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# mechanics

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Mechanics is a bi-monthly magazine. To be considered for publication in forthcoming issues, an advertisement must be received one month in advance of the publication date. For example, an advertisement must be received before the end of November to appear in the January-February issue. Please note that the magazine is distributed near the end of the two-month period. The advertisement will continue to appear in future issues until the deadline of the position opening.

Visit the AAM website to read recent advertisements of position openings and past issues of Mechanics at [www.AAMech.org](http://www.AAMech.org).

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*mechanics* provides its readers with news in the field of theoretical and applied mechanics, and serves as a forum for the presentation and discussion of issues related to the development of the science and profession of mechanics. Opinions expressed are those of the authors and do not necessarily reflect official points of views of AAM or the institutions with which the authors are affiliated.

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The American Academy of Mechanics is a non-profit corporation incorporated in 1969 under the laws of the Commonwealth of Pennsylvania. Its objective is to advance the science and profession of mechanics, with particular reference to the countries of North, South, and Central America. It aims to facilitate cooperation among mechanicians, to encourage recognition of achievements in mechanics, and to promote public understanding of the work of the mechanician.

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**American Academy of Mechanics**  
**Academia Americana de Mecánica**

## OBITUARY

It is with great sadness that we mark the passing of Dr. Robert M. Haythornthwaite, founder of the American Academy of Mechanics. The following obituary of Dr. Haythornthwaite has been authored by R. T. Shield at the request of the Haythornthwaite family.



### **ROBERT M. HAYTHORNTHWAITE**

Robert M. Haythornthwaite, 84, died February 24 in Catonsville, MD. He is survived by Mary, his wife of 55 years, their son Richard, daughters Jennifer, Susan, and Sheila Glesmann, and Sheila's son Andrew.

Bob founded the American Academy of Mechanics in 1969, was its first president, and has been continuously active in it. He formed the Academy to serve not just the United States but all of the countries in the Americas. In 38 years it has grown to some 700 members of which over 150 have been elected Fellows in recognition of their contributions to mechanics. The Academy has sponsored 9 Congresses, in Brazil in 1989, 1993, and 1999, Chile in 1991 and 2002, Argentina in 1995, Puerto Rico in 1997, Cuba in 2004, and Mexico in 2006. A Congress in Cancun, Mexico is planned for 2008. He also was the Founding Editor of *Mechanics*. The journal provided the very useful service of publishing the contents of various mechanics oriented journals until the Internet made them easily obtainable.

In 1985 Bob and his wife Mary founded the Robert M. & Mary Haythornthwaite Foundation to support scientific research. It has provided funds for research and lectures in the United States and in England; through the Academy it provides the Founder's Prize and Grant.

Bob was born in Whitley Bay in NE England in 1922. He began his engineering career at the age of 16 as an articled pupil to a Chartered Civil Engineer and obtained a B.Sc. from Durham University in 1942. His studies at London University led to a B.Sc. in 1945 and a Ph.D. in 1952. He was a Scientific Officer in the Structures Division of the Building Research Station (UK) and later in the Department of Scientific and Industrial Research (UK). Bob's academic career began as a lecturer at the University of Sheffield. In 1950 he was awarded a Commonwealth Fund Fellowship for a year of study in the USA which he used to go to Brown University. He returned to Brown in 1953 to join the Engineering Department and later held professorships at the University of Michigan, Pennsylvania State University, and Temple University from which he retired in 1996.

Bob's work in mechanics was both experimental and theoretical and covered a wide range, from the plastic behavior of metallic structures to the behavior of soils. He published over 50 articles in journals such as the Proceedings of the Institution of Civil Engineers, the Journal of the Aeronautical Sciences, the Journal of Applied Mechanics, the Journal of the Mechanics and Physics of Solids, the Proceedings of the American Society of Civil Engineers, the Transactions of the American Society of Mechanical Engineers, the Journal of Engineering Mechanics, and in the proceedings of congresses. In addition he published over 20 technical reports, book reviews, and translations, and was the editor of the Proceedings of the Third U.S. National Congress of Applied Mechanics, three volumes of the Journal of the Engineering Mechanics Division of the American Society of Civil Engineers, and the first two volumes of *Mechanics*. He supervised theses of graduate students at Brown and at the University of Michigan in addition to teaching experimental methods to students assisting in his laboratory work. Among the recognitions he received for his contribution to mechanics is a Research Prize from the American Society of Civil Engineers. The Academy awarded him a plaque in 1994 at the 25<sup>th</sup> anniversary meeting in Seattle for his leadership and dedication to the Academy. For Distinguished Service to Theoretical and Applied Mechanics, the Academy awarded him a medal in 1996. He was a Fellow of the American Society of Civil Engineers and of the Academy.

I first met Bob at Brown in 1951 at the end of his year as a Commonwealth Fellow and even though busy with his arrangements for traveling back to England he very generously spent time to help me get acclimated and to meet some of his friends. Later I learned that I had followed him at King's College Newcastle, which was part of the University of Durham at that time, now a University in its own right. We were both members of the rowing club although we did not overlap. At Brown in the late 50's he showed me a paper from the Russian journal *Mekhanika i Mashinostroenie* on the plastic behavior of a plate and said that the author was using a sledgehammer to crack a walnut. So we found a much simpler way to treat the problem. Bob wrote the first draft of a paper to send to the journal. Fortunately V. V. Sokolovsky was visiting Brown for the 1958 U.S. National Congress of Applied Mechanics and he edited Bob's Russian.

His friends will remember Bob as a warm, generous person who was always interesting to talk to. His strong interest in mechanics led him to feel that he should contribute to the field and he has most certainly done that.

R. T. Shield

# CONFERENCE ANNOUNCEMENT

In its thirty-seventh year as the premier conference on Structural Mechanics in Reactor Technology, SMiRT will be held August 12 to August 17, 2007 in Toronto, Canada. Join your colleagues from the world over for a penetrating look at the state-of-the-art evolution of Reactor Technology.

The conference's twelve divisions cover the life-cycle of Reactor Technology discussed by world-wide experts:

- B - Computational Mechanics and Computing Applications
- C - Fuel and Core Structures
- D - Aging, Material Degradation, Life Extension, and License Renewal
- F - Design Methods and Rules for Components
- G - Fracture Mechanics and Structural Integrity
- H - Concrete Material, Containment and Other Structures
- J - Analysis and Design for Dynamic and Extreme Loads
- K - Seismic Analysis, Design, and Qualification
- M - Structural Reliability, Probabilistic Safety Assessment (PSA) and Risk-informed Applications
- O - Operation, Inspection, and Maintenance
- S - Advanced Reactors
- W - Decommissioning of Nuclear Facilities and Waste Management

A Keynote address and two other talks at the Opening Ceremonies on Monday morning August 13, 2007:

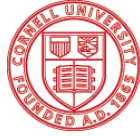
- **Robert P. Kennedy**, long time recognized industry consultant will keynote with the first Thomas A Jaeger Lecture.
- **Peter B. Lyons**, United States NRC Commissioner, and
- **Linda J. Keen**, President and CEO of the Canadian Nuclear Safety Board will speak.

In addition, there will be informative exhibits from major organizations in the Nuclear industry, an interesting program for spouses, and several entertaining events.

IASMiRT has long been recognized for its leadership in providing the greatest informational resources for the industry. The SMiRT Conference is the bow wave of that information flow. IASMiRT is making the historical information from past conferences available on line, but to keep up with the current technology, you must attend SMiRT.

Further information can be found at <http://www.engr.ncsu.edu/smirt-19> .

# POSITIONS AVAILABLE



Cornell University  
School of Civil and  
Environmental Engineering

## **Announces two tenure-track faculty positions in structural engineering starting in Fall 2007-2008.**

At Cornell, structural engineering is conceived of broadly. Thus we are seeking candidates with a passion for applying fundamental principles of physics, cast within the framework of solid and structural mechanics, to enable improvements in understanding and design of complex structural systems in a multi-scale context, and across a range of materials.

In this spirit, two complementary candidates are sought:

- 1) *High performance materials. Position #00127814* - The successful candidate for position one is expected to advance the analysis and design of structural systems made of high-performance materials including concrete structures by integrating structural mechanics with multi-scale modeling and advanced experimentation. The Cornell NEES site and the newly renovated Bovay Laboratory Complex will likely be of value to this candidate's research program.
- 2) *Computational mechanics. Position #00141783* - The successful candidate for position two is expected to have expertise in multi-scale modeling and simulation of materials and structures with considerable background and interest in uncertainty quantification. The cyber infrastructure capabilities of the Cornell Theory Center will likely be of value to this candidate's research program.

For both positions, additional supporting interests and expertise in areas such as smart and multifunctional materials, earthquake engineering, risk and reliability, and sensing and structural health monitoring will be considered. Additional information may be found at <http://www.cee.cornell.edu/>

The successful candidates for these positions will seek innovative solution methodologies to challenging structures problems wherever they may be. Candidates must have a PhD in engineering or an allied field within the physical sciences.

Appointments at the rank of Assistant Professor are anticipated, but applications from candidates from all levels are welcomed. Applications will be held in strict confidence. To apply please mail a detailed resume, statement of professional research and teaching goals, official graduate transcript, and the names, addresses, e-mail addresses, and phone and fax numbers of at least three references to:

Structural Engineering Search Committee Chair  
School of Civil and Environmental Engineering  
220 Hollister Hall, Cornell University, Ithaca, New York 14853-3501

In addition, electronic copies of all application materials must be submitted on-line at [http://www.cee.cornell.edu/position\\_search/](http://www.cee.cornell.edu/position_search/) Review of applications will begin immediately and continue until the position is filled.

The College of Engineering is an equal-opportunity, affirmative-action employer committed to employing a highly qualified, diverse faculty. Women and minorities are encouraged to apply for these positions.



## Senior Faculty Position in Structural Engineering

Applications for a senior faculty member in structural engineering are being accepted to join a research-active structural and solid mechanics group. Qualified candidates who demonstrate a record of scholarly publications, externally funded research, and leadership will be considered at the tenured Full or Associate Professor level.

Specializations of particular interest include structural systems, optimization, bridge engineering, fracture and fatigue of metal structures, blast resistant design, structural reliability, and seismic design. The individual will have demonstrated experience in developing and directing a program of research in their chosen field of expertise. The goal is for the individual to lead a balanced program of research at both the fundamental and applied levels. This individual will have the opportunity to merge the department's resources with those of the Virginia Transportation Research Council (VTRC) located on the grounds of UVA.

**Requirements:** Candidates must possess an earned Doctorate in Civil Engineering, with a specialization in structural engineering. Professional registration or ability to become registered is desirable.

**Responsibilities:** Teach undergraduate/graduate courses in a contemporary Structural Engineering and Mechanics program. Establish and maintain an externally funded research program in collaboration with other members of the group. Support and supervise graduate students pursuing M.S. and Ph.D. degrees.

Review begins December 1, 2006. Applications will be accepted until position is filled. The University is committed to building a culturally diverse educational environment. It is especially interested in candidates who can contribute to the diversity and the excellence of the academic community through their research, teaching and/or service. Applicants are requested to include in their cover letter information about how they will further these goals. Please send complete resume, names, addresses, telephone, fax, and e-mail addresses of three references to: **Dr. Lester A. Hoel, Search Committee Chair and L. A. Lacy Distinguished Professor of Engineering, Department of Civil Engineering, University of Virginia, 351 McCormick Rd., P.O. Box 400742, Charlottesville, VA 22904-4742.**

Applications may also be submitted electronically to [mjd-cvl@virginia.edu](mailto:mjd-cvl@virginia.edu)

Additional information about the Department can be found at  
<http://ce.virginia.edu> and <http://vtrc.virginiadot.org/>

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