschel's children played minor parts in the sciences; Peter Millman' series in Journal of the Royal Astronomical Society of Canada, 74, pp. 134-146, 203-215, and 279-290 (1980) includes Alexander Stewart Herschel in Part III. There is an extensive family tree of the Herschels on p. 209 of the series.

By the way, "William" Herschel was originally "Friedrich Wilhelm Herschel" -- one of many famous "Friedrich Wilhelm"s; I could mention F.W.Argelander and F.W.Bessel in astronomy, and such other notables as Freidrich Nietsche and F. W. Murnau were also Friedrich Wilhelms. (I suppose Bessel goes in your list somewhere for having Bessel functions named after him.)

Then there are the families whose interests spread over many fields, like the Bernoullis, and the Darwins.

Actually, I had expected your page on anecdotes to cover material such as one finds in Roscoe's book "Bunseniana".

Are you interested in people related by marriage? I know of a few obscure cases, such as Joseph Baxendell, long-time secretary of the Manchester Literary and Philosophical Society (whose most famous member, James Prescott Joule, has an SI unit named after him); Baxendell was the brother-in-law of Norman Pogson, who invented the modern stellar magnitude scale. I suppose he belongs in your list because for many years magnitude scales that conformed to his precepts were known as "Pogson scales", though the term has fallen into disuse. After a promising start in England, Pogson went to India to establish the observatory at Madras. His successor there, Charles Michie Smith, established the Kodaikanal observatory, and made some early observations of the green flash. John Evershed, his successor, also made important observations of green flashes, being one of the first persons to notice their connection with mirages. Remarkably enough, it was Baxendall who first pointed out green flashes to Joule, who published one of the first papers on this phenomenon, years before it received its modern name. (All this stuff is buried in my on-line bibliography at

http://mintaka.sdsu.edu/GF/bibliog/bibliog.html

if you are interested.)

A married couple who made important contributions to astronomy were the Gaposchkins, at Harvard. They published over a million observations of variable stars, among other works. Before she was married to Sergei Gaposchkin, Cecilia Payne wrote a very influential Ph. D. thesis in which she showed (basically) that nearly all stars have similar chemical compositions; Otto Struve (the last of the Struve dynasty) said it was the best doctoral thesis ever written, or something like that, in his book "Astronomy of the 20th Century". (Mrs. G. was in fact my own thesis advisor.) Her thesis was published as:

Cecilia Helena Payne

Stellar atmospheres : a contribution to the observational study of high temperature in the reversing layers of stars

Cambridge, Mass. : The Observatory, 1925

This was published as Harvard Observatory Monograph No. 1. The Gaposchkins later co-authored a book on variable stars.

Oddly enough, Cecilia Payne would have established the fact that the stars are mostly hydrogen, but allowed herself to be talked out of it by Henry Norris Russell, the Russell of the "Hertzsprung-Russell diagram". (She always said this was the greatest mistake of her life, not to insist on having her belief in hydrogen as the main component of stars stated emphatically in the thesis.)

Another married couple that come to mind were Franklin E. Roach and Janet L. Gordon, who co-authored "The Light of the Night Sky" (Reidel, 1973), the book I looked into to check on the "rayleigh" unit of airglow brightness.

Probably I will think of some others later, like the father-and-son Babcocks in spectroscopy. Most of these people can be researched on the Web simply by searching for them with Google; the history sites at St. Andrew's and at Rice University cover most of them.

-- Andy Young

Date: Fri, 15 Nov 2002 22:27:45 +0100
From: F.M. Schwandner <florimax@erdw.ethz.ch>
To: jandraos@YorkU.CA
Subject: addition to: bunsen tree, Genealogy File Correspondence List

Dear Dr. Andraos,

I would suggest an addition to the "Bunsen Tree", if it fits into your genealogy concept:

Charles Lee Reese (Nov 4, 1862; - 1940)

I know he studied with Bunsen in Heidelberg because I have his signed personal copy of Bunsen's "Gasometrische Methoden". Certainly a famous chemist! See below for more information on him...

Best wishes,

Florian Schwandner

More about C.L.Reese:

from http://heritage.dupont.com/

Charles Lee Reese (1862-1940) was the first director of DuPont's Eastern

Laboratory and later the company's centralized research department, the Chemical Department. Reese earned a bachelor's degree in chemistry from the University of Virginia in 1884 and two years later a Ph.D. from the University of Heidelberg in Germany. He returned to America, struggled professionally for 13 years as a chemistry instructor, then in 1899 took a position as an industrial chemist with the New Jersey Zinc Company. Reese soon attracted the attention of DuPont executives J. Amory Haskell and Hamilton Barksdale, who were seeking an able manager to organize and head a new explosives research laboratory. In 1902 they named Reese as the first director of Eastern Laboratory, one of the country's first pioneering industrial research laboratories.

In the following years, Reese built a first-class research organization and spearheaded the development of low-freezing dynamites and "permissible" explosives for use in combustible mining environments. Reese's success at Eastern Laboratory led to his appointment as the first director of DuPont's new Chemical Department in 1911, where he worked diligently to centralize the company's several research operations. In 1917 he was elected to DuPont's Board of Directors. After World War I Reese's centralized research structure failed to meet the needs of the company's expanding, diversified businesses, and in 1921 a company-wide reorganization authorized those businesses to establish their own research labs using Chemical Department personnel. Reese remained the nominal director of what remained of the centralized Chemical Department until his retirement in 1924. He continued working as a chemical consultant at DuPont until 1930, and remained on the company's Board of Directors until his death in 1940.

Dr. Florian M. Schwandner
Geochemistry/Volcanology
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Projects:
Volcanic Gas Project: http://www.geochem.ethz.ch/volcano/volcano.html
Volcanic Surveillance Project: http://www.geowarn.org

Date: Mon, 02 Dec 2002 09:12:19 -0600 (CST)
From: omareg@servidor.unam.mx
To: jandraos@YorkU.CA
Subject: [ISO-8859-1] Elhuyar and Del Río

Dr. Andraos:

I have read the "Scientists Associated with discovering the Elements part of your "Scientific Genealogy Master List". I work in the Historical Archive of the Palace of Mines in Mexico City and most of the time I read about Fausto de Elhuyar and Andrés Manuel del Río. Elhuyar was the director of the school of

mines during 33 years and Del Río was professor of Mineralogy. I can give you the following information:

Juan José and Fauto de Elhuyar studied at the Freiberg School of Mines between 1778 and 1781. Juan José travelled then to Uppsala and he had contact wiht Torbern Bergman. At the end of the travel, he returnede to Spain and in that moment he isolated the Wolfram together with Fausto.

Andrés Manuel del Río did studied at the Academia de San Isidro in Madrid, but it was just a part of his studies in the Almadén School of Mines in Spain. In Madrid they studied Mathematics and Physics, in Almadén Chemistry, Mineralogy and Metallurgy. After he has finished, he was selected together with two other students to go to study in the Schemnitz School of Mines and then also in Freiberg from 1789 to 1792.

Omar Escamilla
Acervo Histórico del Palacio de Minería
Tacuba No. 5
Col. Centro, C.P. 06000
México, D.F.
México
Tel: (52) 56 23 29 92
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Date: Tue, 17 Jun 2003 16:13:52 +0200
From: Gerhard Oberkofler <Gerhard.Oberkofler@adv-mail.uibk.ac.at>
To: Jandraos@yorku.ca
Subject: Rupert Oppenauer

I kindly draw your attention to the following article:
Rupert Oppenauer (1910-1969). Ein Tiroler Chemiker aus der Schule der schweizerischen Nobelpreiströger Leopold Ruzicka und Tadeusz Reichstein - Thomas Schönfeld (Wien) zum 80. Geburtstag gewidmet - von Gerhard Oberkofler. Der Schlern 77, Juni 2003, Heft 6, p, 24-39. /schlern@athesia.it/
Sincerely
Gerhard Oberkofler

Date: Tue, 25 Nov 2003 22:41:37 +0100
From: Guy Devaux <guy.devaux2@wanadoo.fr>
To: jandraos@YORKU.CA
Subject: Scientists associated discoveries of elements of periodic table

Corrections and additional informations :

p.2 -Vauquelin, Louis Nicolas
(b. Saint-André-d'Hébertot, Calvados, France.)
- Gay-Lussac, Joseph Louis
(b. St- Léonard-de-Noblat , Haute-Vienne, France)
- Thénard, Louis Jacques
(b. La Louptière near Nogent-sur-Seine, Aube, France)

p.6 - Vauquelin, Louis Nicolas

(b. Saint-André-d'Hébertot, Calvados, France)
- Cronstedt, Axer Frederik, Baron
(b. Stöppsta, Södermanland, Sweden)

p.9 - Noddack, Walter
(b. Berlin, Germany) [deceased in Bamberg]
- Osann, Gottfried Wilhelm 1796-1866
German (b. Weimar, Germany)

p.10 - Richter, Hieronymous, Theodor 1825-1898
1828
Orpat (today Tantu, Estonia)

p.13 - Coryell, Charles Dubois 1912-1971
American (b. near Los Angeles, USA)
- Delafontaine, Marc 1838-1911
Swiss (b. Céligny, near Geneva, Switzerland)

p. 14 - Delafontaine, Marc 1838-1911
Swiss (b. Céligny, near Geneva, Switzerland)

p. 15 - Delafontaine, Marc 1838-1911
Swiss (b. Céligny, near Geneva, Switzerland)
- Soret, Jacques Louis 1827-1890
Swiss (b. Geneva, Switzerland)
- James, Charles 1880-1928
British (b. Earls Barton, England)

p.16 - Elhuyar, Don Juan José de 1754-1796
- Elhuyar, Don Fausto de 1755-1833
Spanish (b. Logrono, Spain)

p. 20 - Cranston, John Arnold 1891-1980
British (b. Shangaï, China)

p. 21 - Seaborg, Glenn Theodor

Reference : Luft, Robert. Dictionnaire des corps purs simples de la chimie. Nantes, Cultures et Techniques, 1997.

Guy DEVAUX
Professeur émérite à l'Université Victor-Segalen (Bordeaux 2)

Date: Mon, 24 Nov 2003 14:25:05 +0100
From: Bojan Pesek <bojan.pesek@guest.arnes.si>
To: jandraos@yorku.ca
Subject: chemical elements data

Hello from Slovenia!
I'm a primary school (ages 6-15) computing tech teacher and while searching for data

on chemical elements to complete my HTML periodic table for our schools homepage
I came upon your pdf files 'elements.pdf' and 'languages.pdf'.
They suit my needs very good so I'm asking you if I can use them to complete my periodic system, because you've probably spent quite a lot of time collecting that data.
My online periodic system will be of strictly non-commercial educational use,
partly for chemistry and partly for html and javascript courses.

You can see an unfinished version at:
http://www2.arnes.si/~bpesek/osm/periodni/periodni.html

I hope you allow me to use your collection of elements data,
I'll mention you as 'data provider'.
Regards,
Bojan

Date: 1/14/2004 19:16:06 -0500
From: "O'leary, M (olearymr)" <OLEARYMR@UCMAIL.UC.EDU>
To: "'jandraos@careerchem.com'" <jandraos@careerchem.com>
Subject: Named Things Web site
Marvelous site!!

Found you by accident, looking for Harold F. Deutsch who is an old friend of my boss Dr. Greenwalt and who appears on your Baeyer1chart. I have always been interested in the connections between discoveries and in college was lucky enough to have a couple of chemistry profs who would point out where particular items had "come from". So, I've had a grand time exploring your pages.

Dr. Tibor Greenwalt is considered the "Father of Transfusion Medicine" and, luckily for me, is also fascinated with history. He wrote a paper on transfusion medicine history that involved us both reading copies of 300 year old letters and following from one paper to another to get as close to a source as possible. Then again he's been an M.D. for 61 years and remembers the personalities and achievements of much of the last century from first-hand experience.

I wish you luck in your endeavors and will visit again, and probably again and.... there is so much to explore.

Margaret O' Leary
Laboratory Associate

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F. 513-558-1522

Date: Tue, 06 Jul 2004 10:39:45 -0400
From: David L. Adams <adamsdl@chemistry.umass.edu>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: JChemEd article (June p. 815)

John:

I visited your web site and love it! As you said much expanded. You must be an organic chemist with so much organic on the NAMED site itself. So am I. I hope to use some of the material in my honors organic course next semester. Thanks for all the work you have put into this compilation. It is fabulous.

Some day when I visit Toronto I would love to top by and exchange some views on genealogy, chemical history, and organic with you. If you are ever in the Amherst, Massachusetts area please let me know.

Dave

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413-545-4711 (phone)
413-545- 4490 (fax)
http://www.chem.umass.edu/~adams (web)

Date: Mon, 18 Apr 2005 18:09:29 -0700 (Pacific Daylight Time)
From: Tue B Petersen
To: jandraos@yorku.ca
Subject: Named Reagents

Dear Dr. Andraos

I just found your website about Named Concepts and Ideas in Chemistry. It looks very interesting and I think I'll be spending some more time on it in the future. For now I have the following comment regarding the man behind Lawesson's reagent:

Lawesson, Sven-Olov (1926-1985)

He was born in Sweden, where he also obtained his education (Uppsala). Later he worked in Denmark (Aarhus).

Sincerely,
cand.scient. Tue B. Petersen

Date: Thu, 21 Apr 2005 08:01:40 -0700
From: Tue B. Petersen
To: John Andraos <jandraos@yorku.ca>
Subject: Re: Named Reagents + Genealogy

Quoting John Andraos <jandraos@yorku.ca>:

Dear John

The closest thing to a biography for S.-O. Lawesson I have been able to find is his obituary published in "Dansk Kemi" (i.e. "Danish Chemistry", a monthly journal published by the Danish Chemical Society) of which I have obtained a scanned copy (the only reason for not sending this on to you is my assuming that you don't read Danish - let me know if you want a proper citation).
As in your genealogy master list the article confirms that he obtained his ph.d. under the supervision of Arne Fredga - that was in 1957.
S.-O. Lawesson was born in Bräcke (that's an "a" with two dots above it in case it doesn't turn out right on your screen).

While we are on the subject of genealogy - of course I don't know when you think it's merited to include someone in the genealogy list, but I'll give you this anyway:
One of the students who obtained a Ph.D. under the supervision of Lawesson is Karl Anker Jørgensen (again, that's "o" with a "/" across it) - that was in 1984 at Aarhus University, where he is currently a professor. He was born, also in Aarhus, in 1955.

Sincerely,
Tue B. Petersen

Date: Sun, 17 Jul 2005 08:30:33 +0000
From: Alan Gall <alangall@hotmail.com>
To: jandraos@yorku.ca
Subject: Named Laboratory Apparatus

Dear John,
I am Archivist for the Institute of Science Technology in the UK and have found your "Named Laboratory Apparatus" website very useful.
The entry for the Davies double surface condenser does not give the first name of the inventor so I assume that it is unknown to you? The A.Gallenkamp & Co Ltd (of London) catalogue, 20th edition 1981, states that he was James Davies and a director of the company. It also mentions that other apparatus carried his name, such as a crucible furnace. I have been researching the history of Adolf Gallenkamp but do not, as yet, have any other details about Mr Davies.

Regards,
Alan Gall (member of the historical group of the Royal Society of Chemistry and of the Institute of Physics, History of Physics Group)

Date: Fri, 23 Sep 2005 15:27:37 -0300
From: Philip Gorin <cesarat@ufpr.br>
To: jandraos@yorku.ca
Subject: Canadian scientists

Dear Prof.
I was curious about when Morris Kates died. It turned out to be

1987, born 1901, but his name was cited as Morris Katz and when I met him he didn´t seem to be that old. The same goes for Art Neish, 1876?-1973, and I am sure that PBI, NRC, Saskatoon has the correct date.

However, I was shocked to hear that Gerald Aspinall had died, although I knew that he had been in bad health for a long time. We were often in touch because of our common field of carbohydrate chemistry, but the last time I met him personally was playing golf with him and Bob Marchessault, near Nattick in the year of Watergate.

I did not see Bob´s name in your list, and this nudged me to see how many French Canadian scientists were in the list. There were seven, including Ray Lemieux, who was born in Alberta, and whose name plus initials seems to be a bilingual, prophetic prank. The only other name of old timers that should be included in your list, is that of G.O. Adams, NRC, Ottawa, who made considerable contributions to carbohydrate chemistry. But I am glad to see that Art Perlin and J.K.N. Jones are included.

Sincerely, Phil Gorin

Date: Thu, 3 Nov 2005 09:55:13 +0100
From: Martin Pot <m.pot@biosoil.com>
To: jandraos@yorku.ca
Subject: Suggestions for "Named Laboratory Apparatus"

Dear Dr. Andraos,

I have some suggestions for your file "Named Laboratory Apparatus". All of this equipment I have used myself in the laboratory. I am a chemical engineer myself, but my father is a retired scientific instrument maker who sometimes makes replicas of named laboratory apparata, so we know this subject matter quite well...

* Kipp's apparatus:
Named after pharmacist Petrus Jacobus Kipp (1808-1864)
Apparatus for the controlled generation of gas for laboratory experiments. Several different gases can be produced by choosing the right reactants.
http://humboldt.edu/~scimus/HSC.54-70/Descriptions/Kipp'sGasApp.htm
http://mattson.creighton.edu/History_Gas_Chemistry/ErnstHomburgArticle.html
The Salm en Kipp BV company (http://www.salm-en-kipp.nl/) and the Kipp & Zonen BV company (http://www.kippzonen.com/) still sell scientific equipment (from 1830 until the present).

* Mariotte's flask:
Named after physicist Edme Mariotte (1620-1684),
http://www.newadvent.org/cathen/09671a.htm
The typical use of a Mariotte flask is measuring gas production from closed biological samples.
Shelton, E. A. and Tiedje, J. M. 1984. General method for determining anaerobic biodegradation potential. Appl Environ Microbiol. 47:850-857.

* Van de Graaff generator:
US Patent 1,991,236 (1935)
Named after Dr. Robert J. Van de Graaff (1901-1967)
http://www.mos.org/sln/toe/history.html

http://tvdg10.phy.bnl.gov/vandegraaff.html

Kind regards,
Martin

Martin A. Pot M.Sc. (m.pot@biosoil.com)
BioSoil R&D B.V., Nijverheidsweg 27
3341 LJ, Hendrik Ido Ambacht
The Netherlands
http://www.biosoil.com/

They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety.
A. Benjamin Franklin -

1

Date: 11/28/2005 11:48:28 -0500
From: John Andraos <jandraos@yorku.ca>
To: John Andraos <jandraos@careerchem.com>
Subject: Nobel list + (fwd) All headers

---------- Forwarded message ----------
Date: Mon, 28 Nov 2005 09:37:05 -0700
From: joel leventhal <jleventhal@champmail.com>
To: jandraos@yorku.ca
Subject: Nobel list +

Dear Dr. Andraos.
I was interested to find you lists of Chemistry Noble prize winners and various info. It is useful to have it all so compactly together. I have had an interest in the Chemistry Nobel prize since it was awarded to my professor at the time, Willard Libby. It gave me something to strive for. I was associated with Libby from 1959 (as an undergraduate student) and then worked with Libby from 1960 to 1967. I have 5 joint publications with Libby.

Let me suggest some, possibly useful and/or interesting additions for your lists. (perhaps you have already thought of these):

1) add the university/ institution where the Noble Prize winning work was done (usually different from the place they got their Ph.D.).
(I can help with a few: Libby -Chicago; Urey -Columbia; Rowland & Molina - U.Cal Irvine; Brown - Iowa? State; Cram- UCLA; McMillan - UC Berkeley; Langmuir- GE; Woodward - Harvard; Altman - Yale; Cech - Colorado; Boyer - UCLA?; Zewail - CalTech?, etc. (maybe I would find time to do this, if you have not)
Same institution as PhD: Giauque - UC Berkeley; Pauling-CalTech.; Seaborg - U.C. Berkeley, and many more, etc.
For a whole lot more effort you (or I) could add the year of publication of the research.

2) if the Noble recipient's PhD advisor was also a Nobelist indicate it with a C29 or P06 (Chemistry 1929 or Physics 1906). (Interesting, in view of the fact that prize winners become nominators and would favor their students).
For example: Alder's advisor was Diels C50 (shared)

Cornforth's	"	Robinson C47
Diels'	"	Fischer C30
Hevesy	post doc w/	Rutherford C08
Hoffmann	"	Lipscomb C76
Joliet		Curie P03, C11
Joliet-Curie		Curie P03. C11
Lipscomb	"	Pauling C54
Rowland	"	" Libby C60
Seaborg	"	Lawrence P39
Soddy	"	Rutherford C08 etc.

questions, suggestions:
3.) your table "Top 5 university ranking" has 9 universities on it. Is this related to where the Nobelists received Ph.D's or possibly? where they did the work?.
And U. Chicago has 3, so should it be listed?

4) your table Canadian born (Niagara Falls, on the Canadian side) - true, however, Giauque's parents were U.S. citizens.

5).Your table "Nobel....by type", on the x-axis title is "number of prizes", could better say "number of prize winners" (i.e. shared prizes).

Could you send me your tables in EXceI format, if you have it. Then I can sort if I wish, and make additions, etc.
Have you done this for physics Nobels ?.
Have you written other Noble related things that you can forward to me?.
Sincerely,

Joel S. Leventhal, Ph.D.
Emeritus Scientist U.S.G.S. (now retired),
Consulting & teaching as Diversified Geochemistry
8944 W. Warren Dr. Lakewood, CO 80227, U.S.

Date: Wed, 7 Dec 2005 13:53:26 -0700
From: joel leventhal <jleventhal@champmail.com>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: Nobel lists (Excel) (fwd)

Dear John

Yes, I was at an old 2002? list (from search for Berkeley Chemistry 1930s). Your link to your up-to-date site opened my eyes. You have certainly collected a lot of information. I am overwhelmed. How do you have time to do anything else? I am impressed and I find it to be quite interesting. This also saves me even thinking about doing such a project --- you have already done it. Thanks so much.

The Nobel links and gaps is great. Have you thought of a list showing the

university where the scientist actually did the Nobel work? This is probably at least as significant than their place for PhD. Have you thought of listing the date of death of the Nobelists mentor Nobelist. That is, was the mentor alive to recommend his/her student the prize?

I have a few suggestions and corrections, I hope you take these in the spirit of making your site and information better. I have done this for things or people I am interested in or know (knew , if they died).

Down your lists to:

"Elements",

1). "Names of scientists assoc. discoveries elements":(p.14 on my print out) #85 Astatine, MacKenzie, died 2002 (obit. L.A. Times). He was my physics prof at UCLA and I am friends with his son (from the 1960s).

2.. "Discoverers of elements": p.23, Berkeley, Abelson, P died 2002. (unbold name)

3.. p.29, timeline: multiple discoverers are missing: 1940 At = Corson, MacKenzie & Segre. 1940 Np = add Seaborg, 1961 Lw, not Lawrence, he died in 1958.

"Nobel Laur. Anecdotes part 2":

3) p.2. Add H.C. Urey shared his Nobel prize money with 2 colleagues that helped Murphy and Brickwedde (but Urey had the idea and did the "heavy lifting". (I think in NAS memorial).

4.. p.4. Achievements not recognized Prof. Saul Winstein (UCLA) Chem, mechanisms in physical organic chemistry (he died young 1969). You have cited his work in several other places (another UCLA prof from when I was there.)

5.. p.6. missing scientists: 1951 Chem winner + McMillan, missing add Abelson.

6.. p.6 1954 Chem- Pauling, add GN Lewis (if he hadn't died in 1946)

7.. p.6. 1960 Chem. Add to missing James Arnold (post doc); alive , UC San Diego (actually neither Anderson nor Arnold would feel they were missing, Libby really had already 15 years of inventing the sensitive Geiger counter, discovering natural radioactiviites and building a neutron counter and the idea and how to do it; Anderson and Arnold just helped with the work (along with Profs. vonGrosse, Inghrahm and others).

8.. p.6. Add 1961 chem. Calvin, could have shared with Ruben and Kamen who discovered C-14 and started the C-14 tracer work for biology; (but Ruben had died, very young, 1943) and Kamen moved to another university and lost a few years.

9.. p.16. CalTech: add Pauling, Feynman and many more.

Could list Univ Chicago: Fermi, Urey, Libby, Mulliken, M.G. Mayer, (Nobelists) plus ... Taube, Teller, etc.

10.. Could also list Princeton (Inst. Adv. Studies): Einstein, Oppenheimer, Pais, etc.

11.. Could list Los Alamos: Oppenheimer, Bethe, Feynman, Teller, Kistiakowski, Wilson, etc., etc.....

12.. p.17. UC Berkeley lists physics faculty (add Oppenheimer); could also list Chemistry: Lewis, Giauque, Latimer, Libby, Pitzer, Hildebrand and others.

13.. No -- Univ.of Washington at St. Louis,,,,, yes-- this is "Washington Univ. at St. Louis".

I hope you can add some of this stuff on your up-dated versions. Keep me on your list for updated info.

Joel Leventhal

Date: Tue, 13 Dec 2005 12:29:16 -0700
From: joel leventhal <jleventhal@champmail.com>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: Nobel lists (Excel) (fwd)

Dear John,
Keep up the good work- yes Nobel publication references will list the institution. (as an aside, I am surprised that Stanford University is not higher on some of the lists (they have so much $$. But maybe they have more applied science, just the next stage from Nobel research.)
Samuel Ruben, b.1913, d.1943. Ph.D Chemistry, U Calif. Berkeley 1938; Ph.D advisor W.F.Libby. Martin Kamen worked with the cyclotron group and made the C-14, Ruben used Libby's screen wall counter (a more sensitive type of Geiger counter) to measure the new radioactivity C-14.(they thought the half life was 300 years, just fine for biological tracer work) (Because Kamen was around the cyclotron so much, his clothes etc. were radioactive, so it was important that he not be in the building where Ruben did the chemistry and C-14 detection). Ruben was instructor 1938-41, Asst. prof 1941-43; died in a lab accident -- phosgene gas being tested for war purposes, vial cracked, not in a fume hood). Very sad, he was on his way to be a great scientist using isotopes (C-14, O-18) to trace metabolism -- M.Calvin finished the job for C-14, Kamen did this for O-18. Kamen and others had to help Ruben's widow & child get financial help from the university (most of this is in Kamen's book "Radiant Science, Dark Politics", U.Calif. Press 1985.)

I am working on a biography of my mentor W.F. Libby. I have made a Libby tree (diagram); it has a lot of other Berkeley scientists on it. I

can send you a copy (but I want to be able to use it for my presentation/article too. So you can post it, but not copyright it). Let me know.
regards,
Joel

Date: Wed, 14 Dec 2005 20:48:21 -0700
From: joel leventhal <jleventhal@champmail.com>
To: John Andraos <jandraos@yorku.ca>
Subject: Re: Nobel lists (Excel) (fwd)

Dear John,
(a). more on item 11.Los Alamos scientists: ... Robert Rathbun Wilson (1914-2000). born Wyoming, AB & PhD Berkeley,(physics, 1940) (advisor E.O.Lawrence; Oppenheimer also on his committee). nuclear and particle physics, successor to E.O. Lawrence in designing and building accelerators (at Berkeley, Cornell and FermiLab.) Asst. Prof Princeton, Los Alamos (Head of Physics Division), Cornell 1947-67, Univ Chicago 1967-80 (1967-78 director of FermiLab). Member NAS; pres. Am Physical Soc.1985. (more than you wanted to know, mostly from Amer Men & W. Sci. 1995 and NAS biographical memoirs). I do not have any info on his students. But I think he should be on your Named list. No Nobel, but many other prizes. (I think there was a long article/obit. in Physics Today in 2000 .; should have students' names).
(b). typo / error - I needed to check on Rare Earth elements "Timeline of discovery of elements" section, (p.28 in my printout): for 1885 you list Pr but call it "Promothium" (sp.), it is, of course, Praesodymium.
Small details in a great collection of data. Thank you again for putting it together.
Joel

Date: Thu, 15 Mar 2007 11:53:51 +0100
From: "DOUSSON, Cyril" <dousson.cyril@idenix.com>
To: jandraos@yorku.ca
Subject: l'eau de Labarraque= diluted NaOCl

Dear Dr. Andraos,
What I found on "l'eau de Labarraque" (which translate to "water of Labarraque", from the name of the French Chemist: Antoine Germain LABARRAQUE (1777-1850) who recommended its use as a disinfectant) that it is only a diluted version of "l'eau de Javel" (aqueous solution of NaOCl) used for disinfection.
"An aqueous solution of sodium hypochlorite, extensively used as a disinfectant."

Antoine Germain Labarraque (1777-1850) est un chimiste et pharmacien français, né à Oloron-Sainte-Marie. Formé chez un pharmacien de Saint-Jean-de-Luz, puis pharmacien en chef dans un hôpital espagnol, Labarraque exerce ensuite à Montpellier puis à Paris. Il découvre les propriétés désinfectantes de l'eau de Javel qu'il recommande sous forme diluée (appelé depuis eau de Labarraque) dès 1825. Il décède en 1850 à Paris.

Best regards,
Cyril Dousson.

Date: Wed, 5 Mar 2008 16:01:35 EST
From: BAHESSJR@aol.com
To: jandraos@yorku.ca
Cc: Smentek1@aol.com
Subject: Nationality of Albert Michelson

I just saw on your Nobel Prizes in Physics an error in the description of Albert Michelson. He was Polish-American, NOT German-American. He was born in Strzelno, Poland, of Polish parents, which happened to be occupied by Prussia at that time (in fact Germany did not exist when he was born). Below is a letter to the Editor published in *Physics Today* in January of this year written by my wife, Prof. Lidia Smentek.

Andy Hess
Prof. of Chemistry
Vanderbilt University
Nashville, TN USA

letter to the Editor (Physics Today):

Michelson's Polish Roots

Not only out of national pride but also in keeping with historical evidence, I would like to correct a mistake in "This Month in Physics History" in the November APS News. Albert Abraham Michelson was born in 1852 in Strzelno, a small and very old town, which at that time was occupied by Prussia during the partitioning of Poland; he was born neither in Germany, as stated in the article, nor in Prussia, as is commonly written in his biographies on the Internet. He was born to a Jewish-Polish family; his father was a Jewish merchant from the nearby town of Inowroclaw, and his mother, Rozalia Przylubska, was the daughter of a Polish merchant in Strzelno.

For his whole life Michelson was proud of his Polish roots. Many years after his death his daughter, Dorothy Michelson-Stevens, asked the Nicolaus Copernicus University in Torun (birthplace of Copernicus, thirty miles from Strzelno) to identify the place of her father's birth, the name of which she knew only in a misspelled version. In the local archives in Strzelno it was found that Michelson indeed was born there. The members of the Torun chapter of the Polish Physical Society then decided to commemorate this finding with a plaque, written in Polish, which states: "In this town, on December 19, 1852, Albert Abraham Michelson was born; Professor at the University of Chicago, Nobel Prize Laureate. With his famous experiments on the velocity of light he started a new era of development of physics. This plaque, which salutes this great physicist, was funded by the Polish Physical Society."

Lidia Smentek
Nashville, TN, and
Torun, Poland

Comments Received from Relatives of Scientists

Lars B. Bäcklund, son of **Birger Bäcklund**

Bill Langmuir, great grandson of Matthew Langmuir (uncle of **Irving Langmuir**)

Linda Erdmann Brown, great granddaughter of Adolph Erdmann (brother of **Hugo Erdmann**)

Dr. Lourens Penning, son of **Franz Michel Penning**

Walter H. Ehrenstein, son of **Walter Ehrenstein**

Arthur L. Thomas, Jr., son of **Arthur L. Thomas**
André Wielki, grandson of **Walter Mund**

Lars B. Bäcklund

Date: Tue, 04 Apr 2006 01:54:46 +0200
From: Lars Backlund <Lars.Backlund@ood.ki.se>
To: jandraos@yorku.ca
Subject: [iso-8859-1] Ramberg-Bäcklund Reaction

Dear Dr Andraos

I did a Google search on my father Birger Bäcklund and was happy to find your site which is fascinating even for one who is not himself an organic chemist (as you could find using Medline, the nearest I came to chemical research was a couple of papers on an amine oxidase which curiously enough turned out to have multiple roles such as being a vascular adhesion protein and is now being suspected of being a signalling substance).

Thank you for entering his name. He did not himself emphasise rote knowledge of eponyms in his teaching, but was quietly proud of his discovery and enjoyed reading papers, mostly from North America, further elucidating and employing 'his' puzzling reaction.

Just a couple of minor details:
The family name is Bäcklund, not Bäckland as in the literature reference. Ramberg, his professor at Uppsala University, was Swedish, not German, and Hälsingborg is in Sweden and has never been part of Germany. http://www.org.kemi.uu.se/Historia/index.shtm

I would gladly give you further details should you so wish. BTW, how on earth did Otto-Albrecht Neumüller find out the year of my father's death?

Kind regards

Lars B. Bäcklund, MD PhD

Bill Langmuir

Date: Tue, 12 Sep 2000 21:01:35 -0400
From: langmuir@bconnex.net
To: jandraos@yorku.ca
Subject: Named Scientists - Irving Langmuir (Chemistry Nobel 1932) -

Canadian Connection

Irving Langmuir's father, Charles, grew up in Toronto where his father was pressman at the Globe from about 1848 until 1878. Charles worked for railroad attorney Aemilious Irving in Hamilton and it is believed this is where Irving's name came from. Irving's uncle Matthew Langmuir (my great grandfather) through the M Langmuir Manufacturing Co of Toronto was the largest luggage and trunk maker in the country opertaing a large plant on King Street from 1890 until 1960. Irvings father immigrated to the US in his early 20's and spent his career with New York Life Insurance.

Just thought you might be interested.

Irving used to visit my family in Toronto regularly in the 20's and 30's, my father recalled him taking home movies of them in the 20's when no one took home movies (they still exist with Irvings grandson, Roger Summerhayes, who has just completed a video biography of him.

Sincerely
Bill Langmuir
langmuir@bconnex.net

Linda Erdmann Brown

Date: Thu, 4 Oct 2001 02:20:31 EDT
From: LindaBch@aol.com
To: jandraos@yorku.ca
Subject: this is my great grandfathers brother hugo.

any additional leads or personal information would be greatly appreciated. my cousin has the book that my dad had by hugo done at leipzig. thank you-linda erdmann brown, great granddaughter of adolph erdmann,b. 1853 circa and i have no other info on my family!

Dr. Lourens Penning

Date: Thu, 21 Nov 2002 15:22:06 +0100
From: "Penning, L" <l.penning@rad.azg.nl>
To: "'jandraos@yorku.ca'" <jandraos@YorkU.CA>
Subject: named laboratory apparatus

Dear Dr Andraos, With much interest I noticed that you included my father's name (Frans Michel Penning) in your list of Named Laboratory Apparatus. If you are interested in a photograph of my father at the age of about 30 years (the only good photograph I have) I will be pleased to send it to you. My father was born September 12, 1894 at Gorcum, Holland and died on December 6, 1953, at Utrecht, Holland. Hoping to hear from you, I remain with kind regards, Prof.dr.Lourens Penning, emeritus Neuroradiology at University of Groningen, Holland.

Date: Mon, 2 Dec 2002 09:10:16 +0100
From: "Penning, L" <l.penning@rad.azg.nl>
To: "'jandraos@yorku.ca'" <jandraos@YorkU.CA>
Subject: laboratory apparatus II

Dear Professor Andraos, I am glad to be able to provide you with some additional information.
The thesis of Eduard Mulder (Utrecht, 1853) is deposited with the University Library of Groningen, and entitled (Dutch):
Historisch kritisch overzigt van de bepalingen der aequivalentgewigten van 13 enkelvoudige ligchamen (zwavel, tellurium, selenium, phosphorus, arsenicum, chloor, kalium, zilver, bromium, sodium, fluorium, silicium and borium)
[Historical critical review of the determinations of the equivalent weights of 13 elements
(sulphur, tellurium, selenium, phosphorus, arsenicum, chlorine, potassium, silver, bromium, sodium, fluorium, silicium and borium)]
The thesis was printed by W.C.J.Bollaan, Utrecht, 1853
No mention is made of promoters.
Simon van der Meer was born 1925 The Hague, studied 'Technical Physics' at the University of Technology, Delft, obtained his engineering degree in 1952 but never took a doctor's degree ; however, two honorary doctor's degrees were bestowed upon him (Geneva 1983 and Amsterdam 1984).
The thesis of Frans Michel Penning (Leiden, 1923) is entitled:
Metingen over isopyknen van gassen bij lage temperaturen [Measurements about isometric lines of gases at low temperatures]. N.B: 'isopyknen' (Greek 'puknos' = dense) are lines of constant density of gases in a temperature/pressure diagram. The thesis was printed by Eduard Ijdo, Leiden, 1923. The promotor was H.Kamerlingh Onnes, professor of physics and head of the Cryogenic Laboratory at Leiden (at the present time a Museum of Low Temperature).
I will send you by post a photograph of my father at the time he finished his thesis. He worked at the Philips Laboratory at Eindhoven from 1924 until his death in 1953.
With kind regards, Lourens Penning
Date: Fri, 6 Dec 2002 11:21:37 +0100
From: "Penning, L" <l.penning@rad.azg.nl>
To: "'jandraos@yorku.ca'" <jandraos@YorkU.CA>
Subject: biographical notice FMPenning

Dear Professor Andraos,
Below you will find my translation of part of an obituary, published January 1954 in the Nederlands Tijdschrift voor Natuurkunde (Dutch Journal of Physics) by Dr. Wim de Groot, fellow-physicist of Frans Michel Penning at the Philips Laboratory at Eindhoven, The Netherlands. Perhaps you can use it for your archive. As a physician I am afraid not always to have translated the technical terms in correct American English. Please make all corrections you deem necessary. With kind regards, Lourens Penning.

Frans Michel Penning, born December 12, 1894 at Gorcum, The Netherlands, studied Physics and Mathematics at the University of Leiden and graduated there on June 25, 1923 on a thesis entitled Metingen over isopyknen van

gassen bij lage temperaturen (Measurements on Isometric Density Lines of Gases at Low Temperatures). Promotor was Professor H. Kamerlingh Onnes. On March 15, 1924, Penning started to work at the Philips Natuurkundig Laboratorium (Philips Physical Laboratory) at Eindhoven, where since 1914 Holst and Oosterhuis, and since 1920 also G.Hertz, had made investigations on electric discharges in rarefied gases. Penning, and others, were commissioned to carry on these investigations.
Completely in line with his tutor Kamerling Onnes, Penning in the first place was a measuring physicist. But besides that he possessed the perspicacity to detect new phenomena, and the fantasy to coordinate the measured macroscopic discharge phenomena with the microscopic world of elementary processes, notably of the reactions between atoms, electrons and light quanta.

Penning's initial observations, among others, concerned high-frequency vibrations in gas discharge tubes and related abnormal electron velocities. These observations led to conclusions contradicting those of Irving Langmuir (American physical chemist and inventor,1881-1957). During a personal discussion, Penning succeeded in convincing Langmuir of the correctness of his (Penning's) ideas.

Relatively soon Penning started measurements on the liberation of electrons from metal surfaces by positive ions and metastable atoms, and especially on the effects related to ionisation of gas atoms and gas molecules, added to inert gaseous elements, by metastable inert gas atoms. Especially the latter effects, already conjectured from previous work by G. Hertz on energy levels of inert gases, was thoroughly investigated into all directions. Once the necessary data had been collected, Penning was also able to produce new effects, such as raising the discharge voltage of an inert gas containing an easily ionisable addition, the extinction of a discharge in a argon-neon mixture by radiation, etc. Also of interest are his measurements on discharge voltages in inert gases and inert gas mixtures, especially in helium, as function of gas density and electrode distance, and his corresponding reflections on the stability of discharges.

Typical of Penning was his tenacity in pursuing the same subject, either because he was not completely satisfied with the published measurements, or because he saw possibilities for extending the subject into various new directions.

Perhaps his most important contribution was the study of the behaviour of discharges in a magnetic field. As a practical result a manometer emerged, in which the current through a discharge tube in a magnetic field is a measure of pressure. This manometer was marketed by several industrial firms because of its quick and direct indication. Also have to be mentioned the detailed measurements by Penning and his co-workers of Townsend's ionisation coefficient, leading to the insight that not only ions but occasionally also light quanta are able to liberate electrons from the cathode of a gas discharge tube.

In 1939 Penning, in co-operation with M.J.Druyvesteyn, wrote a review of his previous work and his new insights in the field of gas discharges in the (American) Review of modern Physics. The paper appeared in 1940 but then Holland had been occupied and Penning did not see the Journal until 1946. During the war Penning's assistance was asked in the development of new types of high frequency electron tubes in the Philips Tube Factory. After the war Penning returned to his original subject. His interest was

drawn by the well-known fact that the data on normal cathode fall during a glow-discharge were so diverging that is was hardly possible to construct a table with generally acceptable values. Having learned how to master the purity of gases, Penning now devoted himself to the cathode material. After completely stripping it from its polluting oxide layer by progressive atomisation he succeeded in producing consistent measurement of cathode fall. As a result a new tube of reliable voltage stability ensued.

In the meantime the above mentioned review paper of 1940 had made great impression in the United States and Penning was invited to come to that country in 1950 to see how his work was estimated, studied and pursued. An American paper humorously illustrated Penning's work and its often seemingly paradoxical results in an Alice-in-Wonderland presentation.

In the following years Penning's health gradually deteriorated and he died on December 6, 1953, at Utrecht, while recovering from an operation.

Date: Mon, 17 Feb 2003 16:08:01 +0100
From: "Penning, L" <l.penning@rad.azg.nl>
To: "'jandraos@yorku.ca'" <jandraos@YorkU.CA>
Subject: Curriculum Lourens Penning

Dear Dr Andraos, You asked me, as son of Frans Michel Penning and Margje Dercksen, to provide a curriculum vitae of my own.
Born October 19, 1922, at Leyden, The Netherlands, where my father was working at the Cryogenic Laboratory of the University (head: Prof. Kamerlingh Onnes). In 1924 our family moved to Eindhoven, where my father became research-worker at the Philips Research Laboratory until his death on December 6, 1953. Medical study at the Universities of Groningen and Amsterdam, concluded May 2, 1951. After two years of general hospital work, specialization in Radiology (diagnosis and therapy) at Maastricht and finished at Groningen on September 15, 1957. Permanent stay at the University Hospital of Groningen, full-time radiologist at the department of neurosurgery in 1959. 1960: Thesis on Functional Radiology of the Cervical Spine (cum laude). 1964: professor of Neuroradiology at the Gronigen University. A monograph on Functional Pathology of the Cervical Spine (1968) attracted international attention, especially of the US and Japan. Other monographs followed: Injuries of the Cervical Spine (with neurosurgeon R.Braakman) and Brain Scintigraphy (with neurologist D.Front). Other work included Preparation and Application of Iodized Contrast Emulsions in the Radiologic Visualization of the Nervous System (with H.Kerckhoffs), Functional Pathology of the Lumbar Spine (with J.Wilmink), Comparative Investigation of the Cervical Spine in Man and Dog (with D.Badoux), The Mechanism of Whiplash Injury, Normal Movements of the Spine in Man and Some Quadrupedal Mammals, and The Function of the Psoas Muscle. Part of this work was performed after my official (obligatory) retirement in October 1987, because I was allowed to remain at the hospital on a so-called zero-appointment. Besides the neuroradiological work booklets were published on Medical Latin and Medical Terminology (with J.Velthoven). Co-founder (1969, Colmar, France) and Honorary Member of the European Society of Neuroradiology, Member of the Cervical Spine Research Society and of the International Society for the Study of the Lumbar Spine, and Editorial Board. Member of the Journals Clinical Biomechanics and the European Spine Journal.

Recently Instructional Courses on Normal Anatomy of the Inner Ear, and the Normal Anatomy of the Nasal Pathways were completed. Further research on the Spine and Inner Ear is going on. With kind regards, Lourens Penning

Walter H. Ehrenstein

Date: 1/26/2004 16:38:04 +0100
From: ehrenstein@ifado.de (Walter Ehrenstein)
To: jandraos@careerchem.com <jandraos@careerchem.com>
Subject: named optical illusions
Dear Sir,

I can assist you in filling in the gap of biographical information with respect to Walter Ehrenstein, my father.
* 10.10.1899 Altenkirchen, Rhineland
+ 16.10.1961 (Bonn)
Dr. phil. nat. (PhD)
Frankfurt am Main
Friedrich Schumann

Many biographical details of persons whose names
are connected with an optical illusion are to be found
in Colman, A. (2002) A Dictionary of Psychology. Oxford

Walter H. Ehrenstein

Leibniz Research Center for Human Factors,
Dortmund University
Ardeystr. 67
44139 Dortmund
Germany

ehrenstein@ifado.de
+49(0)231 1084 -274 (Office;
-263, -279 Lab.;
Fax: -401)

Arthur L. Thomas

Date: Fri, 25 Feb 2005 20:32:28 EST
From: KingArtTom@aol.com
To: jandraos@yorku.ca
Subject: Dr. John Andraos

Dear Dr. Andraos,

I have just come across your excellent Glossary of Coined Names Used in Science.

I noted olation and oxolation and found my father Arthur W. Thomas. I can confirm that he dedicated many years of research to this subject. He was a grand and spirited experimenter in chemistry along with his many graduate students.

They tried to simplify the relationships in solution removing mysticism that had surrounded them for years up the time of their work. His name deserves this recognition.

My father was married in Toronto at Old St Andrew Church on December 23 , 1914. In August 1916 his beloved wife died of typhoid fever in New York. She is at rest at Mt. Pleasant Cemetery in Toronto. I am confident she would have been proud of him.

Sincerely,

Arthur L. Thomas
2 Putnam Park
Greenwich, CT
06830-5747

Date: Wed, 2 Mar 2005 13:24:27 EST
From: KingArtTom@aol.com
To: jandraos@yorku.ca
Subject: Glossary

Dear Dr. Andraos,

My nieces have seen the Glossary website and ask that my father's second wife also be included in any statement in the Glossary.

"In February 1919 my father remarried while an officer in the American Expeditionary Force in Europe. I am the son of his second wife who also was devoted to him and supported his work over the many years. My father passed on in 1982."

As a personal note his first wife had been a brilliant student at the Jarvis Collegiate School on Jarvis Street in Toronto and his second wife had been a brilliant student at school in Normandy.

Sincerely,

Arthur L. Thomas
Connecticut

André Wielki

Date: Sun, 05 Aug 2007 19:41:44 +0200
From: andre <andre.wielki@magic.fr>
To: jandraos@yorku.ca
Reply-to: andre.wielki@magic.fr
Subject: Your Becquerel Sheet of 2002

Dear Dr Andraos,
I found in one of your sheets a reference to my grand father Walter MUND.
I can comment on him a little better but not upon a physics or chemistry point of view.

He was born in Antwerp (Belgium) to a Belgian family from German origin as a result of the war (1914-1918) against the Prussian invasion. Indeed, he spent more than one year at the rue Vauquelin in Paris in the laboratorium of Pierre and Marie Curie and some people say he was meeting a lot of times their daughter Irène. After this period in Paris he became ordinary professor at the UCL (Catholic University of Louvain). He married one of the first student girls accepted in the university in 1923. She was from Russian-Romanian origin and her name was Ludmilla Dontchillo. He was in regular contact with Einstein, Piccard, Bohr and others.
My uncle, Robert Mund, a painter and psychoanalyst (before he died in 1993), was telling me the visits at home of those people (souvenir of his youth before the 1939-1945 war).
Albrecht Einstein stopped at Louvain when he was on the way to finally leave Germany.
My grand father died in August 1956 in Louvain.

I hope this can help you in your sheet construction if you have time for it.

Jan A Herman could be a Canadian student of my grandfather but I don't recall his name.

Greetings,

André Wielki (Malakoff near Paris)