



# The Macrogram

Hartford Chapter of the ASM International  
Build on our Strengths - Leverage our Diversity - Network to Succeed

## MONTHLY MEETING – TOPIC

January 15, 2008

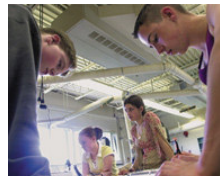
**Topic: Pre-Engineering Programs in CT Public Schools: Project Lead the Way and Engineering byDesign™**

**Speaker:** Gregory Kane  
Connecticut State Consultant for  
Technology Education, Engineering and  
Agricultural Science  
Connecticut Department of Education

**Directions: Cugino's**, 1076 Main Street,  
Newington, CT 06111, Ph: (860) 665-0881  
Main Street is Route 176. **Cugino's** is south of  
Route 175 (Cedar Street). Use alleyway to  
parking area in rear.

**Agenda:** Cocktails: 5:30-6:30 PM  
Dinner: 6:30-7:30 PM  
Program: 7:30-8:30 PM  
**Program Charges:** Regular Members - \$28.00  
Retirees - \$15.00  
Full Time Students - \$15.00

**Technical Chairperson:** Arnie Grot  
**Reservations:** Call Shirley at Dynamic Metals  
(860) 583-3336 by noon January 10th.  
**Thanks!**



**Abstract:**

The presentation will cover the growth and success of **Project Lead the Way** (PLTW) in Connecticut and an overview of the newest option

for Connecticut schools: **Engineering byDesign™** (EbD). Both programs are designed to prepare students for post-secondary experiences in the areas of engineering or engineering technology pathways. EbD is a grade K-12 curriculum that will be available to all Connecticut schools at no cost this year.

**Bio:**



Mr. Kane serves as the State Leader for Project Lead the Way, State Consortium Director for Engineering byDesign™, chairperson of the CCSU School of Engineering and Technology and Teacher

Preparation Advisory Board. He is one of the coordinators for the Connecticut FIRST Lego League State Competition, the Connecticut Junior Solar Sprint, and State Advisor for the Connecticut Technology Student Association and CT FFA. Mr. Kane currently serves on the Connecticut College of Technology Committee and as President of the International Technology Education Association Counsel of Supervisors.

Mr. Kane has been employed with the Connecticut Department of Education as State Supervisor for Technology & Engineering Education and Vocational Agriculture, Bureau of Curriculum and Instruction, since 1996. From 1986 to 1996, Greg served as a consultant for Trade and Industrial Education to the Bureau of Applied Education, Technology and Career Information. Dr. Kane received his Bachelor of Science Degree in Technology & Engineering Education from Central Connecticut State University in 1976. Two years later, he was awarded the Master of Science degree in Career, Vocational and Adult Education from the University of Connecticut. He served 4 years in the United States Navy Submarine Service. He taught industrial arts and technology education for ten years at both the middle school and high school level in Manchester, CT before joining the Connecticut Department of Education.

The future of ASM... is in your hands. Visit the new UConn Materials Advantage Chapter's Web Site [www.engr.uconn.edu/ucma](http://www.engr.uconn.edu/ucma)

Material Advantage **NORTHEAST REGIONAL CONFERENCE** February 22 - 23, 2008 University of Connecticut Storrs, CT



# The Macrogram

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**MONTHLY MEETING – TOPIC**

**February 19, 2007**

**Topic: Modeling Manufacturing Processes and the Effect on Durability**

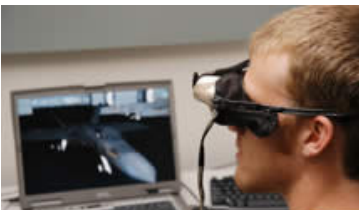
**Speaker:** Dr. Anthony Dennis  
Consultant  
Connecticut Center for Advanced Technology, Inc. (CCAT)

**Directions:** Cugino's, 1076 Main Street, Newington, CT 06111, Ph: (860) 665-0881  
Main Street is Route 176. Cugino's is south of Route 175 (Cedar Street). Use alleyway to parking area in rear.

<b>Agenda:</b>	<b>Program Charges:</b>
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Dinner: 6:30-7:30 PM	Retirees - \$15.00
Program: 7:30-8:30 PM	Full Time Students - \$15.00

**Technical Chairperson:** Amber Black  
**Reservations:** Call Shirley at Dynamic Metals (860) 583-3336 by noon February 14th. **Thanks!**

**Abstract:**



The Connecticut Center for Advanced Technology, CCAT, is a non-profit organization, which has a mission to assist small companies in the Air Force supply chain become more efficient and effective. A major aspect of the CCAT effort is to expose the companies to commercially available software for the modeling and simulation of various processes such as machining, grinding, and casting. The current plan is to incorporate results of these analyses into the life prediction procedure. CCAT has acquired several computer codes and has solicited real demonstration projects through the collaboration with regional companies. The presentation will describe the

The Connecticut Center for Advanced Technology, CCAT, is a non-profit organization, which has a

computer codes being used, results of representative projects, and the plan to use this information for durability analysis. The relationship and collaboration with the faculty and students of universities will also be discussed..

**Bio:**

Dr. Anthony J. Dennis has been a consultant at CCAT since its inception in 2002. He retired from United Technologies Corporation after 39 years in the structural integrity area, half of his career managing the structures group at the corporate research center involved in a variety of projects for the UTC divisions as well as government contracts. The other half was at Pratt & Whitney working on composites, durability, and high cycle fatigue.

He is an adjunct professor of Engineering and Science at Rensselaer at Hartford for over 35 years. He received his B.S in Aeronautical Engineering and M.S. from RPI and his Ph.D. in Mechanical Engineering from the University of Connecticut.

Dr. Dennis lives in South Windsor with his wife, Barbara. They have two children, a son and daughter, both attorneys

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Outing  
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**EXEC'S LETTER**

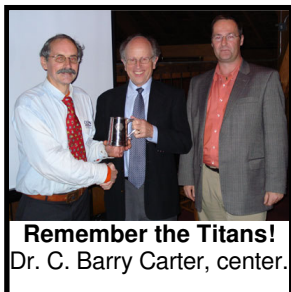
Our October meeting featured a very informative talk about some of the technical innovations on the Boeing 787 by Dr. Dianne Chong, Director of Boeing Commercial Airplanes' Material Processes and Technology section. Dr. Chong has a long distinguished career in airframe manufacturing. She is the 2007-2008 President of ASM International. Dr. Chong left us with some interesting challenges for involving more emerging professionals and Materials Advantage students in Hartford Chapter initiatives. The 1st Annual



**Dr. Dianne Chong**  
Receives Speaker Mug

**Materials Advantage Northeast Regional Conference** ([www.engr.uconn.edu/ucma/index\\_024.htm](http://www.engr.uconn.edu/ucma/index_024.htm)), hosted by the UConn Material Advantage Chapter, at the University of Connecticut on February 22 - 23, 2008 offers a perfect venue for this sort of involvement. This conference showcases a love of material science and engineering through local industry tours, several technical presentations, a Material Advantage chapter workshop, and a keynote address from the Vice President of ASM International, Roger Fabian.

In November, Dr. C. Barry Carter, Professor and Head of UCONN's Department of Chemical, Materials & Biomolecular Engineering (CMBE) gave a talk on some of the advances that are now taking place in Transmission Electron Microscopy and why these advances are changing how we look at materials. His hopes for the department include acquiring one of [the FEI Titan™ S/TEM](#) family of electron microscopes which includes the Titan™ 80-300 and the new Titan3™, the world's most powerful, commercially-available scanning/transmission electron microscope (s/TEM). Dr. Harris Marcus updated the group on the pursuit of a Nanotechnology Center in Connecticut. Both Carter and Marcus agreed that those equipping this proposed center would do well to include a Titan™. Barry's plan would be to have a Titan™ in CMBE or IMS for preliminary work prior in support of the center's, and other, initiatives.



**Remember the Titans!**  
Dr. C. Barry Carter, center.

**Project Lead the Way (PLTW)** in Connecticut has grown from a dozen public schools in April 2003 when we last had Mr. Gregory Kane speak at ASM Hartford. There are now 57 high and middle schools with PLTW programs. In collaboration with the Materials Advantage Chapter, Mr. Kane is inviting teachers and students from these schools to attend the **Northeast Regional Conference** in February. At our January 15<sup>th</sup> meeting, Dr. Kane will cover the growth and success of **Project Lead the Way (PLTW)** in Connecticut and give an overview of the newest option for Connecticut schools: **Engineering byDesign™ (EbD)**. These pre-engineering programs are having a profound effect on the future of Connecticut.

On February 19<sup>th</sup>, Dr. Anthony Dennis of Connecticut Center for Advanced Technology (CCAT) will discuss **Modeling**

**Manufacturing Processes and the Effect on Durability.** Modeling and simulation employs physics-based machining process modeling solutions to help manufacturers improve the efficiency of their machining processes. CCAT investigators can apply these solutions to milling, turning and drilling operations, specifically examining chip formation, cutting forces, temperature and residual stress in both the tool and part with the goal of generating an optimized toolpath that will decrease machine tool cycle times. You will want to attend Dr. Dennis' presentation to learn how your company can benefit from collaboration with CCAT. We thank Amber Black, the undergraduate President of the Materials Advantage Chapter, for arranging this talk. Amber is a student collaborator, working with Dr. Dennis, at CCAT.

Please feel free to drop me a line to share your thoughts on these matters. I'd be delighted to discuss ASM Hartford – present and future – with loyal members like you.

*Thanks for your Support,*

*Sam Christy*



**Preliminary Schedule of Events**

**Friday - February 22**

11:00AM	Check In and Welcome Reception
1:00PM	Industry Tours to Local Companies
7-11:00PM	Dinner, Networking Raffle, and DJ Social

**Saturday - February 23**

8:30AM	Continental Breakfast
9:00AM	Material Advantage Student Leadership Workshop
11:00AM	Women in Technology Forum and Career Path and Emerging Professionals Forum
12:00PM	Lunch Break
12:30PM	Poster Judging and Exhibit
1:30PM	Distinguished Lecture by Roger Fabian, Vice President of ASM International
2:00PM	Material Advantage Outreach Demonstrations with Project Lead the Way
3:00PM	Featured Technical Presentations
4:00PM	Closing and Announcement of Poster Awards

To learn how you can help support this conference please email [UCMA.conference@gmail.com](mailto:UCMA.conference@gmail.com)

**Anthony P Napikoski, Principal Engineer**, the United Illuminating Company, will talk on *Technology Challenges of the Middletown to Norwalk 345-kV Transmission Project*. Check [www.asm-soct.org](http://www.asm-soct.org) ASM Southern Connecticut Chapter for details on this meeting planned for the Thursday, January 17, 2008 - Connie's Family Restaurant in Derby, CT

## Winter 2008

## ASM HARTFORD

### 2007-2008 Executive Committee

<b>Chairperson</b>	Sam Christy	(860) 565-5985
<b>Secretary</b>	Jack Woodilla	(203) 374-7650
<b>Treasurer</b>	Joe Kubinski	(860) 745-5977
<b>Public Relations</b>	Harley Graime	(860) 550-7246
<b>Membership</b>	Jack Piela	(860) 872-9359
<b>University Affairs</b>	Mark Aindow	(860) 486-2644
<b>Student Affairs</b>	Rainer Hebert	(860) 486-3155
<b>Student Chapter</b>	Amber Black	(860) 550-3096
<b>Golf Outing</b>	Rebecca Gatzen	(860) 667-4403
<b>Member at Large</b>	Stu Weiss	(860) 731-6736
<b>Online Chair</b>	Arnie Grot	(860) 633-5849
<b>Outgoing Chair</b>	John Rugh	(860) 741-9388

### Sustaining Member Companies

Consider becoming a sustaining member. For information, please contact Jack Woodilla, Secretary.

BASF	Jacobs Vehicle Systems
Bodycote Thermal Processing	Industronics Service Co.
Consolidated Ceramic Products	Metallurgical Services Intn'l
Conval Corp	MicroTech Optical Inc.
Deringer Ney Inc	Nerac
Excel Technologies	Pratt & Whitney
ExTorconsult	Specialty Steel Treating Inc
Flame Treating & Engineering	United Service Company
Fenn Manufacturing Co	University of Connecticut
Grot Enterprises	Vitta Corp

*Due to cost of printing and mailing, ASM Hartford will publish just one issue of the Macrogram in the fall, one winter issue and one spring issue. Therefore, it is particular important that you bookmark the ASM Hartford web site (<http://www.asm-hartford.org/>) and check it regularly for updated information. We will continue to send out email notices to those on our distribution list prior to events.*

To receive an email notice of Hartford Chapter events, send an email to [web@asm-hartford.org](mailto:web@asm-hartford.org).



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