

GMIC Newsletter

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GMIC Reports

Conference on Glass Problems

The Conference on Glass Problems (GPC) begins its second year organized by GMIC with program support from Alfred University, logistical support from the American Ceramic Society and publicity support from *Glass Worldwide*. Registration is now open for the conference, with substantial discounts for GMIC members. It is also now the official annual meeting of the Glass Manufacturing Industry Council. *Please support the conference and the glass industry by attending and encouraging your colleagues to attend.*

Current information on the Conference on Glass Problems is available on the conference website: <http://glassproblemsconference.org/>

For the first time last year, conference attendees and exhibitors had the opportunity to provide feedback by online evaluations. Evaluation scores of the program and supporting logistics were consistently high. Attendees indicated that the program met their professional needs. Vendors relayed that they felt the conference provided a high value opportunity to present their messages and interact with their customers. One of the common desires expressed, was the need for more real world examples in the programming, as well as for more presentations by manufacturers on commonly shared problems.

The GPC advisory board was reorganized last year, adopting a formal charter under the authority of GMIC and Alfred University. Comprised of industry representatives, the advisory board met in January sharing the philosophy that the glass manufacturing industry could be best served by bridging the gap between a purely academic conference and a trade show. This means creating a program that shares information between those who work in the field, using real world examples, as well as presenting topics on the broader issues that face the industry. Increased emphasis is put on seeking manufacturers as speakers. In the case where a supplier will present a topic, they are asked to co-present with a manufacturer, citing in-plant data.

Another clear theme revealed from the evaluations, was the value of in-depth technical education beyond the lecture hall. The 74th GPC will present two excellent short courses. The first, *Fundamentals of Batch and Furnace Operation*, taught by Phil Ross, has been well received in the past is a very good introduction for engineers new to the field. The second, *Phenomena in Industrial Glass Melting Processes*, is a continuation of Dr. Rudd Beerkens very well

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After much organizing work, the initiative to provide industry funding for basic research in glass strength will commence research

activities this year. As you know, the mission statement is, "To develop a precompetitive research program to identify critical parameters for improving the usable strength of glass." These objectives is divided into three goals. The first is to gain a fundamental understanding of methods for improving usable glass strength. This entails understanding surface structure and chemistry. A component of this is, understanding the effect of chemistry on surface structure, and how surface structure is impacted by chemical and physical damage and how that leads to reduction in strength. In other words, the first goal of our research roadmap is to have the researchers tell us why glass shows a reduction in strength. The second part is to develop and standardize new tools and testing methods. The

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20 Student Travel Grants Available

GMIC will award 20 Student Travel Grants for the 74th Conference on Glass Problems. Graduate and undergraduate students are eligible to apply. Each grant consist of \$850 in travel funding, plus complimentary student conference registration.

Application Requirements

- Submit a 1-2 page CV, including your complete contact information
- Submit a statement describing how the conference will benefit you
- Email your CV and statement to Donna Banks, dbanks@gmic.org
- Awardees will be announced September 17, 2013 with instructions on redeeming their Student Travel Grant
- Students must register via: www.glassproblemsconference.org

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Rejoining Member

Founded in 1908, in Rockford, Illinois, Eclipse, Inc. is now in their third generation of family ownership. Eclipse, Inc. is a worldwide manufacturer of products and systems for industrial heating and drying applications. They design and manufacture a wide variety of gas and oil burners, recuperators and heat exchangers, complete combustion systems, and accessories for combustion systems. Eclipse, Inc. offers its customers an excellent single source for design, installation, and service for total combustion needs, supported by expert application engineering services around the world.



Eclipse's company representative is Kevin Cook, Senior Sales Engineer. He can be contacted at kcook@eclipsenet.com or (407) 628-3338 x171. ■

New GMIC Marketing Brochure

A completely new marketing brochure for GMIC has been produced. The oversized full-color brochure was designed by the design firm 2-Shea with content created by Bob Lipetz and approved by the Executive Committee. The brochure presents a clear and organized summary of GMIC's objectives, mission and what we do; technical education, coordinate technical initiatives for the manufacturing industry, advocacy, and promote glass usage and image. Membership categories and benefits are related. GMIC board members are encouraged to distribute copies of the brochure to prospective members. ■

GMIC Board Reports

GMIC Board Online Meeting – February 7, 2013

Executive Director, Bob Lipetz, presented a proposed operating budget for 2013. The budget will be reviewed and approved the Executive Committee in March at their retreat. President Steve Badger presented his concepts for the operational objectives for GMIC for 2013. It was suggested that the three most likely member prospects be identified and that the Executive Committee begin pursuing them.

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Usable Glass Strength Coalition

third part of the UGSC objective is to develop the next generation of glass technical experts and researchers.

For several years, GMIC has been helping coordinate consortium building activities in coordination with the interim leadership from seeding funding members, O-I, Coca Cola, Johns Manville, Diageo, and Owens Corning, along with the assistance of Alastair Cormack of Alfred University, Richard Blanchard of Diageo and others. After much effort into finding the best legal vehicle to organize the coalition, the UGSC has been incorporated as a for-profit limited liability corporation, wholly owned by the Glass Manufacturing Industry Council. GMIC already is a recognized glass industry representative and many of the companies participating in the UGSC discussions belong to the Council. GMIC agreed to allow UGSC to operate as a separate entity within the council's existing structure. Under this arrangement, GMIC members do not automatically become UGSC members. Likewise UGSC members do not also have to be members of GMIC. GMIC still will focus on the industry and its initiatives, but the UGSC is focused on funding universal research.

It should be noted that a key stipulation of the research agreements will be that the research would be made public. However, coalition participants will have no less than one year's first access to the knowledge. All participating companies will be able to independently take the results of the pre-competitive research to independently fund research leading to applied process IP.

The nature of the UGSC activities is spelled out in an operating agreement. The UGSC has its own independent board of directors that oversee research focus and management. The board met in Columbus in January and again in June, to set research priorities and select a recipient for research funding. Board officers for the 2013/2014 year are Peter B. McGinnis, of Owens Corning, Board Chairman; Louis Mattos, Jr., of Coca-Cola, Board Vice-Chairman; and Robert Weisenburger Lipetz of GMIC, Secretary.

GMIC and the UGSC are currently operating under a joint management agreement, appointing GMIC as the management company responsible for managing all logistical details of the coalition. GMIC receives compensation for time and expenses devoted to this purpose.

After several years of organizing, the coalition was finally able to address its attention to research activities. The coalition published a request for proposals for research in March of this year. Thirteen proposals were submitted from around the world. The UGSC Research Council met in Columbus on June 19 and made recommendations to the board on whom should receive research support and what alterations to the proposals would be



UGSC Continued

desired. On June 20th, the board voted in support of the preferred proposal. Technical Director, Alastair Cormack, is currently negotiating a contract with that institution. At this time, all that can be publicly revealed is that the PI is a highly respected glass researcher, as is the institution. It's anticipated that the contract will be signed in late July or early August, at which time, a public announcement will be made. Research activities are anticipated to commence in September.

Following commencement of research, the coalition will turn its attention towards recruiting new members. Currently, dues from membership provide enough funding for one research project. The immediate goal is to increase membership dues income by \$150,000 affording a second research project. Coalition members will begin a campaign of contacting prospective companies to discuss possible membership. If your company is not currently a member of UGSC, you can help the process by indicating to UGSC leadership what your company's decision making process is, and whom would be the best contacts to discuss participation.

Companies currently participating in the Usable Glass Strength Coalition are: Diageo, Owens Corning, O-I, Johns Manville, Rio Tinto, Coca-Cola, and GMIC.

UGSC Contacts:

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GMIC Board Reports

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GMIC Executive Committee Strategic Retreat – March 13-14, 2013
President Steve Badger hosted the executive committee in Pittsburgh. Strategies for increasing membership were discussed. With adjustments, the committee approved the operating budget for 2013. Approval was granted to make changes to the investments in GMIC's bond fund.

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Conference on Glass Problems

received course from last year and provides a wealth of information for experienced engineers.

One of the things that separates the Conference on Glass Problems from other conferences and trade shows, is that in addition to the typical program of speakers, the conference provides a full day in-depth technical symposium. This year, we will present two symposia. In our first, GMIC is collaborating with the EPA Energy Star, Glass Industry Focus Group to present, *Energy Productivity as a Competitive Edge in Glass Manufacturing*. This symposium is organized and presented by GMIC members, Garforth International, LLC, Corning Incorporated, Saint-Gobain, as well as industry suppliers and other experts. Also, addressing a topic of much interest, GMIC members have organized a full-day symposium, *Current Topics in Glass Melting Air Emissions & Control Technologies*. Not only does this symposium bring together well-respected experts, but it also presents a panel discussion of the leaders in the field, that should prove illuminating. I would anticipate good attendance.

A fund of \$20,000 for student travel grants that permit students to attend the conference, and make contacts and gain insights into the industry has been funded for a second year.

Attendance at the conference has increased each of the last 4 years, despite the economy. In fact, attendance was up by a remarkable 17% last year. Due in part, to this growth, the conference has outgrown the confines of a typical hotel. The 74th Conference on Glass Problems is returning to Columbus in 2014 and for the foreseeable future will be presented at the Greater Columbus Convention Center, with accommodations provided by the Hilton Columbus Downtown. This larger space will provide more flexibility, while keeping all activities in one location.

Conference planners believe that networking opportunities are as valuable as education, when creating a forum for the exchange of innovations and solutions in the glass manufacturing industry. All of the tabletop exhibits and hospitality booths and almost all of the hospitality salons are sold out at the time of this newsletter publication.

Graduate and undergraduate students are encouraged to apply for one of the 20 travel grants available for the 73rd GPC. Each grant consists of \$850 in travel funds, plus complimentary student registration. To apply: Submit a 1-2 page CV and a statement describing how the conference will benefit the student. Email information to Donna Banks by September 1, 2013, at dbanks@gmic.org. Awardees will be notified by September 17, 2013. Checks will be mailed directly to the awardees in October, upon verification of conference attendance.

Current information on the Conference on Glass Problems is available on the conference website: <http://glassproblemsconference.org/> ■



GMIC Reports Continued

GMIC Board Reports

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An expensive patent renewal payment will be due this year on the refractory patent held by GMIC. Utah Refractories does not have current sales for the product. It was decided to not renew the patent and approach Utah Refractories for their interest in purchasing.

President Badger led the committee through an extensive SWOT analysis on the GMIC member value proposition. Good progress was made, with the decision to finish the analysis with the participation of the entire board at the retreat in August.

GMIC Board Online Meeting – May 16, 2013

Bob Lipetz relayed that the Conference on Glass Problems Advisory Board (GPC AB) has established a charter which requires no less than 10 and no more than 12 AB members. Three to 4 seats will become vacant next year. Possible candidates were discussed. Euan Evenson volunteered that Praxair would be interested in participating.

Board discussed whether the ongoing initiative to evaluate and improve the membership value proposition would benefit from an additional membership survey. It was felt that at this time, specific data is not identified and therefore not needed. The board may identify additional information needed during the annual strategic retreat.

Discussed items for board retreat, including: defining what we want from strategic partnerships, board elections, topic for GMIC symposium, topic for possible ACerS GOMD/GMIC joint symposium, identifying technical areas of interest to members, completing SWOT analysis of membership value proposition. Also, discussed speakers.

A review of progress on 2013 objectives was presented. Highlights include:

- Glass Problems Conference is well placed to meet all metrics on logistics and programming. Technical education is expanding this

year to include short courses, GMIC symposium on air emissions and also a joint EPA symposium on energy efficiency.

- The Usable Glass Strength Coalition has completed all organizational activities. The request for research proposals yielded 13 research proposals. Over the next 5 weeks the research council and board will vet proposals and choose a contractor to start work in September. A full day meeting of the research council is scheduled for June 19, with full day meetings of the Board of Directors June 20-21 in Columbus.
- Membership attrition has stemmed for the present. A new marketing brochure for GMIC was unveiled at the meeting and will be distributed at exhibiting at GOMD conference and others this year. Most dues have been collected, but efforts are continuing to collect outstanding invoices.
- Bob Lipetz reported that GMIC has sufficient cash to cover 1 year's operations. We are performing better than budgeted with a surplus of revenue over expenses.
- Regarding strategic partnerships, Bob Lipetz relayed the positive meeting he has had with American Ceramic Society top leadership.
- Work to define strategic partnership goals and areas of technical interest will occur during the board retreat.
- A number of opportunities to promote GMIC and glass have been experienced, including various journal articles, as well as advertising.

GMIC Executive Committee Online Meeting – June 13, 2013

The executive committee reviewed status on 2013 operational objectives and finalized plans for the 2013 board retreat. On the agenda is:

- Strategic focuses – what do we want from strategic partnerships
- Complete SWOT analysis of value proposition

74th Conference on Glass Problems

October 14 – 17, 2013

Greater Columbus Convention Center, Columbus, Ohio

Presented by the Glass Manufacturing Industry Council and Alfred University

Endorsed by The American Ceramic Society – Glass Worldwide the Official Journal of the Conference



GMIC Reports Continued

- Board elections
- Suggest GPC advisory board members
- Topic for GMIC symposium
- Topic for possible ACerS/GOMD – GMIC joint symposium
- Technical areas of interest to our members
- Speakers

17th Annual Ohio Energy Management Conference – February 19-20, 2013

Bob Lipetz attended the 17th Annual Ohio Energy Management Conference and received insights on shale gas development and its impact to stabilize natural gas prices, as well as other energy issues of interest to glass manufacturers.

Hotbels 2013 - April 16-17, 2013

Bob Lipetz attended Hotbels 2013 in Lexington, Kentucky.

ICG XXIII International Congress – June 30-July 5, 2013

Bob Lipetz attended the ICG Congress in Prague, Czech Republic. GMIC is the ICG associate US representative organization. Bob Lipetz is a member of the governing council. Bob made a presentation to the ICG Council on the Usable Glass Strength Coalition, which was well received. GMIC is a co-sponsor with the ACerS on a proposal to present the ICG Congress in Boston in 2019. The ICG Council voted to approve the Boston location. Information at: <http://www.icglass.org/> ■

GMIC 2013 Calendar of Events

- GMIC Annual Board Strategic Retreat: Wednesday-Friday, August 21-23, 2013 Chicago, Illinois
- GMIC Annual Membership Meeting: Greater Columbus Convention Center, Monday, October 16, 2013 4:00-5:00 pm, Columbus, Ohio
- 74th Conference on Glass Problems: Greater Columbus Convention Center, Monday, October 14 through Thursday, October 17, 2013, Columbus, Ohio
- Quarterly Board Teleconference: Thursday, November 14, 2013 1-3 pm
- Quarterly Executive Committee Teleconference: Thursday, December 12, 2013 1-3 pm. ■

Bioglass® Update

Why I brought home another 23 tubes of toothpaste from Europe – Anecdote by Bob Lipetz

A year ago in this newsletter, I related how I heard Larry L. Hench give the keynote address on the three generations of Bioglass® at the 2012 ESG/DGG conference in Maastricht. As his abstract stated, “Historically the function of biomaterials has been to replace diseased or damaged tissues. First generation biomaterials were selected to be as bio-inert as possible and thereby minimize formation of scar tissue at the interface with host tissues. Bioactive glasses were discovered in 1969 and provided for the first time an alternative; second generation, interfacial bonding of an implant with host tissues. Tissue regeneration and repair using the gene activation properties of Bioglass® provide a third generation of biomaterials.”

I was very interested to hear Dr. Hench describe how bioactive glass-containing toothpaste significantly increased tooth dentine mineral content after treatment with the formulation known as NovaMin. At that time, Glaxo SmithKline, did not market Sensodyne® Repair and Protect toothpaste in the United States, so I packed my suitcase with 14 tubes and I having been using the product this past year. I was excited to see GSK finally advertise the release of Sensodyne® Repair and Protect toothpaste in the United States last month. The excitement soon faded when I read Peter Wray’s article in the ACerS Ceramic Technology Today blog. Mr. Wray relayed that the newly marketed toothpaste did not contain NovaMin. I bought a tube, and sure enough, the only active ingredient listed was stannous fluoride. Neither I, nor GMIC, is endorsing this product. But, just to hedge my bets, before I left Prague this month, I packed my suitcase with another 23 tubes of toothpaste. You never know. ■

74th Conference on Glass Problems
where glass manufacturers & suppliers meet

Register now
www.glassproblemsconference.org

Early registration ends September 16, 2013
Add to your registration

Current Topics in Glass Melting Air Emissions
& Control Technologies
A symposium organized by GMIC

Thursday October 17, 2013
8:00 a.m. - 3:30 p.m.