

Ceramics Corridor®

Ceramics, Glass & Advanced Materials Newsletter

First Quarter 2001



The Technology of Tomorrow



Charles A. Gargano

By Charles A. Gargano
Chairman
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The Ceramics Corridor of New York is flourishing. The boom in the Empire State's economy has been sparked by Governor George Pataki's leadership and economic policies, coupled with the efforts of organizations like the Ceramics Corridor Innovation Centers.

Innovative applications of ceramics and glass materials and technologies to a wide range of industries are spurring investment and job creation by the private sector. Much of that innovation began as a dream, turned into the technology of

tomorrow by the nurturing environment provided by such facilities as CCIC's business incubators at Alfred and Painted Post.

The State supports the ceramics industry through regional capacity-building efforts, providing financial and technical assistance to individual companies. Through its Center for Advanced Ceramic Technology, the State works with Alfred University to build a world-class infrastructure of ceramics and glass research. State funding for creation of the CCIC incubators continues to foster technology transfer by new businesses, creating quality jobs in Upstate New York.

The commitment to ceramics has culminated in a series of significant, tangible success stories. In 1992, Corning Incorporated used the CCIC facility to incubate their new photonics technology project. This allowed them to nurture and grow this research and development project into a world-class business. From 1997 to 2001, global leader Corning Incorporated invested over \$225 million in seven major projects, creating new photonics manufacturing, research and service operations, expanding existing facilities, upgrading and creating new microlithographic lens and other technologies.

The Governor's initiative to create the Rochester Center of Excellence in Photonics and Optoelectronics, which is modeled after the CCIC program, is another demonstration of support. Working with partners like Corning, Kodak and Xerox, the Center will focus on technology transfer and pilot fabrication facilities for accelerated product development, and on workforce development and training.

Additionally, the New York State-Southern Tier Appalachian Rural Trade (NYS-START) initiative should interest firms in the Ceramics Corridor. Funded by New York and the Appalachian Regional Commission, NYS-START assists small rural firms by developing export marketing plans and providing matching funds.

Whether assisting a global leader like Corning Incorporated, or helping small firms take their first steps, the State can be counted on to partner with organizations like CCIC to provide tangible support to the entire Ceramics Corridor region.

Charles A. Gargano is Chairman of Empire State Development, New York State's lead economic development agency. For more about ESD and how it can help your business, call 1-800-STATE-NY or visit www.empire.state.ny.us.

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

CCIC - Past, Present & Future

When we opened our doors nine years ago to fledgling ceramics and glass start-ups, our mission was to create 1,000 jobs by the year 2000. We're happy to report that through 2000, CCIC's tenants and graduates job creation total has nearly doubled that goal.



Jon M. Wilder

And we've proven that business incubation works—our 94% success rate is 7 points higher than the national average, according to the National Business Incubation Association.

Going forward, CCIC is committed to an awareness campaign focusing on both the CCIC facilities and on the Ceramics Corridor of New York's Southern Tier as the world's premier location for ceramics, glass and advanced materials.

Response to our newsletter and website, as well as new tenants in the program, are all indicators that the technology cluster is alive and well in the Southern Tier.

Additionally, the proposed Center of Excellence in Photonics and Optoelectronics at Rochester, with Eastman Kodak, Corning Incorporated, RIT, the University of Rochester, Xerox and the Center for Advanced Ceramics Technology (CACT) as partners, is based on the CCIC model.

Back home, we've had a good first quarter. Ceralink, Inc. (see the profile in this newsletter), Corning Microarray Technologies and the Optical Networking Devices Division of Corning Incorporated are new tenants. Finally, we will continue to provide a total success package for businesses that have the right idea and need a jump-start to make their dreams come true.

Jon Wilder
Executive Director

New CCIC Tenants in 2001

Added to the tenant roster just since the first of the year at *Painted Post*:

- **CS&S Thermomechanical Laboratory**...is part of Corning Incorporated's Characterization, Science and Services, providing thermal property testing and mechanical property testing in the fields of glass, ceramics and glass-ceramics.
- **Corning Microarray Technologies**...is a new business utilizing the emerging science of microarray technology. Corning's microarrays are essentially glass microscope slides used in DNA analysis.
- **Corning Optical Networking Devices (OND) Liquid Crystal Switch**...is working on projects related to Corning's wavelength management products.

At Alfred:

- **Ceralink**...is in the process of setting up a Microwave Testing Center (see this issue's PROFILE feature.)

Raymond Family Business Institute Names President

Dr. Carol B. Wittmeyer, currently associate vice president of University Relations at Alfred University, has been selected as the first president of the George and Robin Raymond Family Business Institute.

The Institute, which will be funded through a planned endowment provided originally through the Raymond Family Foundation, is the culmination of a plan George Raymond has had for 20 years: "I saw a niche for Alfred, a way for Alfred University to distinguish its College of Business from other programs." The site for the Institute offices is the Ceramics Corridor Innovation Center facility in Alfred. The site was selected during the fourth quarter of 2000 by Dr. Edward G. Coll, Jr., president emeritus of Alfred University and a member of the Institute's board. But now, he says, "the Institute is ready to officially open for business."

Wittmeyer has more than 15 years' experience in higher education, and through her work at Alfred University, has had an opportunity to meet "dozens of successful Alfred University alumni who own their own firms. I look forward to serving them in a variety of ways, especially by providing networking opportunities for family business owners and by funding high-quality educational programs for owners and their successors."

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

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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?

Keep in touch...send us your information on staff appointments, new products, awards, trade show participation, and any other business and professional activities. Your news should be addressed to Jon Wilder, Executive Director, Ceramics Corridor Innovation Centers, 200 North Main Street, Alfred, NY 14802, by e-mail at corridor@ceramicscorridor.org, or call (607) 587-9444.

Profile: Ceralink, Inc.

Founded by Dr. Holly Shulman, who is an adjunct faculty member at Alfred University, Ceralink is in the business of offering



Dr. Holly S. Shulman

consulting services that promote ceramics industry growth. Essentially, the company assists industry by forging university-based research group relationships and then guiding technology transfer. "We will assist industry in the cost-effective outsourcing of their R&D through appropriate university partnering," Dr. Shulman explains.

Dr. Shulman, a New Jersey native, received her BS at Alfred University, her masters at the University of Pittsburgh, and her Ph.D. at the Swiss Federal Institute of Technology (EPFL). She's also studied abroad in Sheffield, England, and worked in the private sector in New Zealand.

It was at the latter that she "noticed a lot of technology development that came from the university level, but never got into commercial development" and decided to come home to Alfred to put her tech transfer theories to work.

For openers, Ceralink is in the process of setting up a Microwave Prototype and Testing Center, and has received a NYSERDA grant to install and operate state-of-the-art, fully integrated microwave furnaces.

"I saw the need for high temperature microwave technology in the ceramics industry, which would require testing and process development," Dr. Shulman explains, noting that the center should be up and running by early summer.

Ceralink, Inc. (continued)

"We will showcase commercially available microwave systems and interface with equipment suppliers for industrial scale-up."

Beyond that, "we are working in collaboration with the CACT and the New York State College of Ceramics on the densification of nanoceramics through microwave and millimeter wave sintering," according to Dr. Shulman. "We're also looking for other technologies that are ready for industry, and for industries that are in need of certain products."

SUNY Names Amann President of CCC

Floyd F. Amann was named President of Corning Community College in early March after a year-long search. Amann succeeds Eduardo Marti, who accepted the presidency of Queensboro Community College last year. Jonathan Gibraltar, who has been serving as CCC interim president since then, was named by SUNY Trustees as president of the SUNY College at Farmingdale.

A native of Buffalo, Amann comes to Corning from Memphis, Tenn., where he was president of Shelby State Community College from 1996-2000. The college is now Southwest Tennessee Community College, after a merger Amann helped to facilitate with the State Technical Institute of Memphis.

"Floyd Amann has a tremendous background as a college president and as an administrator and faculty member," according to Robert King, SUNY chancellor. King adds that, "Before going to Tennessee, he served for 26 years at Monroe, Finger Lakes, and Jamestown community colleges. We are fortunate that Dr. Amann has made the choice to cap his distinguished career here in New York."

Area Resources:

Southern Tier Central — An Economic Development Partner

The Southern Tier Central Regional Planning and Development Board (STC) provides a variety of services to the public and private sectors in Chemung, Schuyler and Steuben Counties. The Board's main objective is to participate in projects that grow the region's economy and improve the quality of life through development, planning, technical assistance and research and data services.

Among other things, STC's designation as the local development district for both the Appalachian Regional Commission and the U.S. Economic Development Administration allows it to provide local access to Federal funding to meet priority economic development needs. Of paramount importance to the Ceramics Corridor region, STC, through the Regional Economic Development and Energy Corp., provides low-interest loans for small business start-ups and expansions.

The STC Regional Planning & Development Board is located at 145 Village Square, Painted Post, NY 14870, telephone 607-962-5092, fax 607-962-3400, e-mail stcrpdb@stny.rr.com. The Board's executive director is William D. Hess; its economic development coordinator is Stephen L. Dennis.

CANY's Meeting

The Ceramic Association of New York's (CANY) spring meeting was held April 19th at Alfred University's Suan Howell Hall.

Presenters on the agenda were:

NYSTAR Proposals
Dr. Alexis Clare - Photonics
Dr. Herbert Giesche - Nanotechnology

Dr. Holly Shulman - Microwave Testing
Facility at CCIC

Mr. Wayne Brown - Manager, R&D,
Meadow River Enterprises -
University & Industry Partnerships: A New
Integrated Multidisciplinary Hands-On
Strategy for Education & Research

Dr. Amar Choudry, Head, Avionics Program,
Institute of Industrial & Maritime Technology-
Technology Challenges in Aerospace Materials

Feedback...

First of all, congratulations on your excellent publication. I look forward to receiving it.

The company with which I work is now handling the glass and ceramic raw material, spodumene, for North and South America through a representation agreement with the largest producer in the world, Sons of Gwalia Ltd., Perth, Western Australia. We currently maintain stockpiles in North America. Glass and ceramics producers worldwide are taking advantage of this lithia-containing mineral, which offers energy savings, increased product quality, increased furnace capacity and excellent thermal shock properties. We certainly welcome inquiries.

Derek McCracken
American Minerals, Inc.
King of Prussia, PA

Thanks, Derek, for your note. Readers should contact American Minerals, Inc. via fax at 724-695-7867, or by e-mail, DmcCrac814@aol.com.

Business Notes...

Advanced Ceramics, Inc., Painted Post, which earlier reported an order from Italy, has increased that to four orders "and we appear to have made a regular customer," according to sales/office manager *Richard Baldwin*. "We were told that the part we are making is demanding, and they couldn't find anyone in Europe to make it for any reasonable price." Baldwin also reports that the company had an order from Australia and is in the final stages of getting an order from Spain.

On the staffing side, *Advanced Ceramics* has added a new machinist and expects to hire another one soon. And on the production side, the company has a new Mitsui Seiki Jig Grinder in place. "It will add a capability to our shop that isn't even found in most large ceramic machine shops," according to Baldwin. "We will be able to provide more accurate hole placement and sizing, complex hole patterns, complex shapes, as well as angles and radii."

Moore-Merkowitz Tile, Ltd., Alfred, is currently developing a Web site. The "under construction" sign is up at www.moore-merkowitz.com.

Ithaca Materials Research and Testing, Inc. (IMR), Lansing, NY, has received accreditation by the Performance Review Institute (PRI) to the stringent quality requirements of the National Aerospace and Defense Contractors Accreditation Program (NADCAP). IMR employs 35 engineers, scientists and support staff, providing testing and analytical services to aerospace, automotive, computer and medical devices industries, according to company president *Steve Ruoff*.

Corning Incorporated recently showcased its capabilities in optical fiber technology at the Optical Fiber Communication Conference in Anaheim, CA. The conference concluded March 22 and featured live demonstrations of key products designed to advance optical communications. At the conference, Corning Incorporated presented its annual overview of the optical fiber and photonics markets to analysts and the media at a special breakfast meeting.

In related news, *Corning Incorporated* has also begun shipments of its MetroCor™ fiber to Level 3 Communications, Inc. for installation in metropolitan networks that Level 3 has built across North America. MetroCor fiber is specifically optimized for metro networks to enable cost savings by reducing OEO conversions.

Vergason Technologies, Inc., Van Etten, NY, recently exhibited its Press-Side® Rapid Cycle Metalizers at Plastec 2001 in Anaheim, CA, and is slated to exhibit at the Society of Vacuum Coaters Technical Conference in Philadelphia in April, and at the AESF Sur/Fin 2001 show in June in Nashville, TN. The company is also exhibiting its hard coating equipment and services at such shows as Plastec 2001, Anaheim, CA; Erie Engineers Week Industrial Expo, Erie, PA; Westec, Los Angeles; ICMC in San Diego; Eastec, West Springfield, MA; the Rochester NTMA, Rochester; and the Mid Atlantic Machine Tool Show, Fort Washington, PA.

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