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Newsletter



NEW ENGLAND CHAPTER OF THE HEALTH PHYSICS SOCIETY

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Visit our web site at www.nechps.org.

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John G. Robinson Contributed by Rusty Lorenzen

Boston Herald- John G. Robinson of Plymouth, a retired health physicist, died Wednesday, January 14th at home after a lengthy illness. He was 69.

Born in Hartford, Connecticut he lived in Duxbury before moving to Plymouth. He graduated from Connecticut State College with a bachelor of science in industrial education. He also attended Bentley College and the Massachusetts Institute of Technology. He also earned a reactor operator's license.

For more than 34 years, Mr. Robinson was a health physicist in the nuclear power industry. He was the director of the environmental engineering department at the Yankee Atomic Electric Co. He developed and supervised the plant radiation and protection program. From 1963 to 1964, while working for the American Export Lines, he directed radiological surveillance, reactor radiochemistry, the film dosimetry program, bioassay and the training of operators.

He also met with foreign government officials to discuss shipboard radiological conditions and emergency plans before the ship was authorized to enter each foreign port. During this period, he attended a seven-month reactor training program at the Babcock and Wilcox Co. and the U.S. Maritime Academy, and received a reactor operator's license for the N.S. Savannah.

Mr. Robinson served on the Environment and Energy Committee and the emergency planning committee for Edison Electric Institute, and was chairman of the technical advisory committee for the AIF/National Environmental Studies Program. He was past president of the New England Chapter-Health Physics Society and a member of the American Nuclear Society. He was a member of the Plymouth Yacht Club and the Woodchucks Club of Plymouth.

A funeral service was held January 17th at the Church of the Pilgrimage in Plymouth.

Arrangements were made by Bartlett-Garrity Funeral Home, Plymouth.

Victor Evdokimoff Retires Contributed by Chris Martel

Victor Evdokimoff has announced that he will be retiring as the Director of the Radiation Protection Office (RPO) effective January 1, 2004 after completing 26 successful years of service to the Medical Campus and Boston Medical Center.

Victor has served as the Radiation Safety Officer for over two decades providing radiation safety services to hundreds of faculty and staff in dozens of departments. He will be leaving to pursue his consulting interests, his music and to teach skiing. "Victor and I have worked together for many years and share many common interests. He has made an enormous contribution to the Medical Campus and BMC for more than two decades. We are grateful for his dedication and commitment and wish him well in his next endeavor," said Boston University President ad interim Aram Chobanian, MD.

Victor joined BU in August of 1977. He received a BA in Biology from BU in 1966, MS in Health Sciences from Northeastern in 1969, and a MS in Radiological Sciences from John Hopkins in 1971. Victor was appointed Adjunct Assistant Professor of Public Health in 1984. In 1988, he was promoted to Director of Radiation Safety. Victor also received an appointment as Assistant Clinical Professor in the School of Dental Medicine in 1989.

"I am proud of the success of the radiation safety office and appreciate the support of so many who have helped me and the office over the years. We have the best radiation safety program because we have always had tremendous support," said Victor.

[If you have an article you'd like to contribute, contact Doug LaMay at dlamay@mit.edu or (617) 253-4203. Deadlines for article submission are posted on the NECHPS website at www.nechps.org.]

NECHPS Meeting Calendar

March 11 th , 2004-	Details in this Issue
April 21 st , 2004-	Topic To Be Announced
June 8 th , 2004-	NECHPS Annual Meeting

Theory: Sun Radiation Caused Extinction

Contributed by James Klein

ATLANTA (AP) - The second-largest extinction in the Earth's history, the killing of two-thirds of all species, may have been caused by ultraviolet radiation from the sun after gamma rays destroyed the Earth's ozone layer.

Astronomers are proposing that a supernova exploded within 10,000 light years of the Earth, destroying the chemistry of the atmosphere and allowing the sun's ultraviolet rays to cook fragile, unprotected life forms.

All this happened some 440 million years ago and led to what is known as the Ordovician extinction, the second most severe of the planet's five great periods of extinction.

"The prevailing theory for that extinction has been an ice age," said Adrian L. Melott, a University of Kansas astronomer. "We think there is very good circumstantial evidence for a gamma ray burst."

Melott is the leader of a team, which includes some astronomers from the National Aeronautics and Space Administration, that presented the theory Wednesday at the national meeting of the American Astronomical Society.

Fossil records for the Ordovician extinction show an abrupt disappearance of two-thirds of all species on the planet. Those records also show that an ice age that lasted more than a half million years started during the same period.

Melott said a gamma ray burst would explain both phenomena.

He said a gamma ray beam striking the Earth would break up molecules in the stratosphere, causing the formation of nitrous oxide and other chemicals that would destroy the ozone layer and shroud the planet in a brown smog.

"The sky would get brown, but there would be intense ultraviolet radiation from the sun striking the surface," he said. The radiation would be at least 50 times

above normal, powerful enough to kill exposed life.

In a second effect, the brown smog would cause the Earth to cool, triggering an ice age, Melott said.

The extinction "could have been a one-two punch," said Bruce S. Lieberman, a paleontologist at the University of Kansas and a co-author of the theory. "Our theory builds on earlier theories" that included an ice age.

Before the extinction, the Earth was unusually warm. Melott said climate experts have been unable to find a model that would explain the sudden onset of massive glaciers.

"They need something to jump start the ice age," he said. "The gamma ray burst could have done it."

Jere H. Lipps, a paleobiologist at the University of California, Berkeley, said gamma rays as a source of the Ordovician extinction should be regarded as only one of several theories. "It is a hypothesis that should be tested," Lipps said.

He said the widely-accepted idea that the dinosaurs were wiped out by an asteroid 65 million years ago started out as a "wild idea" but that it gained wide support after other research.

Most of the life killed in the Ordovician extinction were primitive sea creatures. Those that lived at or near the surface would be greatest risk from the ultraviolet radiation. Melott the species killed lived in shallow waters or reproduced with larvae that spent part of their lives near the water surface. Animals living in deep water were not harmed.

There were only primitive plants living on land, but they, too, would have been affected, he said.

Melott said it is almost certain that Earth has been zapped by a gamma rays several times in its 4.5 billion year history.

"You can expect a dangerous gamma ray burst every few hundred million years," he said. "It could happen tomorrow or it could be millions of years."

Supernovae, the source of gamma rays, usually leave

behind remnant clouds of dust, shock waves and black holes that can be detected for millions of years. Melott said there is no known evidence of such a nearby supernova, but that in 440 million years the Milky Way would have rotated almost twice and traces of the explosion could have been moved during that time.

The Ordovician was the first of five great extinctions in history.

The Devonian, 360 million years ago, killed 60 percent of all species; the Permian-Triassic, 250 million years ago, killed 90 percent of all life; the late Triassic, 220 million years ago, killed half of all species; and the Cretaceous-Tertiary event destroyed the dinosaurs and half of all other species about 65 million years ago.

For more information visit the website of the American Astronomical Society at <http://www.aas.org>.

Congressman Bass Addresses NECHPS Margaret McCarthy

A January “Hello” [or should I say, “burrrr”]. Our chapter Program Chairman, Chris Martel, has distributed our meetings over the New England area to encourage attendance and to promote cooperation with other professionally related societies. The most recent January meeting occurred at the Crowne Plaza Hotel in Nashua, NH as a joint meeting with the local ANS chapter. Food was superb. Our guest speaker is a member of the Washington, DC House of Representatives.

New Hampshire 5th term Congressman Charles Bass (R) has been awarded the 2003 Outstanding Contribution award from the American Council on Renewable Energy (ACORE) for his work as a member of the House Renewable Energy and Energy Efficiency Caucus. Bass is also a Member of the Committee on Energy and Commerce in the House. In his own words, he has “long supported reasonable and effective efforts to reduce our dependence on fossil fuels and ... have had the opportunity to study renewable energy and consider proposals to develop renewable energy technologies. From funding research and development projects to providing tax

incentives for qualifying producers and consumers, the government should continue supporting renewable energy initiatives to reduce our dependence on foreign oil, improve national security, create jobs, and lessen the threat of global warming.”

His elected official background includes being Co-chairman of the New England Congressional Caucus with U.S. Representative Richard Neal (MA). “The Caucus works closely with The New England Council - the nation's oldest regional business organization - to support federal public policies and initiatives that have an impact on the six-state New England region.” Congressman Bass is particularly interested in renewable energy and how it balances a more responsible energy policy.

On the Friday that began the three-day MLK weekend, Congressman Bass spoke on the status of nuclear energy and its future potential. The audience consisted of members of the local ANS, the NECHPS, the public, and guests of the plenary members. First the Congressman presented the overall tenor of the congress on the future of nuclear energy. There followed a discussion within the audience of the efficiency of existing nuclear plants and the history of nuclear energy over the past twenty years. He was deft in the moderating of the discussion, connecting the topics, and presenting energy - both nuclear and renewable sources - from a political perspective. The Chapter President of Northeastern Section of the American Nuclear Society, Howard Shaffer, and Chapter President of the NECHPS Margaret E. McCarthy thanked him for the informational session, the photo session, and his time.

Please visit the NECHPS web site for photos of the congressman. A variation of this article will appear in “Health Physics News” in the March issue. Photo credit to Jon Ricci, NECHPS & HPS member.

New Members

If you know anyone who wants to join NECHPS, tell him/her to visit the website (www.nechps.org) or contact John Sumares at 617-427-2944. Student members are always welcome; and remember, student membership is free!

NECHPS MARCH MEETING

- Date:** Thursday, March 11th, 2004
- Location:** Newton Marriott, 2345 Commonwealth Avenue, Newton, MA 02466
- Topics:** *Medical Misadministration Response- Perspectives from a Licensee and a Regulator*
- Speakers:** Rex Woodleigh, Massachusetts General Hospital
Robert Gallagher, Massachusetts Radiation Control Program
- Time:** 5:30-6:00 PM Registration/Cash Bar
6:00-7:00 PM Dinner
7:00-9:00 PM Guest Speakers
- Cost:** \$35.00 Members, \$45.00 Guests, and \$25.00 Students
- Menu:** Swordfish Parmesan OR Herb-Crusted Statler Chicken Breast OR Vegetarian (Wild Rice and Anasazi Bean Timbale) AND

Choice of Salad; Chef's Selection of Fresh Market Vegetables, Starch Rolls and Butter; Dessert; Coffee, Herbal Teas, and Decaffeinated Coffee
- To Register:** *Mail registration to:*

Chris Martel
306 Hayden Rowe
Hopkinton, MA 01748

or call to register: (617) 638-7419
or e-mail to register: cbmartel@bu.edu
or register online at: www.nechps.org

Please note, you can make payment up to and including the night of the event (pay "at the door"); however, no matter when you make payment, please register beforehand.

Directions:

Heading South on 128:

Take RT 128 / I-95 SOUTH to EXIT 24 (RT 30 Newton/Wayland). Turn right at the top of the ramp onto RT 30 EAST. The hotel is .4 mile on the left.

Heading North on 128:

Take RT 128 / I-95 NORTH to EXIT 24 (immediately after the MBTA Exit). The exit sign will read "EXITS 23, 24, 25. After EXIT 25, take EXIT 24 (RT 30 Newton/Wayland). Turn right at the top of the ramp onto Route 30 East. The hotel is .3 mile on the left.

For additional information call the Newton Marriott at: (617) 969-1000.

NELRAD ANNUAL MEETING

Radioactive Waste in 2004

Northeastern University, Henderson House, in Weston, MA
Wednesday, April 28, 2004

- 8:30 AM **Registration. Coffee & Danish**
- 9:00 **Introduction**
David E. Drum, MD, Chair, NELRAD
- 9:05 **Management of Spent Fuel in Canada**
Kathryn Shaver, Executive Director,
Nuclear Waste Management Organization of Canada
- 9:30 **NCRP-143 Minimization of Off-Site Disposal**
William Dornsife, MS, CHP, Vice-President/Nuclear Affairs
Waste Control Specialists, LLC
- 10:30 **Break**
- 11:00 **NCRP-139 Risk-Based Classification of Radioactive and Hazardous Chemicals**
David C. Kocher, CHP
SENES, Inc, Oak Ridge
- 12:00 PM **Hors D'oeuvres, Wine and Lunch**
- 1:30 **New Mass State Reporting Process**
Fred Barker, P.E., Radiation Control Officer, Radiation Control Program
Department of Public Health, Commonwealth of Massachusetts
- 2:15 **Current Status of Decommissioning and Spent Fuel Storage at
Connecticut Yankee and Yankee Rowe**
Robert W. Capstick, Jr., Director of Government Affairs
- 3:00 **Concerns of the Council on Radionuclides and Radiopharmaceuticals**
Leonard Smith, CHP, Director, Regulatory Compliance,
PerkinElmer Life and Analytical Sciences, Boston

Application has been made for Health Physics Continuing Education Credits.

Please RSVP by April 20th to Dr. Drum at (617) 732-5656, page 11161, dedrum@earthlink.net, or FAX: (781) 235-3873.

Registration Form: NELRAD Annual Meeting- NO FEE!

Name _____

Company/Institution _____

Address _____

City _____ State _____ Zip _____

Phone _____ FAX _____

E-Mail _____

Mail registration to **NELRAD:** Steve Brehio, Treasurer
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