Innovations in Glass Design and Glass Technology

For its annual Seattle & Southwest Chapter joint meeting, SEAW welcomes special guest speaker, Charles Bostick, Vice President of Seele, L.P., New York. Our meeting venue, the College Club Seattle, overlooks the Seattle Central Library, a notable Seele project.

Mr. Bostick is an experienced architect and manager with expert overall knowledge of the design and installation of custom made curtain wall and cladding projects as well as glass structures. Some of his projects include the Museum of Art & Design, NYC; Winspear Opera House, Dallas; Lincoln Center – Juilliard Music School and Alice Tulley Hall.

Mr. Bostick will introduce us to Seele Corporation and its philosophy, and will discuss the many facets of the company’s work, from the design/build process through testing, materials, and innovation, with examples of projects, both complete and in the works.

Seele is engaged exclusively in custom glazing and architecturally exposed steel structures of the highest quality.

Founded in 1983 by Gerhard Seele and Sigfried Gossner the company has steadily grown to its present size of over 400 employees the world over, yet keeps its origins as a family run, mid-size, German quality craftsman contractor providing design assist engineering services, fabrication, delivery and installation – all from one source. With its array of quality specialists Seele has been able to accomplish projects not only in glass, steel and cable, but also in fabric, wood, bronze and most recently terra cotta.

Photos courtesy of Seele New York

Meeting Information

Date: Tuesday, April 24, 2007
Place: College Club
505 Madison Street, Seattle
Parking in College Club lot is now $2.00
Time:
Special Steel Moment Frame Provisions as referenced in the 2006 IBC—Presented by Bryan Zagers of Coughlin Porter Lundeen
5:00—5:45 FREE Mini-Seminar
5:30—6:30 Social Hour
6:30—7:30 Dinner
7:45—9:00 Program

Menu: Indian Style Smoked King Salmon

Cost:
SEAW Members: $30.00
Non Members: $35.00
Students (with ID): FREE
Late Registration, add $5.00

Reservation Deadline: 5:00 PM Thursday, April 19

Prepayment is appreciated!
Reservations may also be made by email to seaw@seaw.org or by phoning 206.682.6026

NEW COLLEGE CLUB PARKING POLICY
Due to congestion in the parking garage, the College Club will begin posting an attendant and must charge a $2.00 parking fee to cover costs.
Cash payment is required.

Photos courtesy of Seele New York

April Mini-Seminar

Special Steel Moment Frames
Bryan Zagers of CPL will present the 2005 AISC Seismic Provisions requirements referenced in the 2006 IBC
FROM THE BOARD: Our Future Engineers—What Role Will You Play?

A popular topic that seems to be coming up more and more these days is the level of competence and intuition in today’s emerging engineering professionals. If you receive the national SEA publication, you probably saw Ed Huston’s recent article on what he witnessed grading the western states exam.

As I reflect back on the year since I last wrote my “From the Board” column, I’d like to share some insights and thoughts on this topic and try to focus on what’s working rather than just making observations.

Over the past year and a half, I have been involved in a large tunneling project down in Melbourne, Australia. During the heart of the design phase, the work involved 5 trips, each lasting typically 3 weeks on average, down to interface locally with the firm we were teamed up with – a chance to roll up my sleeves and compare good old US know-how with the methods taught by the Queen’s academic system!

Australia uses the metric system, similar to the UK. Hence, there was no switching back and forth for me – I was on their home turf and was forced to rapidly become accustomed to what 100 kPa felt like or what a moment in kN-m represented. Occasionally, I’d mumble something out loud in kips or feet and they’d give me a puzzled look, “what’s a kip, mate?”...

In a way, it was like going through the process that recent graduates go through when they begin designing. You start with no clue how much rebar should be in a concrete beam spanning 20 feet, but after a year or two, you’re sizing them based on span, trib area and loading requirements. And most importantly, you have a feel for what is right.

Interestingly, I also discovered that the engineers of the Commonwealth are drawing some of the same conclusions about the state of their engineering profession. In fact, I ran across an article by an engineer from the UK while in Melbourne that read almost parallel to Ed Huston’s. This fellow, who goes by the name of John Atkinson, observed that “today’s engineers are less competent and less innovative than the chartered engineers of 50 years ago.” He goes on to state that there is a saying that “the problem with British ground engineering is that all the good engineers are in court arguing over the mistakes made by others.” Not a very inspiring picture to say the least.

One of the unique aspects of working on underground structures is the fact that they are not heavily addressed by Building Codes. Tunnel and shaft designers still utilize ACI 318 and the AISC manual for steel design, but the approach for static and dynamic loading relies heavily on engineering principles, rather than a step by step approach defined by someone else. Thus, the designer experiences a sense of self-realization as he or she works through the project and gets a feel for how the structure behaves or what elements are impacting the design. I imagine this is somewhat akin to what designers experienced in the days before the PC that could do 3-D dynamic analysis at the drop of a hat.

I also believe we find ourselves in an age where a lot of emphasis is being placed on interpersonal skills. I see the term “emotional intelligence” being thrown around. There is a strong tendency to groom young engineers into Project Managers, which risks full development of technical intuition and competence.

In my opinion, the development of both technical and interpersonal skills is beneficial to a successful and rewarding career in consulting engineering. Without technical competence, a Project Manager will always be at risk when confronted with thinking spontaneously on his or her feet. Likewise, a technical specialist may find him or herself limited by the direction of others, and not able to appreciate the non-technical aspects that sometimes play a role in determining the outcome of certain issues. In our profession, we will always have some degree of distinction between these two types. Often, the success of our efforts demands complete focus from one approach or the other.

When I was a teenager, my Dad used to proclaim (typically after I had seriously tested his patience) that “the only substitute for experience is being 16...” I think back on this every so often and crack a smile. It is true though – there is no substitute for experience, and this is often on the shoulders of the individual to determine how much experience is necessary on the career path they’ve chosen.

The United States has always been regarded for its innate sense of innovation – in engineering, electronics, medicine... practically anywhere you look. This is the wake-up call for us. Holding onto this title will involve the efforts of the professional and academic community, as well as the individual. In the big picture, the evolution of the American culture is probably not going to make it easy. However, the real treasure we have is the fact that we have the power to do something about it.

Take a look around – there are still many examples of talented young engineers who are turning out quality work and have a good handle on the big picture. We need to take the time to understand what combination of character traits and event history has gone into bringing these folks to where they are today. In my own experience, I have found that an effort to develop the technical and the managerial aspects of my career have both been instrumental in my professional development.

- Andrew McGlenn

Andrew McGlenn is Lead Structural Engineer for Jacobs Associates’ Seattle office. A member of SEAW since 1998, Andrew is a 2005-2007 Director and has been active in the formation of the Younger Member Forum.
Committee News

Building Engineering Committee Recent Activities

The Building Engineering Committee (BEC) was formed in May, 2005. One of its goals is to represent SEAW members on issues related to codes and standards not covered by other SEAW committees (i.e., Wind, Earthquake and Code Advisory). It has investigated numerous technical issues affecting the practice of structural engineering. Its members participate on several committees responsible for the development of nationally recognized codes and standards (e.g., BSSC, ASCE, AF&PA, TPI, etc.) and have testified on behalf of SEAW at recent ICC code development hearings. It consists of 25 members. Meetings are held monthly. Average attendance is 4 to 5 members.

The committee is considering the development of several code change proposals for the upcoming 2007/2008 ICC code development cycle (8/20 submittal deadline), which will be done in conjunction with the code development committees of NCSEA and ASCE 7. A brief summary of these proposals are as follows:

- Do roof planters impose dead load or floor live load (i.e., LRFD factors)?
- Do partitions impose dead load, except in office buildings and where partition locations can change?
- Are partition live load reductions based on supported area warranted?
- Is nonseismic surcharge at a retaining wall a live load or earth pressure (i.e., LRFD load combinations)?
- Are floor live load reductions based on supported area warranted at one-way slabs, walls and foundations?
- What are governing load combinations at occupied roofs (i.e., dead + snow + floor live)?
- What is ground snow load for Puget Sound: 15 psf per IBC or 20 psf per SEAW snow manual?
- Is floor live load at residential corridors 40 or 100 psf?
- Are floor live load reductions based on supported area warranted at egress and retail areas?

More to come. Stay tuned …

We encourage other members of SEAW to contribute their ideas and to consider joining the committee. Please contact me for further information.

Phil Brazil, Chair
pbrazil@reidmidd.com

Newsletter Committee Changes

After serving as chair of the *Equilibrium* committee for the past five years, editor Scott Adan accepted a position in San Francisco, where he and his wife relocated last month. A month prior, Company Spotlight editor Chad Green accepted a position outside the engineering field and tendered his resignation from the Newsletter Committee. These two members contributed many hours of effort to the *Equilibrium* and will be sorely missed. We thank them for their dedication and their service to the organization.

A new Newsletter Committee is now being formed through the efforts of Karen Damianick, Charlene Hails and Lynnell Brunswig. We’d like to encourage anyone interested in participating to contact Lynnell at the SEAW office. Our plan is to hold “committee meetings” by e-mail so that the bulk of our efforts can be focused on production rather than meeting time. Plans include the continuation of meeting and seminar recaps, Company Spotlights, and the introduction of a Member Profile column. New ideas are always welcome. Consider joining us!

Meetings and Seminars

2007 Northwest Conference Plans Underway

Members of the Conference Steering Committee of SEAW’s Seattle Chapter are busily making arrangement for the 2007 Northwest Conference which the chapter will host September 13-16 at the Sheraton Hotel, Downtown Seattle. Technical topics under consideration include: ASCE 7 Seismic Design; Design Considerations for Non-Structural Elements; Foundation Design, and more. In addition, vendors will be on hand to display and demonstrate their products and services.

Since we can’t have all work and no play, a myriad of social opportunities are also in the works. It is our intention to make this conference an accessible, beneficial, and enjoyable event for all.

Mark your calendar now for September 13-16!

ASCE Seattle Section Geotechnical Group 24th Annual Spring Seminar

April 21, 2007 University of Washington

The Geotechnical Group of the ASCE Seattle Section is pleased to announce its 24th Annual Spring Seminar. A one-day symposium will be held at the UW to honor Dr. Robert D. Holtz, on Saturday April 21, 2007 at the University of Washington. Well-known for his research, educational, and professional achievements, Bob Holtz is also an esteemed member of our engineering community. The symposium will feature some of Bob’s mentors, colleagues and former students speaking on a range of topics.

Scheduled speakers include Bob’s mentors Clyde Baker (STS Consultants, Ltd.), Mike Jamiołkowski (Technical University of Torino) and Ray Krizek (Northwestern University), who was Bob’s Ph.D. advisor. Bob’s long-time colleagues Milton Harr (Purdue University), Barry Christopher (Christopher Consultants) and Steve Kramer (University of Washington) are also scheduled to speak. Presentations by some of Bob’s many former students, including Dana Humphrey (University of Maine) and An-Bin Huang (National Chiao Tung University), will round out the day.

The range of topics, the experience and stature of the speakers and the opportunity to honor Dr. Holtz’s achievements are certain to make this symposium of interest to current students, recent graduates, and experienced engineering and
Meetings and Seminars, cont’d

construction professionals alike.

Registration information will be available at http://www.seattlegeotech.org

For further information contact: AH (Tony) Rice c/o Golder Associates Inc. 425/883-0777 ext 2104, or email: trice@golder.com


May 16-19 2007
Westin Long Beach
Long Beach, California

The 2007 Structures Congress is designed to give structural engineers the information to embrace “better practices” as we build and achieve “new horizons”. This Congress will give you information from research and practice in some 90 quality technical sessions, offered in 9 tracks:

4 Practical Design Tracks—Bridges, Buildings, Existing Structures, and Non-Building Structures & Non-Structural Components
2 Research Frontiers Tracks A Business Practices & Development Track
A Codes & Standards Track A Specialty track, featuring the 2007 Forensic Engineering Congress

Additional offerings include plenary session, pre-Congress seminars, Diversity Workshop and reception, Poster Sessions, Networking Events and Exhibit Hall.

For complete details, visit www.structurescongress.org

Opportunities

Staff Engineers

Structural Engineering design firm seeks outstanding individuals to fill immediate openings for Staff Engineers in both our Seattle and Tacoma offices. All experience levels considered and encouraged.

We’re a mid-size dynamic company recognized for our team work, creativity and innovation. We combine a very progressive benefits package with a fun, flexible and informal office culture. Email resume to bbresko@swensonsayfaget.com or fax attention Blaze Bresko at 206-443-4870. No phone calls please.

Structural Project Manager
Bellevue

DCI Engineers is currently seeking Structural Project Managers for our Bellevue office. Applicants should be able to demonstrate abilities in team management and communication, project planning, scheduling, writing, organization, documentation, coordination, contracting and budgeting.

Experience with all building materials and building types preferred. Projects will be diverse including commercial, mixed use and residential. PE Required. Please submit resumes to: resumes@dci-engineers.com or via mail to HR @ DCI Engineers 10900 NE 4th St, Ste 1200, Bellevue, WA 98004.

Structural Engineers

AHBL is seeking ENTRY LEVEL STRUCTURAL ENGINEERS in both Seattle and Tacoma offices! Our structural group is a leader in the region and works on a wide variety of projects, ranging from post-tensioned concrete mid-rise buildings to single story heavy timber framed construction. Each engineer is fluent in the design of all structural systems and materials, and works on all aspects of a project.

The success of our organization is the knowledge, talent and longevity of our staff. We

Mark Your Calendar

Apr 21  ASCE Seattle Section Geotechnical Group Spring Seminar http://www.seattlegeotech.org
Apr 24  Seattle Chapter Special Guest Speaker Event
          Charles Bostick, Seele New York
          Chapter Board Election results
Apr 27  Equilibrium May issue deadline
May 18  SEAW State Board of Trustees Meeting
May 22  Seattle Chapter Life Member/Spouse meeting

LOOKING AHEAD:

Aug 28  Seattle Chapter Summer Casual
Sep 13-15  Seattle Chapter hosts the Northwest Conference

316x735

INTEGRUS

INTEGRUS Architecture is committed to maximizing employee opportunities in a stimulating and energetic atmosphere. We strive to make a lasting impact on the communities we serve, maintaining the highest standard of integrity. If you value these ideals, consider a career with us. Current openings include:

Seattle:
  Structural Project Engineer
  Structural CAD Designer

Spokane:
  Structural Project Engineer

Please send cover letter and resume to:
  jruby@integrus.net

1426 Alekian Way • Seattle
  206.628.3137
  www.integrus.net
10 S. Cedar • Spokane
  509.338.8681
Structural Engineering
Where You Make a Difference

We want you to join our team!

Seattle Structural provides team-oriented structural engineering services to the public and private sector. Our focus is on clients’ needs and value-added services in a low-key, casual office atmosphere. We have openings for recent grads as well as fully licensed project managers.

Our success with domestic and international projects includes the award-winning renovation of the Seattle Aquarium at Pier 59, Costco Warehouses in Korea and Taiwan, and 15 buildings at the New Doha International Airport in Qatar.

We offer:

- Help with your PE and SE exam and a substantial bonus for passing!
- Regular engineering meetings that emphasize open communication and collaboration.
- Work on unique projects, both large and small, locally and internationally...foreign languages (especially Japanese, Chinese and Arabic) are a plus!
- Competitive salary, benefit and retirement plans.
- A relaxed office atmosphere in one of downtown Seattle’s premier high-rises.
- Excellent mentoring opportunities.
- ...and fun company outings!

Check out our website at www.seattlestructural.com

Contact:
Pete Pawlak, Vice President
Phone (206) 343-3000
PPawlak@SeattleStructural.com
BECOME PART OF AN ENVIRONMENTAL ENGINEERING and CONSULTING FIRM WHERE YOU CAN DELIVER YOUR FINEST WORK.

Brown and Caldwell, a nationally recognized environmental engineering and consulting firm has an excellent career opportunity for a Structural Engineer to join our Seattle, Washington office. Are you a self-directed person who values challenging work and a creative learning environment? If so, then come be a part of our team! We are looking to hire immediately.

Structural Engineer III - Requisition #14-30-06-211

Responsibilities: Provide detailed structural engineering on design projects for new and existing water and wastewater treatment systems, as well as other types of structures. Support project design teams and other engineers in development of specifications, detailed drawings, reports and plans.

Qualifications: BS degree in engineering (civil with structural emphasis) and a minimum of five years of experience with industrial structures is preferred. Master Degree in structural engineering is desirable. Washington PE Required, SE preferred.

We offer a competitive salary, benefits and 401(k). For more details visit us at www.brownandcaldwell.com. Please reference position/requisition number in cover letter and e-mail mthullen@brwncald.com. We value workforce diversity. EOE/AA.
**Opportunities**

Hire for the long term. Virtually all of our engineers were hired as entry-level and have chosen to work their entire careers at AHBL. We work closely with our entry level engineers to continue their professional development. Our training process resulted in over 90% of our engineers passing the Structural Engineers exam on their first attempt.

Successful candidates will have a minimum BS in Civil Engineering, heavy emphasis in structural related coursework, Familiarity with IBC is desired, Strong written & verbal communication.

**SUMMER INTERNSHIP OPPORTUNITY!**

The successful candidates should have completed junior level course work in Department of Civil Engineering.

Send resume w/cover letter to: AHBL, Attn: Office Manager, 2215 N. 30th Street, #300, Tacoma, WA 98403, or e-mail: careers@ahbl.com. EEO employer.

**Sr. Structural Engineer**

Beyaz & Patel is a consulting engineering firm specializing in structural engineering of water, wastewater and transportation infrastructure projects. Since inception in 1975, we have earned a strong reputation for providing exceptional engineering services.

Our Seattle office is seeking a highly qualified and capable structural engineer with 5-10 years of experience for interesting and varied structural projects. Typical structural projects include wastewater and water treatment plants, facilities buildings, bridges, seismic analysis/retrofit of public works facilities, field engineering for on-call and construction management services, engineering studies, cost estimating and preparation of Contract Documents. A PE is desirable, but not required.

Beyaz & Patel is a friendly, small firm highly regarded in its fields of expertise, and has been providing quality structural services on public sector projects for 25 years (15 in Seattle). We offer very competitive salaries, excellent benefits, and responsibility commensurate with desires and experience, and opportunities for growth.

Please contact Administrator, Beyaz & Patel, Inc., 2820 Northup Way, Suite 120, Bellevue, WA 98004, (425) 827-7116 (phone), (425) 827-7886 (fax), or bmantz@beyazpatel.com

**Bridge/Structural Engineer**

Otak’s Kirkland office is seeking an Engineer to become an integral part of our Bridge/Structures team in the Seattle area. Qualified candidates must have a minimum of 3 years of experience in designing of bridges and transportation structures. Must be proficient in use of structural analysis & design software including WSDOT Bridge Engineering software; AutoCAD/Softdesk and/or Microstation/Inroads desired. Good written and oral communication skills are desirable. BSCE and Washington PE license (or ability to obtain) is required; MSCE and/or registration as a structural engineer a plus. Please visit us and apply at www.otak.com/careers We are an Equal Opportunity Employer.

**Coffman Engineers**

Do you want to work on creative projects? Are you a results oriented person? Do you want to develop relationships with clients?

Coffman Engineers is the place for you!

We offer extraordinary advancement potential doing challenging structural design on projects ranging from large international hospitals to seismic retrofits of major buildings.

Come join our team! We are looking for key people to fill the following openings:

**Structural Design Engineers**

**CAD Operator/Designers**

Los Angeles, California  
Seattle & Spokane, Washington

For details about these openings visit www.coffman.com. Qualified applicants should fax or e-mail their resume to: (206) 624-3775 seattlehrd@coffman.com

**Quantum Consulting Engineers**

**STRUCTURAL ENGINEERING: From Vision to Reality**

Are you able to prepare structural calculations and construction drawings for various project types? Do you have experience in structural detailing and seismic design, and possess a B.S. degree in engineering?

The good news is we are expanding and if you answered ‘yes’ to these questions, then we would like to know more about you.

We provide superior wages, offer excellent benefits and have a top-notch flexible and casual work environment. Additionally, we are a rapidly-growing and friendly team, offering:

- Friday office social
- Cinco De Mayo open house
- Company sailing excursions
- Professional development
- Annual paid ski day
- Bonuses & 401(k)

For more information about us, visit www.quantumce.com

Send resumes to:
HR@quantumce.com

Quantum Consulting Engineers
1511 Third Ave, Suite 323, Seattle, WA 98101
tel 206-967-3900 - fax 206-967-3901

**Help Wanted Ads** are accepted through the fourth Friday preceding the publication month. The cost for text ads is $50 per insertion pre-paid with a 10% discount for ads running two or more consecutive months. Ad copy should be limited to 180 words or less and must be submitted by e-mail. Advertising order forms and information about display advertising, can be requested by e-mailing seaw@seaw.org.

Help wanted ads must be purchased through the newsletter to be included in the SEAW online job board.
Career Opportunities for Structural Engineers

Live in the north end? Thinking of moving to the north end? Would you like a reverse commute?

Imagine living only minutes away from your office and not having to spend hours per day away from your family commuting to Seattle or Bellevue for work.

Reid Middleton is an employee-owned and client-focused structural and civil engineering firm with a 53-year history of design excellence. Our north-end location offers an easier, more convenient and affordable life-style poised within one of the country’s most dynamic consulting engineering markets.

Reid Middleton engineers are encouraged to be leaders in their design practice and to embrace technology to solve problems to help our clients succeed. We are experts at creating outstanding solutions by providing the right balance of technical expertise, leadership, management, and teamwork.

If this sounds interesting to you and you have a BSCE or MSCE we would like to help you build your career within our diverse and dynamic firm. PE preferred for candidates with five or more years experience. Send your resume to jobs@reidmiddleton.com.

Project Types:
- Aviation
- Civic/Public
- Federal/Military
- Historic
- Academic
- Healthcare
- Commercial
- Transportation/Bridge
- Parking
- Waterfront

Services
- Structural Engineering
- Civil Engineering
- Seismic Design
- Parking Consulting
- Transportation Engineering
- Protective Design
- Sustainable Design

Reid Middleton
728 - 134th Street SW
Suite 200
Everett, WA 98208
www.reidmiddleton.com
EOE
APPLIED FOR MEMBERSHIP

Drew A. Graham
PCS Structural Solutions
BSCE 2005, MSCE 2007,
Washington State University
Licensed EIT, WA
Class: Associate

Larry Ramey
Weyerhaeuser
BSCE 1974, Colorado State
University
Licensed SE, WA
Class: MEMBER

Lori Shields
Technical Sales Representative,
Trus Joist
Class: Affiliate

APPLICATIONS ACCEPTED

Farid Chouery, MEMBER
Daniel R. Currit, Associate
Brian Holloway,
Professional Associate

Jerry Jackson, Affiliate
Darin Kolliis, Associate
Brian Matsumoto,
Professional Associate

Janet Miller, Associate
Hamid R. Naderi-Asrami,
Professional Associate
Lori Szewczyk, Associate

We're at 73% PAID!
Thank you to our members who have responded to the e-mailed dues invoices, which were sent in mid-February. At this writing, 250 of our 480 dues paying Seattle Chapter members have paid their 2007 membership dues, with 26% paying online.

YOU CAN HELP!
We're aiming for 100% paid before the summer break. To pay your dues online, sign in as a member on the website at <www.seaw.org>. [Default log-in name is your e-mail address, password is your first name (up to eight letters)] Click the “My Membership” tab, then the “Renew Membership” tab in the gray menu bar. A pull-down box will show you any outstanding invoices. Select your invoice and follow the prompts to pay your dues.