

A Message from the President

I would like to touch on some reasons why structural engineers benefit as members of SEAONC, and remind members about the value that is received for your membership cost. Along with this, I would also like to say thank you for continuing your membership, because without membership, SEAONC and SEAOC could not offer the programs that we are able to offer. SEAONC is not like most professional organizations—we are much more active and involved.

First of all, structural engineers are social creatures, and we like to interact with others in our profession. We also like to socialize with our clients, associates and affiliates in the building industry. By gathering we can discuss issues, both good and bad, relating to our profession and the building industry—issues such as business, projects, clients, markets, fee structures, business practices and management, retaining and hiring employees, quality locations for employment,

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May 7th Dinner Meeting Program, San Francisco

Moscone Convention Center Expansion Project

Raj Sahai and Jack Laws, Structural Design Engineers, and Hamid Fatehi, Faye Bernstein and Associates

by Jamison Curry, Program Committee Chair

The May meeting at the City Club will feature Raj Sahai and Jack Laws of SDE and Hamid Fatehi, of FBA. They will make a presentation about the Moscone Convention Center Expansion Project, presently under construction. It is a



three-story structure with a basement, encompassing 600,000 square feet of prefunction and convention space above grade and 200,000 square feet of basement space for delivery and storage.

The lateral load resisting system for the

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May 14th Dinner Meeting Program, South Bay

Our next South Bay meeting will be May 14th, at Michael's at Shoreline Restaurant in Mountain View. Don Peterson and Larry Ho of Rinne & Peterson will provide a presentation on seismic upgrade using base isolation.

The presentation will be about Channing House, a 10-story concrete building with a parking basement. Built in 1962 and located in Palo Alto, Channing House provides full-care housing and a skilled nursing facility for retired residents. After the 1989 Loma Prieta earthquake, the board of directors undertook a voluntary seismic upgrade, selecting a base isolation system in order to

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Channing House Base Isolated Retrofit

Don Peterson and Larry Ho, Rinne & Peterson

by Jamison Curry, Program Committee Chair



Meeting Notice

There are TWO May dinner meetings:

**May 7th, 2002
The City Club**

*155 Sansome Street, 10th Floor
San Francisco*

**May 14th, 2002
Michael's at Shoreline**
*2960 N. Shoreline Boulevard
Mountain View*

Fax registration form on the back of this newsletter to the SEAONC office by
San Francisco Meeting: 12 noon Fri., May 3
South Bay Meeting: 12 noon Fri., May 10

SEAOC/SEAONC

EXCELLENCE IN ENGINEERING AWARDS

SEAONC	CATEGORY	PROJECT	FIRM
	Retrofit by firms with fewer than 10 PEs	<ul style="list-style-type: none"> ▪ Marin Executive Center ▪ Omni Hotel ▪ 5700 Third Street Telecom ▪ Viscous Shear Wall Dampers system for Kagoshima Airport 	<ul style="list-style-type: none"> ▪ Hohbach-Lewin, Inc. and Telesis Engineers ▪ Murphy, Burr, Curry, Inc. ▪ Rivera Consulting Group, Inc ▪ STRUCTUS, Inc.
	Retrofit by firms with more than 11 PEs	<ul style="list-style-type: none"> ▪ Marin County Civic Center ▪ South Pylons of Golden Gate Bridge ▪ Wallace F Bennett Federal Building ▪ Channing House Seismic Upgrade ▪ AboveNet ISX-SF1 Internet Service Exchange Facility 	<ul style="list-style-type: none"> ▪ Crosby Group ▪ Jacobs Civil, Inc. in Assoc. with Thomas Jee & Associates, Inc. ▪ Reaveley Engineers & Associates ▪ Rinne & Peterson Structural Engrs ▪ Skidmore, Owings, & Merrill LLP
	New projects by firms with fewer than 10 PEs	<ul style="list-style-type: none"> ▪ Walton Lighthouse ▪ Carquinez Bridge/North Anchorate Temp. Shoring 	<ul style="list-style-type: none"> ▪ Mesiti-Miller Engineering Inc. ▪ PB&A, Inc.
New projects by firms with more than 11 PEs	<ul style="list-style-type: none"> ▪ Peter B. Lewis Building ▪ SFIA Concourse H-BART/ART Station ▪ Harrison Residence, High Performance Straw Bale ▪ Osprey Platform 	<ul style="list-style-type: none"> ▪ DeSimone Consulting Engineers ▪ Degenkolb-Forell/Elsesser, LLC ▪ Tipping Mar + Associates ▪ Winzler & Kelly 	

Entries Judged at April SEAONC Meeting

*By Mehri Ansari, SEAONC
Awards Committee Chair*

The entries for 2002 SEAOC Excellence in Structural Engineering Award Competition were displayed at the April SEAONC dinner meeting. A total of 32 projects were submitted. For details, see tables at right.

SEAOSC	PROJECT	FIRM
	<ul style="list-style-type: none"> ▪ Agere Wafer Fabrication Plant ▪ Walt Disney Studio Theme Park ▪ Southbay Tower ▪ Water's Edge ▪ Pacoima Training Tower ▪ Broad Center for Biological Sciences, Cal Tech ▪ Core Pacific City ▪ Miller Park ▪ Longo Residence Conservatory ▪ Cathedral of Our Lady of the Angels ▪ Unknown 	<ul style="list-style-type: none"> ▪ Risha Engineering Group ▪ Walt Disney Imagineering ▪ Saiful/Bouquet Consulting SEs ▪ Saiful/Bouquet Consulting SEs ▪ Frank Burke, SE ▪ Arup ▪ Arup ▪ Arup ▪ Paul Pina, SE ▪ Nabih Youssef & Associates ▪ Martin, Chow & Nakabara

SEAOSD	PROJECT	FIRM
	<ul style="list-style-type: none"> ▪ San Diego International Airport – Terminal 2 ▪ Saint Vincent DePaul Catholic Church ▪ The Lodge at Torrey Pines ▪ Hotel del Coronado Seismic Upgrade ▪ O.B. People's Organic Food Market ▪ University of San Diego, Joan Kroc Institute for Peace and Justice ▪ LaMedia Road Pedestrian Overcrossing 	<ul style="list-style-type: none"> ▪ Simon Wong Engineering ▪ Stedman & Dyson ▪ Structural Technology Consultants, Inc. ▪ Degenkolb Engineers ▪ KPFF Consulting Engineers, Inc ▪ Hope Engineering ▪ Simon Wong Engineering

SEAOCC	PROJECT	FIRM
	<ul style="list-style-type: none"> ▪ Seismic retrofit of Department of Motor Vehicles Headquarters 	<ul style="list-style-type: none"> ▪ Lionakis Beaumont Design Group Inc.

Members who were present at the SEAONC April dinner meeting were able to view all entries and vote on their favorite SEAONC projects. SEAONC entries were evaluated by a panel of judges consisting of four SEAONC past presidents, including Ron Hamburger, Ephraim Hirsch, Ron Gallagher, and Mark Saunders, with input from the SEAONC membership. All the entries were evaluated based on their technical merit (considering creativity or innovation in structural design or analytical procedures, design efficiency in terms of labor and materials, meeting the performance objectives and unusual challenges of project), and completeness of submission material. Entries from SEAOC, SEAOSC, and SEAOSD were judged by a panel consisting of Steve Tipping, Todd Thorp, Jon Walsh, and Mehri Ansari. All entries will be forwarded to the SEAOC Competition. Presentation of SEAONC awards will be made at the June 2002 SEAONC dinner meeting. **STAY TUNED FOR THE RESULT OF THIS EXCITING COMPETITION!**

EERI-NC Announces Quake'06 Project

by David Bonowitz

SEAONC members are invited to participate in a new project of the Earthquake Engineering Research Institute's Northern California chapter. The Quake'06 project, announced in April, seeks to reduce seismic risks in Northern California by the 100th anniversary of the 1906 San Francisco earthquake and fire.

As of press time, the EERI-NC chapter had planned a series of events around the April 18th anniversary. Lloyd Cluff and Eric Elsesser presented the first "1906 Earthquake Commemorative Lectures" at a chapter meeting on the 15th.

On the 17th, chapter President Peter Yanev announced the Quake'06 project at a press conference for Bay Area media. The project was also presented at San Francisco's annual commemoration at Lotta's Fountain downtown on the 18th.

The project groups "risk owners" by the nature of their decision-making and regulatory apparatus (e.g. healthcare facilities, private residences, etc.). EERI-NC volunteers are teamed with representatives of each risk group. The joint committees will then attempt to assess existing seismic risks and implement mitigation strategies. The first task for each committee is to identify exist-

ing "best practices" of risk managers, building departments, or other organizations.

The chapter expects to report the project's status—as well as the overall status of existing earthquake risks in Northern California—each year in April and October, marking the anniversaries of the 1906 San Francisco and 1989 Loma Prieta earthquakes.

SEAONC members are invited to participate in the multidisciplinary Quake'06 project even if they are not EERI members. More information about the project can be found at www.eeri.org. Those interested may also contact SEAONC members Charles Scawthorn or David Bonowitz.

March 5th Dinner Program Wrap-Up

The Search for the Perfect Seismic Solution

Eric Elsesser, Forell/Elsesser Engineers

by Jamison Curry, Program Committee Chair

The Degenkolb Forum speaker this year was Mr. Eric Elsesser of Forell/Elsesser Engineers. Mr. Elsesser presented a survey of many examples of engineered building structures built in the last 100 years.

April's dinner meeting also included the exhibit of the Engineering Excellence Award entries from Northern California and the other three sections of SEAOC: Central, Southern and San Diego.

Mr. Elsesser began his survey by observing that the past century has seen much progress, as engineers have observed damage from earthquakes, incorporated lessons from those observations in building codes and then have again observed performance in subsequent earthquakes. I might point out that this is a clear nod to Mr. Henry Degenkolb, who made a point of observing building damage after earthquakes.

Mr. Elsesser noted the conundrum structural engineers face: that in order to dissipate seismic energy a structure must be displaced, but in order to limit damage these displacements must be minimized.

He then began a survey of building structures in the Bay Area over the past 100 years, showing how structural engineers attempted to solve this dilemma. At the beginning of the century, engineers and architects were cognizant only of designing building structures for gravity loads; in the present, structural engineers think of buildings as dynamic structures.

Mr. Elsesser showed buildings in the downtown San Francisco area at the time of the 1906 Earthquake, whose 96th anniversary occurs this month. Many of these structures were steel frames with masonry infill—some still stand today on Union Square, although they have been retrofitted. Mr. Elsesser opined that many of these structures did pretty well in the 1906 Earthquake and Fire. Although many structures were heavily damaged, they did not collapse.

He presented many other examples. Included were the 1908 Mills Building with its gusseted moment frames, the 1915 reconstructed San Francisco City Hall, with its first level soft story (recently base isolated

by Forell/Elsesser), the Moffett Field Dirigible Hanger, with its timber arches, the 1949 Shell Oil addition, which incorporated design for a 2% lateral force, the 1959 Crown Zellerbach building, which had no anchor bolts in its columns, and the New Crocker Building with its welded steel connections. Pier Luigi Nervi's Saint Mary's Cathedral was shown, and of course the Transamerica Tower was included. Base isolated structures like the new San Francisco International Terminal and the retro-fitted and refurbished Hearst Mining Building were shown. New systems, like the unbonded braced frame, are now being utilized.

The strong point was made that the Bay Area has been a laboratory in the search for a perfect seismic solution. Many of the buildings shown utilized classes of structural components for the first time anywhere.

Mr. Elsesser concluded by speculating about the future. He suggested that structural engineers look to nature and to machine design to design structures for the more organic, sculptural architectural forms that are presently in vogue.

Committees on Assignment

May 16, 2002 Business Forum Luncheon Meeting

by Lisa Blanton, Business Forum Chair

Register today for the SEAONC May 16, 2002 Business Forum Luncheon.

Date: May 16, 2002

Time: Board Meeting: 11:30 am-12:00

Lunch/Program: 12 pm-1:30 pm

Place: City Club, 155 Sansome Street, Wine Cellar Room, 9th Floor
San Francisco

Topic: Round Table Discussion Group: "Your Image and Your Price."

Open Forum for sharing business ideas about Structural Engineering scope of work and price. Basically, the price you set and your pricing policy communicates your image. When you consider the work involved in

making sure a building is structurally sound, environmentally safe, or emergency-equipped, you must realize that all of the services related to design enhance the quality of human life. When you consider your liability risk alone, you must understand the complex structure that goes into setting your price.

In addition to lively discussions, we will also have a case study exercise regarding scope of work. Please bring the resources that you use to help scope your services to share with other members.

Cost: \$20.00 Business Forum Member
\$35.00 Non-Business Forum Member

Lunch Selection: Chicken Picata, Char Grilled Filet of Beef or Penne Pasta

RSVP: Make reservations by calling the SEAONC office at 415/974-5147 by Tuesday, May 14th at noon and don't forget to make a meal selection for this event.

Join the Business Forum and save \$15.00 a month on the luncheon! Yearly dues is \$150 for firms of 6+ employees and only \$75 for 5 employees or less. Call the SEAONC office directly at 415/974-5147 to join. This is an opportunity to join a committee who's only requirement is that you eat a great lunch each month with us and receive some good information about running your business.

Spring 2002 Seminar A Success

by Reina Farah, Continuing Education Committee Chair

The Spring 2002 Seminar was held at the PG&E auditorium on March 13th and 20th. Approximately 280 people attended the seminar entitled "Practical Concrete Design and Construction." Vendors were also available during the registration hour and break to provide information on several different products and services.

Dr. Jack Moehle of U.C. Berkeley led off the seminar with a talk on Concrete Moment Frame Design. Robert Schwein, an independent consulting engineer, and Harvey Haynes of Haynes and Associates, followed with two practical concrete construction talks. The first talk was on Concrete Materials and Mix Designs and the second was on

Design and Construction Issues with Concrete Slabs on Grade.

For the second evening, Dirk Bondy, President of Seneca Structural Engineering, gave a substantial talk on the Design and Construction Issues with Post-Tensioned Concrete Slabs. Dr. Joe Maffei wrapped up the seminar with a talk on Punching Shear, Diaphragms and Collectors.

From the evaluation forms that were returned, the seminar was very well received. Many thanks to all of the speakers for their informative presentations and thanks to the Continuing Education Committee members for all their help in planning the seminar.

Repeat 1/6 page Ad for CalQL8

SEAONC Begins Phase II of Website

By Darrick Hom, Website Committee Chair

With the successful launch of our new SEAONC website and streamlining the update process, the website committee now looks to continue to improve the site. Among the current plans for Phase II are the additions of the roster database (with the ability for members to update their information online), password protection of certain portions of the website limited to members only,

and the DES Phone Tree. There is also discussion for the possibility of online payment for dues and seminars. If you would like to help with the planning and implementation of Phase II, please feel free to contact us.

Make sure you keep checking back with our website at www.seaonc.org to get the latest information on SEAONC's activities.

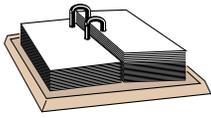
SEAONC Multimedia Projector for Rent

SEAONC's multimedia projector is available for rental! Voting members can rent the projector for only \$100 a day (plus a \$1000 security deposit). Contact the SEAONC office at 415/974-5147 for more details.

Bulletin Board

CALENDAR OF EVENTS

May 7th San Francisco Dinner Meeting - The City Club, San Francisco, RSVP: 415/974-5147 by noon, May 3rd.



May 14th South Bay Dinner Meeting - Michael's at Shoreline, RSVP: 415/974-5147 by noon, May 10th.

May 16- Business Forum Meeting, RSVP: 415/974-5147 by noon, May 14th.

New Company Formed

Member Carl Chan has formed a new company, SURE Engineers, Inc. The name SURE is an acronym for the firm's services: Shoring, Underpinning, and Reinforced Excavation. Mr. Chan can be reached by telephone, 510/352-6123 or 888/688-SURE; by fax, 510/352-6159; and by e-mail, Carl@WeAreSure.com

SMIP02 Seminar

MAY 2, 2002. SMIP02 Seminar for Utilization of Strong-Motion Data, Including New ATC-54 Guidelines, Hyatt Regency, Los Angeles, CA. Info: Office phone 916-322-3105, web site www.conservation.ca.gov/dmg/csmip, or e-mail Ichishol@consrv.ca.gov

SEAONC Elections

Don't forget to vote! SEAONC is holding elections for three open director seats on the Board of Directors, as well as for Vice President and President. Voting members should look for the official SEAONC ballots in the mail. Ballots are due to the SEAONC office no later than noon, Tuesday, June 4th.

Chopra Awarded Medal

Dr. Anil K. Chopra, Johnson Professor of Civil Engineering at the University of California at Berkeley, has been awarded the George W. Housner Medal, the highest honor of the Earthquake Engineering Research Institute. The medal was awarded for his fundamental contributions to structural dynamics and to the understanding of earthquake response of structures.

International Conference and Short Course on Design and Retrofit with FRP

Following the success of the first two conferences, the Third International Conference on Composites in Infrastructure (ICCI '02) will be held in San Francisco, June 10-12, 2002. The previous conferences were attended by delegates from over 25 countries.

The conference will be preceded by a two-day **short course** (June 8 & 9) on Design and Retrofit of Structures with Fiber Composite Polymers (FRP). Continuing education credits are available for the short course attendees.

FRPs provide unique and economical solutions to many structural problems where conventional materials and techniques cannot be used efficiently. As a result, the application of this technology has grown exponentially worldwide.

For SEAOC members, the deadline for registration has been extended by two weeks to May 15th. For additional information, please visit the conference web site at www.AZ-ICCI.org.

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San Francisco DBI Implements New Special Inspection Procedures

by Zan Turner, CQA Committee

The San Francisco Department of Building Inspection (DBI) has recently updated its procedures for the administration and enforcement of San Francisco Building Code special inspection and structural observation provisions. DBI began to implement these procedures effective April 1, 2002.

San Francisco Building Code Section 106.3.5 requires that the engineer or architect of record prepare an inspection program designating portions of the work that require special inspection and/or structural observation. In order to clarify this requirement and provide a means of uniform administration, DBI has developed a standardized form to be copied onto or incorporated into the plans. This will facilitate microfilming of the special inspection requirements after completion of construction so that they will become part of the permanent record for the project.

Effective July 1, 2002 the San Francisco Department of Building Inspection will require that all plans for construction requiring special inspection incorporate into the structural drawings the DBI form identifying the scope of special inspection for the project, completed and signed by the Engineer or Architect of Record. Plans submitted prior to July 1 will be accepted without the form but must add the form before the permit is issued.

South Bay Program, continued

Continued from page 1

minimize disruption to residents and allow the facility to fully function during construction. The isolators, composed of rubber, lead-rubber and friction sliders, were installed in and below the basement slab.

The first base-isolated retrofit submitted to and approved by OSHPD, the design compared the performance of the existing fixed base building to that of the building with base isolators, and was subjected to the same time history analysis. Based on OSHPD's requirements, the design team had to demonstrate that the upgraded facility would be "no worse than" the existing condition.

The construction, with a modest \$18M budget, faced many difficult construction proce-

To view or print a copy of this form, please visit the Construction Quality Assurance Committee page of the SEAONC web site: www.seaonc.org.

If the form is incorrect or incomplete, the plan reviewer will not make corrections as has been past practice but will return the plans for correction and resubmittal by the engineer or architect.

DBI participates on the ICBO Tri-Chapter Special Inspection Committee and accepts its *Special Inspection Agency Recognition List* as firms approved to provide special inspection services on San Francisco projects. A copy of this list is available at the DBI Plans Approval Division, 2nd floor, and the Building Inspection Division, 3rd floor, 1660 Mission Street. Engineers or architects of record remain approved as special inspectors on San Francisco projects for types of work in which they are qualified, as well as other individuals and agencies identified in SFBC Section 1702.

DBI is finalizing an Administrative Bulletin describing special inspection and structural observation requirements and procedures which will become a part of the Rules and Regulations of the San Francisco Building Code during its next code adoption cycle.

dures and challenges, such as clamping, jacking and saw cutting sections out of 1000 kip loaded columns for inserting 4000-pound isolator units, while life in the 10 floors above went on every day.

The design team was composed of Rinne & Peterson Structural Engineers, with isolator modeling and technical support by Dynamic Isolation Systems; architect was B.H. Bocook; peer review was Hart Consultant Group with early participation by Eric Elsesser and Joe Nicoletti.

OSHPD's review consisted of internal review and outside review by Rutherford & Chekene Structural Engineers and Charles Kircher & Associates. Anderson Pacific is the general contractor. The three-year construction is near completion.

Posting for Membership

Member SE

Freydoon Arbabi, Professional Engineer
Rinne & Peterson Structural Eng.
Carrie Bischoff, Project Engineer
Degenkolb Engineers
Bradley Hoogerwerf, Principal
Hoogerwerf Engineering
Ken Napior, Senior Structural Engineer
Walker Parking Consultants
Roger Parra, Project Engineer
Degenkolb Engineers
Rafael Sabelli, Associate
DASSE Design, Inc.
Gregory Wallace, Principal
Gregory Paul Wallace, SE
John Westphal, Associate
DASSE Design, Inc.

Member

Ignacio Barandiaran, Associate
Ove Arup & Partners
Brad Erickson Staff Designer
Watry Design Inc.
Stephanie King, Associate,
Hart-Weidlinger
William Liang, Design Engineer
SOHA Engineers
Susan Lyons, Project Manager
Watry Design Inc.
Nicholas Oberts, PE
Skidmore Owings & Merrill, LLP
Sandy Yee, Engineer
Hratch Kouyoumdjian & Associates

Associate

Lucie Fougner, Assistant Designer
Degenkolb Engineers
Eric Ho, Structural Engineer
Skidmore, Owings & Merrill, LLP
Sam Jamison, Senior Staff Engineer
Kennedy/Jenks Consultants
Jiin Lee, Staff Engineer
DASSE Design Inc.
Wen-Hsiung Lin, Structural Engineer
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Juan Mendoza, Engineer/1
Ben C. Gerwick
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Student

Jason Stone, Graduate Student
Stanford University

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G.A. Graebe & Assoc., Inc. in Salinas, CA, is seeking an Associate Civil Engineer with at least 10 years experience in Structural Design of Wood, Concrete, Masonry and Steel Structures. Familiar with 1997 UBC and skilled in Computer Programming, Engineering Software and Autocad. CA PE is a plus. Salary is negotiable, depending on experience. Call 831/422-6409 and/or e-mail/fax résumé to: structdraw@redshift.com, Fax#831/422-3275.

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Simpson Gumpertz & Heger Inc. (SGH), founded in 1956 by three M.I.T. professors, is a growing and dynamic consulting engineering firm with \$20M in gross revenues, a staff of 170, and offices in Boston, MA, San Francisco, CA, and Washington, DC. SGH has an international reputation in design, investigation, research and development of structural and building envelope systems, mechanical components, and materials. The variety of our expertise enables the firm to undertake investigative, research, and design projects of a complex and unusual nature. We seek creative, enthusiastic, motivated individuals for positions in all three offices. We offer an excellent compensation and benefits package in a corporate culture based on learning and growth. At SGH you'll gain the strength of our reputation and the creativity of diverse and complex projects. To learn more about SGH, please visit our web site at www.sgh.com. We are an equal opportunity employer and value the diversity of our workforce. Please forward your

résumé and letter of interest to Dept. LAS, SGH, 297 Broadway, Arlington, MA 02474; FAX 781/643-2009; e-mail jobs@sgh.com.

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Watry Design, Inc. which is located in the San Francisco Bay Area, is in search of highly motivated engineers to join our rapidly growing team. Watry is a full service Architectural/Engineering Firm specializing in the design of large concrete structures, including high-rise hotels and apartments as well as award-winning parking structures. This position offers the right individual an opportunity to play an integral role in the design of multi-million dollar projects with a firm that fosters a cohesive family like environment. The applicant must possess a B.S. in Structural Engineering (or equivalent) with a P.E. or S.E license being highly desirable. A background in the design of concrete and post-tensioned structures, strong computer skills, and excellent communication skills are beneficial. If you would like further information regarding Watry Design, Inc., please visit our web site at www.watrydesign.com. Submit all résumés to: Watry Design Inc., 815 Hamilton Street, Redwood City, CA 94063 attn: Lisa Blanton or you can send electronically to lblanton@watrydesign.com

Barrish Pelham & Partners Inc., an award winning firm in Sacramento CA, is seeking a motivated individual with three years min. experience and PE license. A creative work place, challenging projects and new home prices in the \$180,000 range await the successful candidate. We are looking for an engineer with some real world experience, a willingness to learn and good communication skills for structural design and investigative engineering projects. Contact us by fax at 916/418-9101 or e-mail to lesquivel@barrish.com.

Structural Design engineer: **Blaylock Engineering Group** is seeking an engineer with 3+ years of structural design experience. An entry-level candidate with outstanding qualifications and abilities would also be considered. Projects include major waterfront construction, seismic retrofit, architectural and construction defect, in a variety of locales worldwide. Our firm has a 40-year track record of proven success. We offer competitive compensation and excellent benefits in a friendly fast-paced environment. Resumes to: Blaylock Engineering Group, Attn: Ms. Susan Johns Valentino, 1775 Hancock Street, #250, San Diego, CA 92110-2036, Fax 619/543-0667, E-mail: srjv@blaylock.net EOE

E.A. Bonelli + Associates, Inc., a medium size A & E firm seeks all levels of structural design engineers. BSCE minimum. If you are interested in a rapidly growing firm with excellent opportunities for advancement and working on challenging light industrial structures of various types, send résumé to 8450 Edes Avenue, Oakland, CA 94621 or fax to 510/740-0160, attn Structural Department.

Hohbach-Lewin, Inc., a 35 person plus firm in Palo Alto, seeks entry level and project engineers in the analysis and design of steel, masonry and wood buildings. Company emphasizes professional development. Excellent benefits. Salary with bonus considerations dependent on experience. E-mail résumés to: alee@hohbach-lewin.com or Fax: 650/617-5932

ENGINEER: Structural License to lead in dynamic time history analyses and design of seismic and blast protection retrofits for existing tall buildings. E-mail résumé to jdanielson@mcaia.com.

Paradigm Structural Engineers, Inc. is seeking graduating engineers, recent graduate engineers and experienced engineers to work in a collaborative, fun and challenging environment on a variety of exciting projects. Pool your talents and energy with others who share your enthusiasm for professional growth in structural design. Current projects include office complexes, historical renovation and seismic retrofit of existing buildings, large corporate manufacturing facilities and design projects nationwide. If you

are looking for an environment that supports the art of structural engineering come talk to us. MS & CE a plus. We offer an excellent salary and benefits package. You can visit us on our web site at www.paradigmse.com. E-mail résumé to jhernandez@paradigmse.com. Send résumé to 251 Kearny St. 7th Floor, S.F. 94108. Fax 415/362-8945.

Plan Review Firm is seeking a Licensed Civil or Structural Engineer knowledgeable in 1997 UBC code requirements to perform structural plan review. Residential and commercial experience preferred. Part time or full time position. Flexible hours. Salary DOQ. Good communication skills necessary. Fax résumé to Kutzmann & Associates at 510/796-9422 or mail to 39355 California St., Suite 200, Fremont, CA 94538 or e-mail to kutz@pacbell.net.

San Francisco-Structural/Civil Engineers with 5+ yrs.- Are you ready to make your own destiny? Do you prefer smaller projects but ready to play a larger role? Our business is the hyphen of Design-Build. You will use your problem solving abilities, structural steel design and project management skills to solve highly diversified problems in the construction arena. To learn more about this opportunity or other challenging possibilities E-mail your résumé: rodney.guffey@searchwest.com or call 415/788.1770 e227.

*Job Forum insertion fee:
\$150 up to 450 characters/spaces
\$15 for each 45 characters/spaces
thereafter
All job forum ads will be posted on the
SEAONC web site.*

**Reminder:
June Newsletter Deadline:
Friday, May 10, 2002**

**Submit your articles by
e-mail!
SEAONC@ix.netcom.com**

Member SE

Stephen Chan, Building Plans Specialist
San Mateo County Building Dept.

Member

- Efren Abarado, Civil Engineer
ESA Design
- Suresh Acharya, Project Engineer
Earthquake & Structures, Inc.
- Mohsen Alhuraibi, Senior Engineer
URS Corporation
- Bryan Cortnik
Rinne & Peterson
- Jeffrey Falero, Civil Engineer
Biggs Cardosa Associates Inc
- Michael Gemmill, Project Engineer
Paradigm Structural Engineers, Inc.
- Catherine Haynes, Project Manager
Kleinfelder
- Michael Hughes, Consulting Engineer
Madsen, Kneppers & Associates
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PMI Design Group
- Gerard Maloney, Senior Marine Engineer
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- Hong Mei, Senior Bridge Engineer
DMJM + Harris
- Alfred Rafuson, Jr., Principal
ABR Engineers
- Constantine Shkapsky, Assoc. Civil Engr.
Department of Public Works, San Jose
- Laura Yamaguchi, Project Engineer
Tipping Mar + Associates

Associate

- Matthew Eatherton, Design Engineer
GFDS Engineers
- Thomas Lau
Santa Clara Valley Water District
- Ryan Lawton, Design Engineer
American Building Company
- Stephen Moore, Plans Examiner
City of Saratoga
- Jeremy Salmon, Design Engineer
Structural Design Group
- Jonathan Toone, Engineer
Skidmore, Owings & Merrill LLP

Student

- Ali Afrasiabi, Graduate Student
University of Southern California
- Linda Stewart-Knight, Graduate Student
Santa Clara University

Message from the President

Continued from page 1

career paths, accounting, human resources, benefits, etc. We can discuss the state of the economy and which markets are hot and which markets are not at any given time.

We gather to discuss technical issues, such as how to perform analysis of structural elements or how to improve our practices—everything from professional practice to design considerations—or how to correctly implement code provisions. We form committees to develop technologies, write guidelines and create new or modified codes, guidelines and standards of practice. We form committees to interpret required testing and inspection requirements, to participate in disaster planning and recovery efforts, to monitor legislation, or to reach out to society with information, charitable contributions or help.

We also gather at a yearly convention where we present our newest ideas in the form of papers and presentations. These presentations often circulate new ideas to many practitioners and become future standards of practice.

We disseminate information in the form of proceedings, publications, guidelines, standards, codes and interpretations of codes, and we present material in educational seminars on all of these topics. Publications such as the Blue Book and other documents are given to all members as a membership benefit. Our educational seminars offer the most pertinent material outside of individual company training dealing with issues that we face regularly in our practices. Many other organizations like to have SEAOC or SEAONC co-sponsor seminars because they know that our sponsorship will draw attendees. I would like to give a special thank you to the Continuing Education Committee who

have developed three outstanding seminars for the membership this year.

We offer a venue for networking, where prospective employees or employers can interact and get to know one another. Younger and more senior members are able to interact with peers and learn what others in comparable stages of their careers are doing both similarly and differently. Our association encompasses structural and geotechnical disciplines and welcomes building regulation officials, product suppliers, materials industry representatives and other building industry members.

We offer a venue where product suppliers can come meet us and convince us of the advantages of their proprietary products over the other products on the market, or the advantages of one construction material over others. Through our association, our individual worlds are broadened.

We represent a standard of structural engineering practice, which is paralleled in only a few locations in the United States and abroad. By our stature, we are known world-wide as experts in seismic design. Many of our members have gone on to influential positions in national organizations and committees.

SEAOC is well into development with NCSEA in writing and implementing a national structural engineering certification program, which will in time be the recognized certification for practice in our region and in the United States. SEAOC has a dream that the certification program will be national, uniform and self-policing. We believe we can succeed in this endeavor and that we can maintain the growth and survival of NCSEA and SEA organizations through certification.

San Francisco Dinner Program

Continued from page 1

Moscone center used two components that are new in building construction: a Coupled Girder Moment Resisting System (CGMRF)* and Friction Dampers. The design criteria required that the structure withstand a Design Basis Earthquake without significant damage and be available for limited occupancy immediately after the earthquake event.

Structural Design Engineers developed a system that has allowed the use of two relatively light, rolled shape girders, placed under the floor and above the ceiling in the vertical plane and coupled, using two verti-

cal links in each bay. This system resists the lateral loads, providing stiffness and absorbing energy in the shear-links, in combination with the girder-to-column moment connections. This system has saved significant weight in steel in the lateral frames in the project. Friction dampers manufactured by Pall Dynamics were used to reduce floor to floor drifts and absorption of seismic energy economically.

The gravity load resisting system uses floor trusses with 90-foot, heavily loaded spans, and roof trusses with 180-foot spans. The system presented interesting challenges for detailing, fabrication and erection.

The discussion will include design of the

We offer an organization where we can pool our resources and talents to offer time and/or money for charitable causes, from teaching school kids in middle schools and high schools about the profession, to giving presentations on college campuses, to providing structural engineering scholarships. Other examples of SEAONC community outreach are the Lego Project, the Leap Kite Building Challenge, the Student Impact Project, and Rebuilding Together.

As young professionals enter our profession, we encourage them to join SEAONC and become involved with the Younger Members Forum and then branch out into other committees encompassing their interests.

SEAONC has been associated mostly with the development of the Blue Book and our influence with the Uniform Building Code for over forty years. We had a large influence in the development of the International Building Code, and personally I would like to see the IBC come into adoption in California. In recent years we have started to branch out, and I believe become a more well-rounded professional association.

Lastly, I would like to acknowledge that the vast majority of work performed by SEAONC is performed by our members...those who get involved, join committees, and chip in wherever help is needed. To all of you, thank you for your tireless efforts.

I hope that all of you as members agree that SEAONC is a worthwhile organization to be part of, one that is benefiting society, and one worthy of your membership.

by Jon Kiland, SEAONC President, 2001-2002

mat foundation and basement perimeter walls built using slip forms. The curtain wall design will also be presented. It has a maximum height of 112 feet, likely among the tallest in seismic zone four, and is designed for seismic drifts of 4.5 inches per story and 13.5 inches total displacement. To keep the curtain wall support structure slender, it was designed to hang from the roof, keeping the members in tension, isolating the wall from the live load deflections of the floors.

** Coupled Girder Moment Resisting System (CGMRF) has patent pending with the US Patent office, assigned to Structural Design Engineers, who reserve all rights on its application. Interested parties may contact Structural Design Engineers.*

*New Ad for
Computers and Structures*

MAY

- 7 SEAONC Dinner Meeting
The City Club
- 14 SEAONC Dinner Meeting
South Bay--Michael's
- 16 Business Forum Luncheon

Registration

Note: There are TWO dinner meetings this month. Please indicate your choice of ONE or BOTH.

May 7th SEAONC Dinner Program, City Club, San Francisco

R. Sahai, J. Laws & H. Fatehi--Moscone Convention Center
 Location:
The City Club, 155 Sansome St., 10th Floor, San Francisco
BART: Montgomery Street Exit, San Francisco

Deadline for pre-registration:
12 noon, Friday, May 3, 2002

Dinner and program reservations are limited. Register early! No cancellations after 12 noon, Friday, May 3, 2002.

COST:	PRE-REGISTERED	LATE REG.
SEAONC Member	<input type="checkbox"/> \$32	<input type="checkbox"/> \$37
Junior Mbr (34 and under)	<input type="checkbox"/> \$28	<input type="checkbox"/> \$33
Non-Member	<input type="checkbox"/> \$35	<input type="checkbox"/> \$40
Student	<input type="checkbox"/> \$15	<input type="checkbox"/> \$15

May 14th South Bay SEAONC Dinner Program, Michael's at Shoreline, Mountain View

D. Peterson & L. Ho--Channing House Base Isolated Retrofit
 Location:
Michael's at Shoreline
2960 N. Shoreline Boulevard, Mountain View

Deadline for pre-registration:
12 noon, Friday, May 10, 2002

Dinner and program reservations are limited. Register early! No cancellations after 12 noon, Friday, May 10, 2002.

COST:	PRE-REGISTERED	LATE REG.
SEAONC Member	<input type="checkbox"/> \$24	<input type="checkbox"/> \$29
Junior Mbr (34 and under)	<input type="checkbox"/> \$20	<input type="checkbox"/> \$25
Non-Member	<input type="checkbox"/> \$28	<input type="checkbox"/> \$32
Student	<input type="checkbox"/> \$15	<input type="checkbox"/> \$15

If no label is shown above, or for guests, please fill in the form below.

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE _____ FAX _____

Please check meeting(s) you wish to attend:

- May 7th, City Club
- May 14th, Michael's, South Bay

5:45 PM General Assembly
 6:30 PM Dinner
 7:30 PM Program

No-shows will be invoiced. Tickets not claimed by 6:45 p.m. on the night of the event are subject to being sold. Note: Individuals with outstanding monthly meeting balances are required to pay in advance for a meeting reservation and pay all outstanding monthly meeting invoices.

RSVP by fax to: 415/764-4915 or phone: 415/974-5147
 Make check payable to **SEAONC** and bring with you to the door.