



U.S. ARMY



Top Story

CCM signs first SOW under new CRADA between UD and U.S. Army

The University of Delaware and the U.S. Army's Research, Development and Engineering Command (RDECOM) signed a landmark cooperative research and development agreement (CRADA) on Tuesday, Jan. 26 that constitutes a major step forward in the development of a mutually beneficial partnership between the Army and UD.



UD President Harker and RDECOM Commander Major General Nickolas Justice look on as ARL Director John Miller, CCM Director Jack Gillespie and CERDEC Director Gary Blohm signed the first cooperative statement of work to be carried out under the new CRADA agreement
Photo courtesy of UD OCM

University of Delaware
Center for Composite Materials

COMPOSITES

UPDATE

February 2010

"It's hard to imagine a partnership with more promise than the one we're establishing with Aberdeen Proving Ground—one whose benefits could affect more people or affect them more critically," said UD President Patrick Harker.

The CRADA provides an umbrella under which the Army and UD can work together to optimize resources, share technical expertise in a protected environment, share intellectual property emerging from the effort, and speed the commercialization of federally developed technology.

The signing ceremony, which took place at the Roselle Center for the Arts on the UD campus, included not only the agreement but also the first cooperative statement of work (SOW) that will be carried out under the CRADA.

Photo courtesy of UD OCM



*UD President
Patrick Harker*



TOP STORY (Continued)

This cooperation, which will focus on antenna technology and composite materials, involves UD's Center for Composite Materials (CCM), Department of Electrical and Computer Engineering, and Department of Physics and Astronomy, as well as two Army research centers--the Army Research Laboratory (ARL) and the Communications-Electronics Research, Development and Engineering Command (CERDEC).

Harker referred to the SOW as a document that "shows how serious our intentions are and how far we've already come in the planning process."

"Strategic collaboration between our two organizations makes sense," Harker said of the CRADA. "Our core research strengths align well, and we have a long and successful history working with one another. Of course, physical proximity also makes this partnership a good fit: UD is the closest Category 1 research university to APG."

CCM is a major element in that "long and successful history." The Center has an established 25-year partnership with ARL and is currently the Army's Center of Excellence in composites. This established infrastructure provides the foundation for increased interactions with Army labs nationwide.

CCM also has a commitment to technology development and transition, as evidenced by the Center's strong track record of partnering with industry. CCM's industrial consortium, established in 1978, currently has more than 60 sponsors.

At the CRADA signing, Harker said that the formalized partnership with APG will be an important influence on the transformation of the former Chrysler site, which is now owned by UD, into "a major center of innovative science, technology, and engineering and a dynamic incubator of new entrepreneurial businesses."

Photo courtesy of UD OCM



(From left) CERDEC Director Gary Blohm, CCM Director Jack Gillespie, Del. Congressman Mike Castle, RDECOM Commander Maj. Gen. Nicholas Justice, UD President Patrick Harker, Del. Governor Jack Markell, ARL Director John Miller



[Click here to view video highlights of this groundbreaking event](#)

According to CCM Director Jack Gillespie, the former Chrysler site offers a myriad of opportunities for the Center's existing and future sponsors to establish facilities. "The CRADA will allow us to expand to meet the needs of all RDEC's nationwide and the specific needs of the Research, Development and Engineering Command as it adds thousands of new jobs in our region through BRAC," he says.

Under BRAC (Base Relocation and Closure), CERDEC, the Vehicle Technology Directorate, and the Test and Evaluation Command have all been relocated to APG.

The CRADA was signed by UD President Patrick Harker and Maj. Gen. Nickolas Justice, Army RDECOM commanding general. The SOW for the antenna technol-

ogy was signed by the directors of the three participating centers--John Miller (ARL), Gary Blohm (CERDEC), and Gillespie (CCM).

Justice thanked Harker for his "aggressive leadership" in making the partnership happen. "We know you're dead serious," he said, "because you've showed it by your actions, and in the Army we know that actions speak louder than words."

Justice also lauded the University for its excellence in engineering. "We're hiring engineers with all skill sets," he said, "and many of your strengths align closely with our needs. Your mindset--the way you think as engineers--is what we're looking for."

The signings were witnessed by Delaware Governor Jack Markell, U.S. Rep. Michael Castle (R-Del.), Newark Mayor Vance Funk, State Senator Liane Sorenson (R-Hockessin), Delaware State University President Harry Williams, Cecil College President Stephen Pannill, and a large group of UD faculty, staff and students.

Markell referred to the CRADA as formalizing "an amazing partnership that will strengthen our economy." Delaware, he said, is responsible, flexible, agile, nimble, and committed to the partnership. "We have a proud legacy of innovation in this state that goes back hundreds of years," he said.

Castle said that the jobs that will be created through BRAC are "highly scientific, and the University will prove to be very important in this partnership in terms of not only providing graduates to be employed by the Army but also serving employees who will take advantage of the opportunity to continue their education. This whole geographic area will benefit from the economic surge we're going to see at Aberdeen."

Article by Diane Kukich



[Click here to view UDaily Article Jan. 26, 2010](#)



Chajes named Delaware Engineer of the Year

Michael Chajes, Dean of the College of Engineering at the University of Delaware, has been named the 2009 Engineer of the Year by the Delaware Council of Engineering Societies (DCES). He was recognized for his contributions to the field of engineering at the Council's annual awards banquet on Feb. 18 at the DuPont Country Club.

"This is a great honor for me," says Chajes, who is a CCM affiliated faculty member and Professor in the Department of Civil and Environmental Engineering (CEE). "Most of the past recipients of the award have been practicing engineers rather than educators, and it is a testament to the profession of teaching that the council chose to recognize me this year."

Chajes has focused his research on bridge testing, evaluation, and rehabilitation, including the use of advanced composites for repair, retrofit, and rehabilitation. In 1992, he led a team of students in the rehab of a Delaware bridge using advanced composites, one of the first such applications in the U.S. He was also a member of the CCM/CEE team that won the ASCE Delaware Section Project of the Year Award in 1998 for their work to replace the superstructure of the Bus. Rte. 896-S bridge over Muddy Run in Glasgow, Del., with glass-fiber-reinforced composite panels.

Chajes has worked on bridges throughout the U.S., including the Brooklyn-Queens Expressway, the Ben Franklin Bridge, the Newburgh-Beacon Bridge, the Chesapeake City and Summit Bridges, and the lock gates on the Erie Canal.

His work has been funded by the National Science Foundation, the National Academy of Sciences, the Federal Highway Administration, and the National Cooperative Highway Research Program. He is widely published and a frequent public speaker on these projects both in the U.S. and abroad.

In addition to his administrative roles, Chajes teaches structural analysis and structural design, and he was instrumental in the development of UD's Introduction to Engineering course, which is now required of all freshmen engineering students.

Photo courtesy of UD OCM



*Michael Chajes,
Dean of the UD
College of Engineering*



**[Click here to view
UDaily article
Feb. 3, 2010](#)**

Chajes places a strong emphasis on the development of UD's engineering students into leaders. "Engineers are trained to solve technological problems," he says, "but I think it's also important that they leave here with leadership skills, as such skills are a valuable asset no matter what path our graduates follow in their careers."

"I also encourage all of our students to take advantage of the University's extensive opportunities to study around the world," Chajes adds, "so that they can enhance their own skills as well as their understanding of the role of engineers in a global economy."

Chajes earned his bachelor's degree at the University of Massachusetts, Amherst and his M.S. and Ph.D. degrees from the University of California, Davis.

He is a former board member of the Delaware Association of Professional Engineers, and he has been an active member of the American Society of Civil Engineers, serving as past chair of the Department Heads Council Executive Committee and as a member of the planning committee for the 2006 summit on the "Future of the Civil Engineering in 2025."

"I'd like to extend my congratulations to Michael on behalf of everyone here at CCM," said Director Jack Gillespie. "He has been an asset to the Center as a researcher, as a teacher, and now as Dean, and we're very proud to have him as a colleague."

Article by Diane Kukich

2010 Spring Research Review Series begins March 3, 2010

The Spring 2010 CCM Research Review series comprises weekly overviews of the Center's research focus areas. Each session consists of four brief presentations on specific topics within the designated theme area, followed by discussion/Q&A. The Research Reviews, which are free and open to the public, are scheduled Wednesdays at 11:30 in 106 CMSL unless otherwise noted. Lunch follows the session. Speakers include graduate students, post-docs, research associates, and visiting interns.

[Click here to view upcoming Research Review Sessions](#)



*Spring Research Reviews are hosted by CCM and the **[SAMPE-UD Student Chapter](#)**.*

MEMBER NEWS



We would like to thank **Impact Armor Technologies, LLC**, Cleveland OH for becoming our newest consortium member.

We also wish to thank **Superior Graphite Company**, Chicago, IL for their recent renewal of their memberships, and for continuing to participate in consortium activities.

To learn more about the benefits of becoming a member, please visit us on the web at www.ccm.udel.edu/Consortium/benefits.html

Celebrating 35 years of significant contributions to composites science and technology, the education of students, and the creation and transfer of technology to industry.

This is a newsletter publication of the University of Delaware Center for Composite Materials
Please visit us on the web at <http://www.ccm.udel.edu>

201 Composites Manufacturing Science Laboratory ♦ phone 302.831.8149
University of Delaware, Newark, Delaware 19716-3144 ♦ fax 302.831.8525

