

Ceramics Corridor®

Ceramics, Glass & Advanced Materials Newsletter

Volume 3, December, 2000



Partnerships & Clusters: The Future of the Ceramics Corridor®

By David Szczerbacki, Ph.D., Dean
College of Business, Alfred University and
Chairman, Alfred Technology Resources, Inc.



The Ceramics Corridor® was founded as a partnership among New York State, Corning Incorporated, and Alfred University. Like any good partnership, the program is based upon mutual interests in achieving economic development objectives. To date, these objectives have been realized – businesses have been created, job creation targets have been exceeded; and incubator tenants have “graduated” and grown. Clearly, these objectives remain the key.

Fundamentally, the Corridor can help shape the evolution of the ceramics, glass, and advanced

materials industry, differentiating it from a traditional incubator. Its future success will be measured by its ability to help shape development of a vibrant cluster of businesses, institutions, public officials and government agencies, industry groups, and economic development agencies.

To illustrate the relevancy of the cluster paradigm, consider this industry’s complexity: Ceramics has a broad range of segments, opportunities springing from the versatility and breadth of materials and the role of ceramics as an enabling and embedded technology. Moreover, potential property, composition, application, and product matrices are a function of creative genius and the rather organic process of technology transfer. Diversity and complexity make ceramics an interesting profession and an even more interesting economic force. No individual, laboratory, or company can, or should, dominate this sector. It is most exhilarating at the forefront of innovation – fields such as nanotechnology, biomaterials, and photonics, for example.

What is the significance of such diversity and complexity to the cluster paradigm, and what is the relevance to the Ceramics Corridor’s future? One alternative to cluster development is vertical integration – enhancing supply chain transactions. Here the Corridor can foster business contacts that broaden supplier contracts and relationships. Supply chain proximity, joint R&D initiatives, and new venture development are alternatives that need to be expanded and/or explored.

In contrast to facilitating rich supply chain relationships, the Corridor has an opportunity to support horizontal linkages across the cluster, in some cases expanding or reshaping the cluster in the process. Horizontal integration offers a more robust view of an industry cluster. Here, stakeholders have no direct buyer-supplier relationship as they invest in common initiatives, including research projects, development of standards or design codes, or industry promotion and advocacy.

What does the cluster concept suggest for the future of the Ceramics Corridor®? New York State’s current initiative to stimulate advanced technology research and economic development through its “NYSTAR” program has created a renewed sense of partnership among the Ceramics Corridor®, Alfred University’s Center for Advanced Ceramic Technology, Corning Incorporated and other corporate partners, and other university-based research programs. The Corridor must be prepared to participate in such horizontal networks as this and other such “cooperate to compete” options as they emerge.

Finally, the Corridor must work to understand the needs of various businesses in relevant buyer-supplier chains. Needs assessment should be the basis of tenant recruitment, support, and “graduation” planning.

In This Issue

- *Partnerships & Clusters: The Future of the Ceramics Corridor®*
- *What a Year!*
- *CACT: a Technology Partner*
- *From Corning Community College*
- *Profile: Information Boulevard*
- *Feedback...*
- *People in the News...*
- *Business Notes...*



The Ceramics Corridor® runs along I-86 in the Western and Central Southern Tier of New York State

What a Year!

Between the health of the national economy and the increasing economic strength and job growth shown by

New York's Southern Tier, the first year of the new century has been an exciting one for all of us. And as you know, 2000 was the year CCIC launched



Jon M. Wilder

the publication you have in your hands.

Indeed, it has been particularly exciting to be able

to report to you news and events taking place not only in the Alfred and Painted Post incubator facilities operated by CCIC, but in the larger Southern Tier region that supports a growing critical mass of ceramics and advanced materials industries. It is our mission to grow companies in this important industry sector.

This region, increasingly known on the national level as "The Ceramics Corridor[®]," the premier center for ceramics and advanced materials innovation, has seen the development of countless innovative uses of ceramics, glass and high-tech materials. And the best is yet to come—innovation is rampant here. The best scientific minds in the field are here and steadily building on what has already been accomplished, both in terms of product development and in the inherent economic development that innovation creates.

The future is extremely promising, both for the ongoing expansion of CCIC's facilities and in terms of the industry's impact on the larger region. Stay tuned...we will have plenty to report to you in the year ahead.

Jon Wilder

Executive Director

CACT: a Technology Partner

The New York State Center for Advanced Ceramic Technology at Alfred University (CACT) was founded 13 years ago as one of 10 Centers for Advanced Technology created by the State of New York to facilitate technology transfer in various industry sectors. The list of CATs has grown to 14, and they are funded through the state's Office of Science, Technology and Academic Research (NYSTAR). Additional funding comes from industrial partners.

The CACT was recently redesignated by the state with an outcomes-based approach to research. Essentially, its mission is to help New York State companies in the ceramics and advanced materials field create and retain jobs, increase productivity, and increase profitability. Its primary vehicle for accomplishing those goals—technology transfer—includes collaborative research between the university and industry, as well as industry-oriented education and training. Ultimately, its mission is to facilitate outreach and networking. Tech transfer services range from short-term "trouble-shooting" to long-term graduate research.

The CACT is oriented toward several specific ceramics and advanced materials-related categories:

- electronic ceramics
- photonic ceramics & glasses
- whitewares
- high temperature structural ceramics
- bioceramics & glasses
- advanced manufacturing processes
- computer modeling & simulation

For more information, contact Dr. Vasantha R.W. Amarakoon, Director, NYS Center for Advanced Ceramic Technology, 2 Pine St., Alfred, NY 14802, phone (607) 871-2486. CACT's web page can be accessed at nyscc.alfred.edu/external/cact/.

From Corning Community College

A key program offered by CCC is Tech Prep, which provides a variety of educational and training programs for Ceramics Corridor[®] resident's, graduates and area businesses. Tech Prep is a nationally sponsored combined secondary and post-secondary program designed to prepare today's students for the advanced tech age in which we all live and work.

In the Central Southern Tier, Tech Prep is developing a "seamless curriculum" between each consortium school district and CCC. The program supports a strong foundation of math, science, communication and technology via both applied instruction and an educational delivery strategy.

CCC Events

➤ On display at the Atrium Gallery in the CCC Administration Building, Corning, NY, now through January 26, 2001, is the "2nd Annual Invitational Glass & Ceramic Exhibition." The opening reception was held on Friday, December 1st. The acclaimed exhibition is a sampling of work from both within and without the Southern Tier. The exhibit is open seven days.

➤ From February 2 through March 9, the Atrium Gallery will display "Shanahan & McPherson." Carl Shanahan and Tom McPherson, two professors from SUNY Geneseo, will team up with a show of lively ceramics and splashy, large-scale watercolor paintings.

The Ceramics Corridor[®] newsletter is published quarterly by the Ceramics Corridor[®] Innovation Centers for ceramics, glass and advanced materials entrepreneurs and corporations.

Jon Wilder Executive Director
Eric Peterson Editor
Laura Quick Managing Editor

For additional copies of this newsletter, or to add your company to the mailing list, please call (607) 587-9444, or e-mail us at corridor@ceramicscorridor.org

Got News?

Send your press releases on personnel appointments, new products, awards, trade show attendance, and any other business, professional and personal activities to CCIC Executive Director Jon Wilder, Ceramics Corridor[®] Innovation Centers, 200 North Main Street, Alfred, NY 14802. If you have any questions, call (607) 587-9444 or (607) 962-6387.

Profile: Information Boulevard

It started out back in 1996 as a small two-person operation located in CCIC's Alfred facility. The immediate goal was to bring enhanced Internet access to the Alfred/Hornell, NY area.

"We saw the need," recalls Frank Spitulnik, president of Information Boulevard. "There was no local access at the time. There were national providers, of course, but no local access, and limited access overall. We saw that schools and businesses in this area were suffering from a competitive disadvantage because of that."



Information Boulevard owner, Frank Spitulnik (far left) and staff

"We started small," he continues. "We had only 16 external modems and one PC."

By 1998, with its business roots firmly planted in the region, Information Boulevard was ready to "graduate" from the Alfred facility to its own location in Hornell. Today, it's a 10-person operation, and the company now has a dedicated server room, 10 dedicated servers, and they're nearing 1,000 ports. Serving the Alfred, Hornell, Corning, Bath and Elmira region, Information Boulevard is currently expanding to cover the entire 607 area code with just one dial-up number. Also in the works is an expansion into the 716 area code, and into Northern Pennsylvania.

"We're also in the process of delivering large-scale broad-band access to local businesses," Spitulnik confides. "We want to become a major broadband provider—that's our goal. There will always be a market for reasonably priced dial-up access, and we will continue to provide that. But, we are moving toward broadband for businesses."

There's something else Information Boulevard brings to the table, and it's a key to understanding what Frank Spitulnik and company are all about. "We are committed to a level of service second to none, comparable to any national provider," he explains. "But, we are also committed to a hometown level of personal service."

And there is no forgetting one's roots. As Spitulnik explains, "This is an expensive, competitive business to be in. If it were not for Alfred University and the Corridor as a whole, we would never have gotten started. Everyone was a great help. The Ceramics Corridor® Innovation Centers are ideal for start-ups. CCIC was a big help in getting us started."

Incidentally, Information Boulevard is not only his only "baby" in the Ceramics Corridor®. Spitulnik also operates TriCeramics, Inc. in Alfred. Yet another graduate of CCIC's Alfred facility, TriCeramics makes horticultural devices, including TerraWick®, a ceramic device that spot irrigates plants.

For more about Information Boulevard, visit the company's Web site, www.infoblvd.net, or call (607) 324-0810. To find out more about TriCeramics Inc., visit their Web site at www.triceramics.com.

Area Resources

Southern Tier West: An Economic Development Partner

The Southern Tier West region, encompassing Allegany, Cattaraugus, Chautauqua, Erie and Niagara counties, began marshalling its collective economic development efforts, just over two years ago, to focus on ceramics, glass and advanced materials. Using federal Appalachian Regional Commission funds, the counties jointly launched what is known as the Ceramics Corridor Cluster Project. The effort is currently funded to carry through at least August, 2001. The program has grown to encompass several components:

- Promotion of active participation of Cluster firms in the Ceramics Association of New York (CANY). Efforts include Cluster conferences, a newsletter and a Web page.
- Southern Tier West is also working with Alfred University to create a student internship program.
- Southern Tier West also provides grants to encourage Cluster businesses to utilize the various business assistance productivity enhancement services available through the Western New York Technology Development Corp.
- Grants are also available to encourage businesses to use the technical consulting services of the Center for Advanced Ceramics Technology(CACT) at Alfred University.
- Also available is the Technology Development Corp. program, which encourages start-ups of technology-based businesses.

The Southern Tier West Regional Planning and Development Board is based in Salamanca, NY. For more information, call Tom Barnes, Senior Regional Economic Development Coordinator, at (716) 945-5301.

Feedback...

I recently received a copy of your newsletter, which I found to be very interesting and informative.

Although my company lies a bit north of the "Corridor," we serve several companies mentioned in your newsletter, as well as others along the way. Would you accept news briefs from us as well? We employ 35 materials scientists, engineers, chemists and support staff, and test a wide variety of materials. Our Web site is www.imrtest.com.

Jeff Zerilli
Vice President
Ithaca Materials Research
IMR Test Labs
Lansing, NY

Jeff...we certainly would accept news from you, especially given your interaction with various companies in the Corridor. Your news should be directed as indicated in the Got News? box elsewhere in this newsletter. Note to readers: Founded in 1984, IMR Test Labs is a full-service materials research and testing facility, serving manufacturers in a variety of industries. Its Lansing (Ithaca area) facilities encompass 13,000 square feet of lab, machine shop and office space. The company's total staff is 30, including seven engineers and five chemists.

Ceramics Corridor Innovation Centers
Alfred, New York 14802

People in the news...

Corning Incorporated chairman and CEO, *Roger G. Ackerman* has announced that he will retire from the CEO position. The company's board of directors has elected *John W. Loose*, currently president and COO, as CEO effective January 1, 2001. Ackerman will remain as chairman of the board until Corning Incorporated's next annual meeting, slated for June 21, 2001, when he will retire from the company.



Brenda Davies, CCIC Accounting Agent

"My retirement is consistent with a long-term plan that I have had in place with our board of directors and it happens to coincide with our 150th anniversary as a company," according to Ackerman.

In other appointments at Corning, *Donald H. McConnell* has been named director of **Corning Science and Technology**; *Mark S. Rogus* has been elected vice president and treasurer of **Corning Incorporated**; and *Dr. Gerald J. Fine* has been named executive vice president of **Corning Photonics Technologies**.

There's also a new face at the **Ceramics Corridor® Innovation Centers** facility in Painted Post, NY. *Brenda Davies* has joined the CCIC staff as accounting agent.

Brenda's warm personality and attention to detail make her a valuable asset to the CCIC team. Please join us in welcoming her!

Business Notes...

Vergason Technologies, located in Van Etten, NY, a company which produces metalizing equipment to apply thin metal films on plastic components, as well as hard coating services applied to metal and carbide substrates, continues to expand its capabilities. The company recently added Press-Side Janus, the latest twist on the Press-Side 3000 Metalizer. It incorporates several features, which reduce cycle time and improve ergonomics.

VTI has also added Press Side Rapid Cycle Topcoat Systems that remove environmentally damaging paint top-coating processes and reduce scrap, and ultimately allow users to process parts directly after metalizing.

In terms of hard coatings, VTI has also introduced ALOX™ coatings for cutting tools. ALOX™ is specifically designed for cutting tasks with large chip cross-sections. And CatArc Coatings include two new low-temperature coatings.

VTI's Web site is www.vergason.com.