

Volume 3, Number 1  
Spring 2007  
Top Stories

## University of Akron and Partners Lay Groundwork for New Degree Programs

*By Cynthia Greenwood*

A unique plan to expand corrosion curricula in American universities, beginning in Ohio, is gathering momentum. The University of Akron, NACE International, the NACE Foundation, and several industry partners are working together to offer non-credit training and credit courses under the banner of the University of Akron. In addition, the partners are talking about furthering the concept of a four-year corrosion engineering degree that could involve a multitude of universities.

The plan got underway last year when the entrepreneurial and innovative University of Akron (UA) began developing new programs to offer from its Medina County University Center. The Center, situated on 46 acres of land that was bestowed by the Medina County Board of Commissioners and co-located with a technology park, is viewed by UA as a center for innovation.



*The University of Akron plans to finish constructing its Medina County University Center in fall 2007. Rendering courtesy of UA.*

The university's ultimate goal? To build education programs that support the industry clusters of Medina County, a microcosm of northeast Ohio's industrial Mecca of polymer manufacturing; rubber and plastics production; healthcare; and biomedical research and development. UA began construction on the new facility in September 2006 and plans to complete the Center this fall.

"UA's Medina County University Center will eventually serve the broad population by providing both in-person and distance-education coursework for students, traditional and non-traditional, who seek to launch or further their educational and career aspirations," said Sue Louscher, director of the Medina County University Center.

Based upon industry inquiries, one of the Center's important goals is to provide non-credit training courses and degree programs in corrosion-related fields for a broad spectrum of students. To achieve that goal, the Center is partnering with NACE International and such companies as Corrpro, Carboline, Northern Technologies International, and others to increase the opportunities for students to receive corrosion-specific college coursework.

"This key partnership would be the first of its kind and would allow the current generation of would-be corrosion practitioners an opportunity that others in the field have sought for decades," said Daniel J. Dunmire, leader of the Corrosion Prevention Integrated Product Team in the DoD Corrosion Policy and Oversight Office.

### **A Two-Pronged Initiative to Provide Corrosion Education**

The university is working on an agreement with NACE to update and adapt several of NACE's general education courses for a new corrosion curriculum. Under the plan, NACE would contribute funding to help UA offer non-credit distance learning coursework. "NACE and the University of Akron would co-brand and co-market the products," Louscher said. The

distance learning courses may include Basic Corrosion, Protective Coatings and Linings, Design for Corrosion, and possibly others.

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The partnership will also specify that anywhere NACE delivers certification programs, UA will grant continuing-education accreditation units to students in these programs, and eventually offer credit toward an associate's degree, Louscher said. Both UA and NACE hope to have a non-credit business agreement in place before NACE's annual conference in March 2007. Both are also aiming to put the initial curriculum delivery for Basic Corrosion and Protective Coatings and Linings-Level 1 in place by fall 2007 and to have both courses hosted on the Web with possible live

interaction by December 2007, she added.

UA is also pursuing a longer-term initiative with the NACE Foundation through a separate business agreement. "The University of Akron is joining the Foundation and approaching industry to build interest in and financial development for a new corrosion engineering curriculum at the main UA campus in Akron, possibly through the College of Engineering," Louscher said.

Under this agreement, the university and NACE Foundation would establish programs allowing students to earn a two-year associate's degree and NACE certification in corrosion engineering, said Helena Seelinger, staff director of the NACE Foundation and senior director of business development at NACE International. "The partners' goal is to take the two-year degree initiative one step further by jointly establishing a four-year and five-year bachelor's degree in corrosion engineering, and related advanced degrees after that."

A detailed business plan is in development, and will reflect input from many academic organizations that are already providing corrosion curricula in universities. "We've painted a picture with broad-brushed strokes, but there are many stakeholders in this arena and so many opportunities to consider, possibly going as far as research collaboration and funding." Seelinger said.

Louscher noted that UA hopes to involve several departments in a long-range attempt to create a corrosion engineering curriculum. The departments include UA's College of Polymer Science and Polymer Engineering, Summit College, Buchtel College of Arts and Science, and College of Business Administration. "At the moment, we are developing an advisory board for this project, drafting initial program requirements, and outlining a detailed implementation plan," she said.

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Under its pending agreement with NACE, the university plans to offer most, if not all, of its associate's and baccalaureate degrees in corrosion engineering through distance-learning coursework.

Currently, Kilgore College of northeast Texas is the only higher education institution that offers an undergraduate degree program in corrosion. When Kilgore students graduate with an associate's degree in corrosion, NACE offers the students an opportunity to immediately sit for the NACE Cathodic Protection (CP) Level 1 examinations at a special student rate. Those who pass receive their Kilgore degree and the NACE's CP I certification simultaneously, just before entering the workforce. "That's a powerful combination of academic and industry credentials in that particular field," said Seelinger. "At the moment the corrosion degree program at Kilgore is so valuable to industry that there's a waiting list to hire Kilgore graduates each spring."

## UA and NACE Welcome Other University Partners

Both UA and NACE are open to bringing other university partners into their strategic initiative. "We're seeking the best way to have as many universities involved as possible," said Elaine Bowman, president of the NACE Foundation. "This is an expansive effort and it requires a collaboration that's in the very earliest stages. Our vision is a Corrosion Center of Excellence, an idea that was initiated several years ago by several prominent NACE board members."

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Seelinger reviewed ways in which the partnership would be beneficial. "When the UA/NACE partnership is developed, certain NACE training and certification programs will be associated with college credit. The partnership under discussion benefits students and both entities—UA graduates can earn NACE certification upon completing their academic programs, and NACE members and those holding certain NACE certifications will earn college credit."

When the NACE Foundation and UA partnership is solidified, the Foundation also will help UA students earn professional internships.

Both partnerships—one pairing UA with NACE International and another between UA and the NACE Foundation—are under legal review. Look for an update on this unique industry/university partnership in future editions of *CorrDefense*.