

About Your Instructor

Rainer Hebert, Ph.D., Assistant Professor of Chemical, Materials & Biomolecular Engineering, UCONN



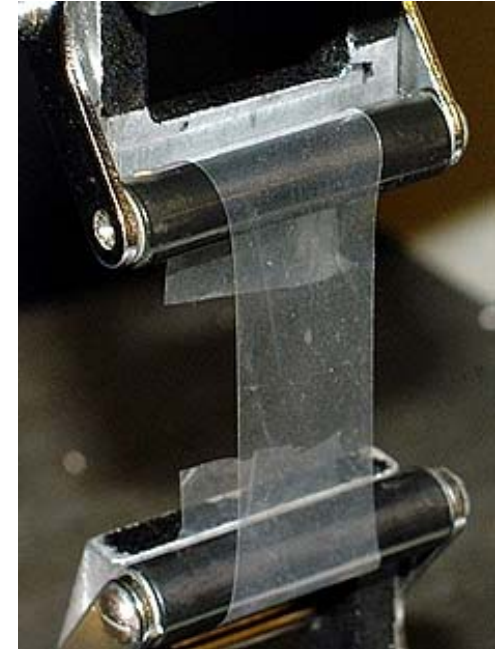
Rainer Hebert received a Ph.D. in Materials Science and Engineering from the University of Wisconsin-Madison in 2003. Following a two-year post-doctoral

stint at the Research Center in Karlsruhe, Germany, where he worked at the Institute for Nanotechnology, he returned to UW-Madison before joining the University of Connecticut as an assistant professor in 2006. The two main research themes in Rainer's group have been metallic glasses and metallic multilayers. The metallic glass research currently addresses their elastic behavior and wear properties. The multilayer work addresses a novel severe plastic deformation technique based on repeated cold rolling and folding and local hardness measurements based on nanoindentation. Rainer's teaching portfolio includes the Materials Science and Engineering department's undergraduate core course on mechanical behavior of materials and the associated laboratory course.

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Return Services Requested

IMS Associates Program Short Course



Mechanical Behavior of Materials

A Short Course for
Scientists and Engineers

Monday, May 23 & Tuesday, May 24, 2011
9:00 a.m. - 5:00 p.m.



Sponsored by:
Institute of Materials Science &
IMS Associates Program
University of Connecticut
Storrs, Connecticut

About the Workshop

This two-day workshop will provide participants with a combination of theoretical background, practical mechanical testing insight and answers to mechanical behavior questions typically encountered in day-to-day industry operations.

The background section will address elastic and plastic behavior of materials, fracture and fatigue basics, common strengthening methods, and the role of defects for mechanical behavior. Practical tests will be conducted to highlight some of these theoretical aspects. Pertinent ASTM standards will be explained in the context of this theoretical background.

The workshop will draw from practical examples and will examine the mechanical behavior of polymeric, ceramic, and metallic materials. Participants will leave the workshop with an understanding of the meanings of, for example, “hard”, “strong”, “resilient”, “elastic”, “tough”, both from a theoretical and a practical viewpoint. The workshop will furthermore enable the participants to evaluate measurement data and to select mechanical tests according to the mechanical property of interest.

No prior knowledge of materials science and engineering is necessary.

Workshop Schedule

Day 1 (Monday, May 23)

- AM Elastic & Plastic Behavior
- PM Plastic Behavior (continued), Strengthening Mechanisms & Practical Demonstrations

Day 2 (Tuesday, May 24)

- AM Fracture, High Temperature Deformation, Creep
- PM Fatigue & Practical Demonstrations

Course Location and Schedule

The course will be held on May 23 & 24, 2011 from 9am to 5pm each day in Room 159 of the Institute of Materials Science (Gant Building) on the Storrs campus of the University of Connecticut. Parking is available across the street in North Parking Garage.

Directions: <http://visitors.uconn.edu/directions.php>

Interactive campus map: <http://maps.uconn.edu/>

Registration

The registration fee (see facing panel) includes workshop attendance, a set of course notes, lunch and coffee breaks. Registration for this course closes May 11, 2011.

Please let us know in advance if you require special services / arrangements.

Refund and Cancellation Policy

The registration fee is refundable, less \$35, prior to the first day of the course, only if you notify Student Services: 877-892-6264 or 860-486-4905. Participants who do not attend and fail to cancel are subject to the full fee. Participant substitutions may be made.

The Institute of Materials Science reserves the right to change instructors and cancel or reschedule the course in the event of insufficient enrollment or unforeseen circumstances.

Further Information

Questions regarding the course should be directed to Rhonda Ward at 860-486-5874 (voice), 860-486-4745 (fax) or rhonda.ward@ims.uconn.edu

* IMS Associates Program

The IMS Associates Program assists industry with short term projects in research, development and manufacturing projects where expertise or facilities are not readily available from the private sector. For more information regarding IMS Outreach: <http://www.ims.uconn.edu/>

Schedule # 1022

Mechanical Behavior of Materials

Registration Form

May 23 - 24, 2011

Name _____

Title _____

Company _____

Business Address _____

Phone _____

Fax _____

E-mail _____

___ Check enclosed payable to UConn

___ PO # _____ PO Issuer _____

Contact Person's Name & Phone Number _____

Registration Fees

IMS Associate Program members*

- \$330 each for the first two registrants
- \$550 additional registrants

Non-Associate Program member

Small Companies (≤30 employees)

- \$550 per registrant

Large Companies (>30 employees)

- \$700 first registrant
- \$550 additional registrants

Methods of Payment

Mail Send complete registration form plus check or PO to: University of Connecticut, Student Services Office, One Bishop Circle, Unit 4056, Storrs, CT 06269-4056.

FAX: FAX complete registration form & PO to our secure FAX 860-486-0272

Online Pay by credit card (VISA/MasterCard/Discover/Diners Int'l) or PO* : <http://www.ims.uconn.edu/>

* If you plan to use a Purchase Order for online registration you must receive prior validation. Please call 1-877-892-6264 and have the Purchase Order number, maximum amount of Purchase Order, valid start and end date, the issuing city/town, institution or company name, address, and contact number ready.