

THE

# HISTORY OF GEOLOGY

DIVISION

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**SUBMIT!**

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## *ABSTRACTS DEADLINE JULY 13, 2004*

It is not too late to submit your abstract for the general History of Geology Session. Please, we need your help. Tell us about your latest work, or work-in-progress, but do submit an abstract.

## **HISTORY OF GEOLOGY - AWARDS FOR 2004**

The GSA History of Geology Division is pleased to announce that **Professor Stephen G. Brush**, University of Maryland, will receive the *History of Geology Award for 2004*, and **Mr. Michael C. Rygel**, a graduate student at Dalhousie University, Nova Scotia, will receive the Division's first *Student Award in the History of Geology*, which includes a cash prize of \$500.00. Both awards will be presented at the History of Geology Division annual luncheon at the 2004 GSA meeting.

**Dr. Brush** is a well known historian of science and the author of numerous papers and books, especially his portion of the series on the history of ideas about the early earth and origin of the solar system, *A History of Modern Planetary Physics - Volume 1: Nebulous Earth-The Origin of the Solar System and the Core of the Earth from LaPlace to Jeffreys*, *Volume 2: Transmuted Past-The Age of the Earth and the Evolution of the Elements from Lyell to Patterson*, and *Volume 3: Fruitful Encounters-The Origin of the Solar System and of the Moon from Chamberlin to Apollo*. Many of us remember his very interesting and insightful papers, "The Age of the Earth in the Twentieth Century" (*Earth Sciences History*, v. 8, no. 2, 1989, p. 170-182) and "Finding the Age of the Earth by Physics or by Faith" (*Journal of Geological Education*, v. 30, 1982, p. 34-58). The latter paper was a marvelous critique of claims by creationists that the Earth is only a few thousand years old, coupled with an exposition of the radiometric dating method.

**Mr. Rygel**, a third-year graduate student at Dalhousie University, is studying sedimentary geology and has been involved in doing the first measurement of the Joggins section since William Logan did it in the 1840s. On the following page is the abstract submitted by Mr. Rygel and his advisor, Brian C. Shipley:  
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## **LOGAN IN ACADIA: REEXAMINATION OF NINETEENTH CENTURY MEASUREMENTS OF THE JOGGINS SECTION**

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In July of 1843, William Edmond Logan (1798-1875) began his first major project as the head of the newly established Geological Survey of Canada: the search for coal on the Gaspé Peninsula of Upper Canada. Although Logan's activities in present day Quebec are well documented, there is little record of his journey through the coalfields of Nova Scotia and New Brunswick in the preceding month.

Two previously overlooked field notebooks contain detailed information about Logan's most famous undertaking in the Maritimes: measurement of the famous 'Joggins section'. Inspired by reports of 40-foot-tall fossil lycopsid trees from Abraham Gesner and Charles Lyell, Logan spent 5 days in early June measuring 14,570 ft. 11 in. of section exposed along the shore of the Bay of Fundy. Widely regarded as a meticulous, bed-by-bed section, Logan's notes reveal that only coal-bearing intervals were measured directly; thicknesses for the rest of the section used paced distances and were calculated long after he left the section. Realizing that the complete log would not be publishable in scientific journals of the day, Logan published it as an appendix to his "Report of Progress for 1843" - an obscure work that went unnoticed for many years.

Unaware of Logan's log, J.W. Dawson and Charles Lyell briefly visited Joggins in 1852 and found the "tree stump fauna" while measuring their own 2,819 ft. 2 in. log of the coal-bearing part of the section. This more detailed section was published in the *Journal of the Geological Society of London* (1854) and in the first edition of *Acadian Geology* (1855). Having learned of the existing section, Dawson noted that the two contained only minor differences and included a précis of Logan's work with his own. A comparison of the logs reveals that, although they differ in thickness by only 3 to 8%, descriptions and measurements of individual beds differ radically. Dawson cleverly disguised these discrepancies in later editions of *Acadian Geology* by rewriting much of the log and abandoning many of his own observations in favor of Logan's.

This examination of Logan, Dawson, and Lyell's work dispels the notion that these Victorian luminaries were infallible, but shows that in a few short days they added more to our understanding of the section than the cumulative contribution over the past 160 years.

Our congratulations to both **Dr. Stephen G. Brush** and **Mr. Michael C. Rygel**, our awardees for 2004.

## **GSA ANNUAL MEETING - DENVER - NOVEMBER 7-10, 2004**

### **SESSION T-57 LAYER-CAKE CONCEPT - THEN AND NOW**

The History of Geology Division annual theme session at the upcoming Denver meeting is shaping up nicely. The concept of time-parallel stratigraphy was widely accepted in the nineteenth century, but it was eclipsed by the facies concept for many decades. Today we see it making a comeback in the guise of sequence and event stratigraphy. Contact Charlie at [cwbyers@geology.wisc.edu](mailto:cwbyers@geology.wisc.edu) for more information. Spread the word to your stratigrapher colleagues!

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## **GENERAL HISTORY OF GEOLOGY SESSION**

Also, we invite members and non-members to share with us the results of your current research, even a work in progress, as part of the General HoG Session that we sponsor each year in addition to the specific symposium. We need papers to be submitted for this general session, so please consider sharing your work with the Division, and submit your abstract.

**ABSTRACT DEADLINE JULY 13, 2004**

**<http://www.geosociety.org/meetings/2004/>**

### **Also of Interest:**

T-3: History of Hydrogeology in the United States: Celebrating the Contributions of O.E. Meinzer, Stan Lohman, and John Ferris

## **RECEPTION**

**Don't forget our annual reception, co-sponsored with HESS,  
and remember to bring articles for the door prizes.**

## **CONGRATULATIONS**

**Prof. Jim Skehan** (Weston Observatory, Dept. of Geology & Geophysics, Boston College) will be inducted into the *Massachusetts Hall of Fame for Science Educators* by Thomas L. Maccarone, President, on May 6 at the Holiday Inn, Worcester, Mass. Jim's induction will take place on the occasion of the Annual Meeting & Banquet of the Massachusetts Association of Science Supervisors. Jim authored the lead chapter in Elsevier's JOURNAL OF GEODYNAMICS volume, now in press, memorializing his eminent friend, "Nicholas Rast: A Geologist who Straddled the Atlantic but never an Issue." Born in Teheran, and in late years Hudnall Chair holder at the University of Kentucky, Nick's and Jim's friendship and fruitful collaboration on regional geology and tectonics spanned 30 years on three continents. A second chapter in the Rast volume, "Tectonostratigraphic Relationships of the Narragansett and Norfolk Basins, New England," was coauthored by Jim with Prof. Daniel P. Murray of the University of Rhode Island.

**William R. Brice** received the *President's Award for Excellence in Teaching for 2004* at the University of Pittsburgh at Johnstown. Bill is the first person in the Natural Sciences Division to receive this award. In 2003 he received the *Dr. Edward A. Vizzini Teacher of the Year Award* from the Natural Sciences Division at UPJ.

## **MISSING FRIENDS**

The newsletter sent to the following people on our list of "Friends" came back. If anyone knows the whereabouts and/or a new address, please contact Bill [wbrice@pitt.edu](mailto:wbrice@pitt.edu).

**Dr. Berly Hamilton**, 2 Ash Grove, Rainford, St. Helens WA11 8DU, United Kingdom

**Dr. Peter U. Rodda**, Department of Geology, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118, and forwarded to Peter Rodda, 1090 Corydon St, Eugene, OR 97401

## IN MEMORIAM

*Somehow the Division missed this announcement, and I wanted to pass it along to the membership (Ed):*

Cliff Nelson sent word that **Thurman Wilkins** died at his home in Bandon, Oregon, in 1997. Cliff never had the opportunity to meet Thurman personally, but came to know him somewhat during many pleasant and rewarding conversations by telephone during and after Thurman prepared the second edition (1988) of his biography of Clarence King and his brief life of John Muir.

## UPCOMING MEETINGS OF INTEREST

### **FIFTH BRITISH-NORTH AMERICAN JOINT MEETING OF THE BSHS, CSHPS AND HSS.**

Circulating Knowledge: 5-7 August 2004, Halifax, Nova Scotia, Canada.

The Plenary Lecture at the meeting will be given by Prof. James A. Secord (University of Cambridge), winner of the 2002 Pfizer Prize of the History of Science Society. His talk will be entitled "Knowledge in Transit."

Keynote sessions are also planned on "Mediators and Knowledge Networks in Late Eighteenth Century Imperial Experience"; on "Circulating Psychological Knowledge"; and on "Networks of Knowledge in the Scientific Revolution."

### **INTERNATIONAL COMMISSION ON THE HISTORY OF GEOLOGICAL SCIENCES (INHIGEO)**

After the 32<sup>nd</sup> International Geological Congress (August 20-28, 2003), INHIGEO is organizing a field trip (August 29-September 3) visiting various field sites, academies, and museums important in the history of geology. Estimated cost 900 Euros. Contact: Professor Nicoletta Morello, Dipartimento di Storia Moderna e Contemporanea, Università di Genova, Via Balbi 6, 16126 Genova, Italy, +039 010 2099838; nicoletta.morello@unige.it.

### **HELP CELEBRATE THE EARTH'S BIRTHDAY - GEO-FAKES, FRAUDS AND HOAXES OCTOBER 22, 2004**

Join the History of Geology Group at Burlington House, Geological Society of London, on October 22, 2004. Get the latest on the Piltown hoax, many other geological fakes and frauds, and celebrate the Earth's birthday, according to Bishop Ussher, as well. It should be a splendid time. For more details contact Cherry Lewis at [Cherry.Lewis@bristol.ac.uk](mailto:Cherry.Lewis@bristol.ac.uk)

## INTERESTING PUBLICATIONS

*To See the Fellows Fight - Eye-witness Accounts of Meetings of the Geological Society of London and its Club, 1822-1868*, Edited by John C. Thackray. British Society for the History of Science, 5 Woodcote Green, Fleet, Hants, GU51 4EY, United Kingdom. \$26.00 (US) Postpaid. Tel: (+44) (0) 1252 641135; [execse@bshs.org.uk](mailto:execse@bshs.org.uk).

**ENGLISH TRANSLATION OF HENRY DARCY'S *LES FONTAINES PUBLIQUES DE LA VILLE DE DIJON*.** The full-length English translation of Henry Darcy's *The Public Fountains of the City of Dijon* is now available. The book is Darcy's account of the design and construction of Dijon's water supply system in 1840. Darcy's 12-km aqueduct and 10.5-km cast-iron-pipe distribution system

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### **Interesting Publications** (continued from p. 4)

supplied free spring water to 120 street fountains located throughout Dijon. The street fountains provided water for domestic purposes, street washing and fire fighting. Darcy replaced Dijon's meager supply of pestilential well water with water so abundant and pure that Dijon suddenly ranked second only to Rome in water quality and quantity.

Written in 1856 as an engineer's guide to water and the construction of water supply systems, the book is an encyclopedia of mid-19th century knowledge of water, wells, springs, pipe-manufacturing, Pitot tubes and other topics. In an appendix devoted to water filtration, Darcy describes the experiments that led to the law of water movement through sand that we know as Darcy's Law.

From the foreword by Dr. Jack Sharp, Jr. of the University of Texas, "Patricia Bobeck's wonderful translation opens a window into the engineering science of the early 19th century, its challenges and its modern implications. Scientists, engineers, policy analysts and the well-read general public will find this a most intriguing volume."

The translation contains 28 plates of Darcy's engineering drawings, originally published as a companion volume to the 657-page French text. The English translation has been published as a result of financial backing by Geomatrix Consultants. It is available from Kendall Hunt Publishing Company at 1-800-338-8290 or [www.kendallhunt.com](http://www.kendallhunt.com). The price is \$100.

*The Seashell on the Mountaintop-A Story of Science, Sainthood and the Humble Genius who Discovered a New History of the Earth*, by Alan Cutler. Published by William Heinmann, London 0 434 00857 5. The story of Nicolaus Steno, whom we all know from beginning geology with his three principles of stratigraphy.

## **HISTORY OF GEOLOGY AWARD FOR 2005 CALL FOR NOMINATIONS**

The History of Geology Division makes this award to an individual for contributions of fundamental importance to the understanding of the history of the geological sciences. Achievements deserving of the award include, but are not limited to: publication of papers or books that contribute new and profound insights into the history of geology (based upon original research or synthesis of existing knowledge); discovery of and making available rare source materials; comprehensive bibliographic surveys; editing a thematically integrated collection of articles; organizing meetings and symposia in the history of geology; research into original sources; original interpretations of data; translations of key material; and exceptional service to the Division. The award, established by the History of Geology Division in 1981, consists of an embossed certificate and a pewter Revere bowl. The deadline for receipt of nominations by the selection committee is February 1<sup>st</sup> each year. Nominations should be sent to Bill Brice, Secretary-Treasurer, address is given below.

### **FORMER AWARDEES**

1982 George W. White	1990 Gordon Y. Craig	1998 Hatten S. Yoder, Jr.
1983 Claude C. Albritton, Jr.	1991 William A.S. Sarjeant	1999 David R. Oldroyd
1984 Mary C. Rabbitt	1992 Michele L. Aldrich	2000 Hugh Torrens
1985 Cecil J. Schneer	1993 Martin Guntau	2001 Walter O. Kupsch
1986 Ursula B. Marvin	1994 François Ellenberger	2002 Dennis Dean
1987 Martin J.S. Rudwick	1995 Robert H. Dott, Jr.	2003 Ellis Yochelson
1988 Stephen J. Gould	1996 Gordon L Herries Davies	2004 Stephen G. Brush
1989 Albert V. Carozzi	1997 Kennard B. Bork	2005 ??

## 2003-2004 History of Geology Division Officers

**CHAIR:** Charles W. (Charlie) Byers, Dept. Geology & Geophysics, University of Wisconsin, 412 Weeks Hall, 1215 W. Dayton Street, Madison, WI 53706-1692; (608) 262-2361 (office); (608) 262-8960 (dept); (608) 262-0693 (fax); cwbyers@geology.wisc.edu

**FIRST VICE-CHAIR:** Ed Rogers, P.O. Box 455, Poncha Springs, CO 81242-0455; (719) 539-4113; (719) 539-4542 (fax); erogers@geology-books.com

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**PAST CHAIR:** Roger D. K. Thomas, Franklin & Marshall College, Dept. of Earth & Environment, P.O. Box 3003, Lancaster, PA 17604-3003; (717) 291-4135 (office); (717) 291-4133 (dept); (717) 291-4186 (fax); roger.thomas@fandm.edu

**WEB MASTER:** Hugh Rance, 4310 Kissena Blvd, 11 H, Flushing, NY 11355-2973; hughrance@rcn.com