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architectural lighting

VOL.17, NUMBER 5



GATESHEAD MILLENNIUM BRIDGE



AIST TOKYO WATERFRONT

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Architectural Lighting (Vol. 17, No. 5 USPS 000-846, ISSN 0894-0436) is published seven times per year (Bimonthly except Monthly in March and June) by VNU Business Media, Inc., 770 Broadway, New York, NY 10003-9595 and is distributed free of charge to individuals or firms engaged in the specification of lighting products in the US and territories. The cost of all other subscriptions in the US and territories is 548 per year. A one-year Canadian subscription, payable in US dollars, costs 560 and all other foreign, 596. Canada Post Publications Mail Agreement No. 40031729. Periodicals Postage Paid at New York, NY and additional mailing offices. Printed in the USA. POSTMASTER: Send changes of address to Architectural Lighting, PO Box 1061. Skokie, IL 60076-8061.

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For those of you who frequent our website at lightforum.com—or for those of you who have yet to visit it—don't be alarmed! While the site is labeled "under construction" and looks completely different from before, rest assured, you *have* reached the correct address—just a new format with a change in content.

The decision was made by our parent company, VNU Inc., through its e-media division, to revamp all of the company's websites in a more standardized format to build Internet presence and hence, increase business opportunities. That's a plus. The downside, however, is that the vast amount of content that made

lightforum.com a powerhouse of information is no longer there. What this all means to you, the reader: Fresh ideas, new material and the opportunity for you to tell us what you would find invaluable on a lighting industry website,



Christina Trauthwein, Editor-in-Chief

Illuminating Design

since we're essentially starting from the ground up. What this means for us, the editors: A lot of work to build a site that is comparable—or even better—than what was previously housed on lightforum.com. Please be patient while we try to recover and transfer to this new model the necessary items, glossaries and data that made lightforum.com *the* industry Internet tool and begin to move forward with a substantial library of articles and ideas to help you in your businesses. The editors of *Architectural Lighting* realize that many of you have relied on lightforum.com as a fundamental research tool—and believe me, we too used it as a resource in planning and writing our issues. Lightforum.com will be back soon and hopefully improved from what it was before. I welcome any suggestions and submissions from you to make it once again the website you reference—*your* website.



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NUCKOLLS FUND AWARDS 2002 GRANTS

The Nuckolls Fund for Lighting Education has announced the award of two grants this year. The first in the amount of \$10,000 will go to the Teachers of Lighting Workshop that is held every other summer at the University of New Hampshire. The expenses of the Workshop are underwritten by the Illuminating Engineering Society, the Education Trust of the International Association of Lighting Designers and the Lighting Research Office. The Nuckolls Fund grant will underwrite travel expenses for participants demonstrating a need.

The second grant, the Edison Price Fellowship, which is worth \$7,500 this year, was awarded to Dr. Abimbola Asojo from the University of Oklahoma, who will join the firm of U.S. Lighting Consultants in New York City in the summer of 2002. Dr. Asojo will use her experience this summer toward developing a new course in lighting design for third-year architecture and interior design students at the university. The awards were announced by Fund president, Jeffrey Milham, at the Nuckolls Fund's annual luncheon at Lightfair.

GE ANNOUNCES EDISON AWARD WINNERS

At an awards presentation and banquet held June 2 at the Westin St. Francis Hotel in San Francisco, GE Lighting announced the winners of its 19th Annual Edison Award Competition. This year, Kris L. Wilde, LC of Creative Designs in Lighting took top honors with the lighting of Sapporo Sushi and Teppanyaki in Phoenix, AZ. Wilde, who received a personalized Steuben crystal trophy, was selected from a group of three Award of Excellence winners, which included Paul Gregory and Diana Ades of Focus Lighting for Toys "R" Us and Brilliant Lighting Design's Robert Daniels and Julio Vasquez Pretto of Lamparas Varibe for the facade illumination of the National Sanctuary Church.

Awards of Merit were also presented to Rhomney Forbes-Gray, Lightbrigade Architectural Lighting for La Maison Simons in St.

TURRELL SHOW OPENS IN PITTSBURGH

James Turrell: Into the Light, an exhibition featuring eight new installations created by the artist, James Turrell, opened June 2 at the Mattress Factory in Pittsburgh. The show will run through April 30, 2003 and also includes the models and prints of The Roden Crater Project; *Gasworks*, a 12-ft. fiberglass sphere in which visitors experience a series of flashing light patterns; and the museum's three permanent works by Turrell. The Mattress Factory is located at 500 Sampsonia Way, Pittsburgh, PA 15212. For more information, phone (412) 322-3169, fax (412) 322-2231 or visit www.mattress.org.

Bruno; Ross De Alessi of Ross De Alessi Lighting Design and Stefano Riccard, Chorn Kirtland Riccardi for Montecasino; Suzan Tillotson, Alistair Wandesforde-Smith and Wai Mun Chui of Kugler Tillotson Associates, Inc. for Prada Guggenheim; Erin Erdman and Lisa Fischer of Patrick B. Quigley & Associates for IBM e-Business; Susan Brady, Attila Uysal and Scott Herrick of Susan Brady Lighting Design, Inc. for Hamilton Square, 600 14th Street; and Lam Partners' Paul Zaferiou and Glenn Heinmiller for Ahmanson Hall at the Skirball Cultural Center.

Judges for the 2001 awards were Emily Klingensmith, LC, Schuler & Shook; Randy Burkett, FIALD, Randy Burkett Lighting Design, Inc.; James Benya, PE, FIES, IALD, LC, Benya Lighting Design; Jason Martin, LC, GE Lighting; and Stefan Graf, IALD, LC, Illuminart Inc.

IESNY ANNOUNCES LUMEN AWARD WINNERS

In an awards presentation and dinner held June 19 at the Chelsea Piers in New York City, the IESNY announced and honored the 2002 Lumen Award winners. Receiving Lumen Awards this year are the Bank of China Head Office, which was lighted by Kugler Tillotson Associates, Inc. and The Thomas Jefferson Memorial, which was illuminated by The Mintz Lighting Group.

Citations were presented to Fisher Marantz Stone for the Millennium Class and the Mickey and Friends Parking Structure; Focus Lighting for Town Restaurant; Susan Brady Lighting Design, Inc. and COMM Arts for the JFK International Arrivals Terminal; Cline Bettridge Bernstein Lighting Design, Inc. for Gateway Village Technical Center; and Technical Artistry for 50 Years of Television @the Oca. Award of Merit winners include Fisher Marantz Stone for the Mohegan Sun Phase II; Kugler Tillotson Associates, Inc. for Thorne Hall, Bowdoin College; James Carpenter Design Associates and Tanteri + Associates, Inc. for Luminous Arc, San Diego Convention Center; Ann Kale Associates, Inc. for Suba Restaurant; and Susan Brady Lighting Design, Inc. for the Frist Center for the Visual Arts.

SELUX OFFERS SILL

Selux Corp. has announced an exclusive licensing agreement for the U.S. and Canada with Sill, a German manufacturer of spot and flood lighting equipment. "We look forward to a whole new arena of lighting possibilities by bringing the Sill technology to the American market," said Veit Mueller, president of Selux. "Now, Selux and Sill together can provide the most innovative solutions to a lot of different lighting projects." For more information, contact Selux at (800) 735-8927 or visit www.selux.com/usa.

CORRECTIONS

On page 8 of the June 2002 Market Issue, Kale Lacroux's name incorrectly appeared as "Kate Lacroux." Lacroux is a lighting designer with Robert Singer & Associates.

Appearing in both the April/May and June 2002 issues, Prescolite's Lunis, a collection of fixtures designed around circular T5 fluorescent lamps, has been renamed Lumex. *Architectural Lighting* regrets the errors.

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2002 SCHEDULED EVENTS

September 6-10 Maison&Objet, Paris-Nord Villepinte, Paris, France. Contact: 33 (0) 1 44 29 02 00, email info@maison-objet.com.

September 12-14 Architecture in Dialogue: 5th International Architecture Symposium Pontresina, Congress Centre Rondo, Pontresina, Switzerland. Contact: 41 (0) 81 838 83 18, www.archisymp.com.

September 19-20 IIDEX/NeoCon Canada, The National Trade Centre at Exhibition Place, Toronto, Ontario, Canada. Contact: www.merchandisemart.com.

October 2-3 2002 Design-Build EXPO, Adam's Mark Hotel, Denver, CO. Contact Patrick Wilson at (202) 454-7535, email PWILSON@DBIA.org.



October 17-18 The Fundamentals of OLED Fabrication, Hyatt Islandia Hotel, San Diego, CA. Contact: (207) 781-9800, fax (207) 781-2150, www.intertechusa.com/oledfab.html.

October 18-20 LDI 2002, Las Vegas Convention Center, Las Vegas, NV. Contact: (800) 288-8606, fax (720) 489-3101, email trade_shows@primediabusiness.com.

October 21-23 Light Emitting Diodes 2002, Hyatt Islandia Hotel, San Diego, CA. Contact: (207) 781-2150, fax (207) 781-9800, email register@intertechusa.com, www.intertechusa.com/leds.html.

October 29-March 2, 2003 New Hotels for Global Nomads, Cooper-Hewitt National Design Museum, New York. Contact: (212) 849-8400, www.si.edu/ndm.

November 3-5 Fifth Lighting Research Office Symposium: Light and Human Health, Grosvenor Resort, Orlando, FL. Contact: (216) 291-1884, email lighting@ieee.org, www.lightingresearchoffice.org.

November 13-14 International Conference: "Constructing Beijing 2008," Beijing, China. Contact Dora Tsang at fax (852) 2598-8771, email dora.tsang@hongkong.messefrankfurt.com.

November 15-16 Third IALD Education Conference and 33rd Annual Meeting, Hyatt Regency, Chicago. Contact: (312) 527-3677, fax (312) 527-3680, www.iald.org.

November 20-21 NeoCon West, Los Angeles Convention Center, Los Angeles. Contact: www.merchandisemart.com.

With 2003 just around the corner, send us your dates for the coming year; fax (646) 654-5816 or email aliao@vnubuspubs.com



19th IAID awards

he 19th annual International Association of Lighting Designers (IALD) Lighting Design Awards presentation and banquet were held June 4, 2002 at the San Francisco City Hall in San Francisco. Judging for the lighting design competition, which is cosponsored by Architectural Lighting Magazine, took place February 28 - March 1 at the IALD office in Chicago. This year, the awards program received 136 submissions, from which one Award of Excellence, five Awards of Merit and two Citations were chosen. In addition, six projects exemplifying good work and quality lighting were recognized with honorable mentions.

As in previous years, the awards presentation was preceded by a cocktail reception where lighting professionals and industry members had an opportunity to catch up and unwind after a day

on the Moscone Center show floor. This year's gala drew a crowd of 390, who, following the reception, gathered in the Hall's rotunda space for the presentation of the lighting design awards as well as the announcement of the student scholarships. The presenters for the evening kicked off the festivities with a grand entrance, descending the staircase in style (above, left to right): IALD Awards Committee co-chairs Babu Shankar, IALD and Christina Trauthwein; IALD president André Tammes; IALD Scholarship Committee chair Julie Reeves-Blankenheim; and IALD Education Trust Fund president Fred Oberkircher.

Turn to page 16 for detailed coverage of the winning projects and meet the scholarship winners in a special section on student designers beginning on page 28.

The winners: (front row, left to right) Matthew Tanteri, Tanteri Associates; Susan Brady, IALD, Susan Brady Lighting Design; Susan Jennings, Randy Burkett, IALD and Ron Kurtz, IALD, Randy Burkett Lighting Design; Paul Gregory, Focus Lighting; Jonathan Speirs and Michelle Clement, Jonathan Speirs and Associates; (back row, left to right) Attila Uysal, Susan Brady Lighting Design; Babu Shankar, IALD, Integrated Lighting Design; Christina Trauthwein, editor-in-chief, Architectural Lighting Magazine; André Tammes, IALD, Lighting Design Partnership International; William Schwinghammer, Johnson Schwinghammer Lighting Consultants; and J.R. Krauza, Focus Lighting





Left to right: Paula Ziegenbein, Osram Sylvania; Glenn Heinmiller, IALD, Lam Partners; Edwin Rambusch, Rambusch; and Katherine Abernathy, IALD, Abernathy Lighting Design



Left to right: Sylvan R. Shemitz, FIES, president of Sylvan R. Shemitz Designs; Clara Powell, IES, Philips Lighting and president of IES NY Section; Russell Suppies, Elliptipar; and Allison Craig, Zumtobel Staff Lighting



Left to right: David Apfel, IALD, David Apfel Lighting Design; Sonny Sonnenfeld, IES; and Patrick Gallegos, IALD, Gallegos Lighting Design



Suzanne Tron Haber, publisher of Architectural Lighting and Veit Mueller, president of Selux



Left to right: Zia Eftekhar, president of Lightolier; Naomi Miller, IALD, FIES, Naomi Miller Lighting Design; Ken Mackenzie, Lightolier; and Megan Carroll, Philips Lighting



Left to right: Ken Douglas, IALD, The Mintz Lighting Group; Charlie Stover, Indy Lighting; John Richardson, Indy Lighting; and Jacques Lefevre, president of Indy Lighting

2002 AWARDS

Gateshead Millennium Bridge

Gateshead, Tyne and Wear, England, UK

The Gateshead Millennium Bridge is the first tilting bridge of its kind in the world. Working closely with the design team, Jonathan Speirs and Associates developed a lighting concept that would reinforce the form and structure of the bridge, provide a safe environment and create a powerful nighttime icon for Gateshead and Tyneside. The resulting design has delighted the Gateshead Metropolitan Borough Council, which has received an enormous amount of positive feedback from the general public. As George Gill, leader of the City Council remarked, "the lighting is superb."



While the lighting concept was to reinforce the form and structure of the bridge, primary lighting design priorities included sustainability in terms of low energy consumption and longevity of light sources, avoidance of light pollution into the sky and integration of lighting equipment into the structure. Close collaboration among design team members was critical to ensuring that an integrated solution could be realized for the lighting aspirations of such a prestigious project. This rendering (below) was presented at the concept stage.



Three main elements are integrated into the bridge deck structure: markers to delineate the deck edges, internal lighting for the perforated, stainless-steel "hedges" and structural riblights to reinforce the structure beneath the deck. The opening gate assemblies located on each bankside, which control access to the bridge, are internally lighted by exterior-quality 13W T2 linear fluorescent battens. Specially designed LED/fiber-optic marker lights delineate either a "walk" green arrow or a "no-entry" red dash indicating access conditions onto the bridge.

Also located at each bankside are caissons that contain 150W asymmetric metal halide floodlights with blue glass filters to uplight the glass-lensed floor above and illuminate both the stairwells and hydraulic ram pit. Prior to the bridge elevating, 150W metal halide spotlights within the ram pit illuminate the hydraulic rams, drawing attention to the impending event.



nce award of excellence aw





A quartet of narrow-beam AR500 color-changing luminaires located on each bank limns the main arch in light. During the week, the luminaires illuminate the arcing structure in white light, but they are also programmed to create subtle color changes that flow from bank to bank. Maximizing the opportunity for reflection provided by the River Tyne, the lighting solution also lights the underside of the deck with custom cylindrical luminaires lamped with 30W PAR20 10-degree lamps. Positioned to reinforce the structural I-sections below the deck, the luminaires are equipped with rotating and locking bracketry to allow access to them from above the deck.

Other highlights of the lighting design include low-energy, long-life LED luminaires that delineate the outer edges of the bridge, adding highlights to the balustrades. A central "hedge" separating

the pedestrian and cycle pathways is internally lighted with low-voltage, dimmable cold-cathode tubing. The cold cathode was detailed into the architectural design so that it also provides low-level lighting across the deck of the cycle path.



details

project Gateshead Millennium Bridge location Gateshead, Tyne and Wear, England, UK client Gateshead Metropolitan Borough Council lighting designer Jonathan Speirs and Associates Ltd.— Jonathan Speirs, Gavin Fraser and Carrie Donahue Bremner architect Wilkinson Eyre Architects engineer Gifford and Partners photographers Graeme Peacock; Jonathan Speirs lighting manufacturers ETC/Irideon; Poulsen Lighting; LB Lighting; Meyer; Bega; Marlin; Lite Luca; Oldham Lighting

JULY/AUGUST 2002

award of merit a

2002 AWARDS

Jefferson National Expansion Memorial Gateway Arch

St. Louis, Missouri, USA

Above: Throughout the Arch's history, a dozen designs were proposed for lighting the monument, but its slim, catenary shape, the reflective nature of its skin, as well as a host of technical, bureaucratic, historical and social hurdles proved overwhelming obstacles to previous attempts. Further complicating the challenge were concerns about nighttime migratory waterfowl becoming disoriented during bad weather and consequently, being injured or killed. In response, the lighting design includes a modified laser-detecting ceilometer (used frequently at airports) to monitor a specific range of atmospheric conditions. When heavy fog or low cloud decks are detected, the luminaires are extinguished by the central computer control.

Right: Because the National Park Service required that any proposed lighting system be virtually invisible by day, the solution mounts 44 custom-designed, 3000W short-arc xenon luminaires within four 8-x-10-x-55-ft. subterranean concrete vaults. Located 115 ft. from the legs on the east and west sides of the Arch, each vault is covered with a high-strength, lightweight alloy, high-transmission grating. Above each fixture, an independently adjustable circular grating section permits variable orientation to maximize optical efficiency. Each luminaire employs a computer-addressable and adjustable reflector system for precise beam shaping—up to 30,000,000 center beam candlepower—and a mechanical douser to effectively fine-tune intensity. Four special lens types were chosen to elongate and soften distributions and minimize spill. On-board diagnostic chips report constant status to the central computer control. After standing unlighted for 30 years, Eero Saarinen's Gateway Arch is now an elegant element of the St. Louis, MO nightscape. This recent effort lights the 630-ft.-high, stainlesssteel monument with a system virtually invisible by day, responsive to the site's archeological concerns, absent of reflected glare to surrounding highways and sensitive to one of the nation's busiest migratory flyways. The final solution, developed by Randy Burkett Lighting Design from three-and-a-half years of mockups and computer analysis, realizes the project goals with an innovative 3000W short-arc xenon, computercontrolled lighting system and laser-detecting, atmospheric monitor.

Gateway Arch location St. Louis, Missouri, USA client National Park Service; The Gateway Foundation lighting designer Randy Burkett Lighting Design, Inc.—Randy Burkett, FIALD, Susan Jennings and Ron Kurtz, IALD architect Eero Saarinen engineer EDM Engineers general contractor McGrath electrical contractor Kaiser Electric photographer Debbie Franke lighting manufacturers Syncrolite; Ushio; Vaisala

Above: Defining the visual seam between San Diego's Convention Center and its new expansion, this highly visible aerial curve draws pedestrians from surrounding areas as far as the city's historic Gas Lamp district. The Luminous Arc's gentle linear trajectory lures viewers up a grand staircase and toward a series of spectacular bay-front vistas. The sculpture consists of a series of internally lit laminated glass-lens assemblies mounted atop 21 14- to 39-ft.-high stainless-steel masts spaced 20 ft. apart.

details

project Luminous Arc location San Diego, CA, USA client The City of San Diego Commission for Arts and Culture; San Diego Convention Center Corp. lighting designers James Carpenter Design Associates, Inc.-James Carpenter and Richard Kress; Tanteri Associates-Matthew Tanteri renderings James Carpenter Design Associates, Inc. research James Carpenter Design Associates, Inc. photographers Skip Jurus Photography; Brian E. Gulick lighting manufacturers James Carpenter Design Associates, Inc. with B-K Lighting

Luminous Arc San Diego, California, USA

Designed by James Carpenter Design Associates and Tanteri Associates for the San Diego Convention Center, the Luminous Arc is a dynamic and arresting exploration of reflected, refracted and transmitted light. Inspired by San Diego's role as a coastal beacon and visitor's magnet, the work's arc of light overarching the grand staircase of the Convention Center serves as an orienting marker for the city while also guiding visitors from the city side of the complex through the grand passageway to the stunning bay views.

Above and right: The fixtures are designed to catch light and spread it

along its surface. The array of sleek, stainless-steel poles functions like a large-scale linear spread lens, reflecting sunlight into long, laser-like vertical lines. Its prismatic dichroic, laminated glass-lens assembly redirects and disperses daylight and electric light in a precisely controlled way. In the day, when pedestrians ascend the staircase, the dichroic glass sparkles with bright orange hues. For pedestrians descending the staircase in the opposite direction, the

At night, the action of the prismatic glass manifests, redirecting the grazing light rays from an upward-facing internal metal halide source out toward the horizon and down to pedestrian approaches and circulation zones. At 420 ft. long, this contemporary light beacon, which responds to the distinct sun, sky and atmospheric conditions of its historic site, consumes only 820 watts.

colors shift to a complementary vibrant electric blue hue.

award of merit a

MoMA Design Store, SoHo New York, New York, USA

Above: Chosen for their energy efficiency and even glow, fluorescents are placed inches behind the Barrisol ceiling panels to create a patterned surface and add interest to the architecture. Fluorescents are also concealed roughly 1 ft.

behind the Barrisol merchandise display panels to minimize contrast and prevent the pattern of the light from competing with the product. Because of the distinct forms and shapes of the merchandise, no accent lighting was required or used on the ground floor, making the store's lighting consistent and therefore, easier to maintain. Angular slabs of sandblasted glass enclose the original cast-iron columns that support the ceiling. Because the glass is immovable, lensed, end-glowing, fiber-optic light sources are used at the base and the top of the columns, streaking light down the interior of the column to define the shape. The merchandise is backlighted with warm fluorescent lighting strips and illuminated from the front of the casework with a cool neon light source. The warmth from the Barrisol and the cool vertical casework lighting create a layering effect that adds depth to the display.

Above right: A display cube at the back of the ground floor changes backdrop colors to complement the merchandise while rows of primarycolored neon create white light. Each color is controlled separately. In the cellar floor, a halogen track-lighting system produces controlled pools of light to give the furniture a museum-quality presentation.

The lighting design concept for this 10,000-sq.-ft. store in Manhattan's hip SoHo district was to create a retail environment as a luminous light box whose glow attracts pedestrian traffic and transforms the store environment into a display itself. To effect this transformation, the solution, developed by 1100 Architect and Johnson Schwinghammer Lighting Consultants, Inc., equips the store with a luminous wall and ceiling treatment accented with glowing glass columns. A polyvinyl membrane—Barrisol—is stretched across multiple panels and backlighted by fluorescents from the ceilings to the walls. This treatment creates a bright, shadow-free interior to display the distinctly shaped merchandise while accentuating the architecture—at only 4W/sq. ft.

details

project MoMA Design Store, SoHo location New York, NY, USA client The Museum of Modern Art, Retail lighting designers 1100 Architect; Johnson Schwinghammer Lighting Consultants, Inc.—William Schwinghammer and Michelle Clement architect 1100 Architect— Juergen Riehm, David Piscuskas, Pam Nixon, Ellen Martin, Erin Vali, Jamie Palazzolo and David Later structural engineer Robert Silman Associates mechanical engineer Lilker Associates general contractor Gilman Construction Co. photographer Peter Aaron/Esto lighting manufacturers Leviton; Lightolier; A&L Lighting; Patrick Nash Design; Lucifer Lighting Co.; Light Project International

vard of merit award of merit

For the lighting designers at Focus Lighting, Inc., the goal of this project was to create a dynamic and exciting dining experience. With the architect combining the shape of the undulating ceiling and organically formed plaster walls with modern, angular seating booths, clean lines and surfaces were a must. However, those same walls and the booth dividers presented the lighting design team with their biggest challenges. The plaster walls required a life of their own and the frosted glass booths were to provide a changing field of color across the restaurant with little to no maintenance. To prevent these strong colors from adversely affecting the look of the

patrons and their food, trimless MR16 fixtures are focused in tight spots around line-voltage lamps on each table. The glow of the lamps, combined with the reflected table and wall light, cuts through the color to cast a beautiful glow on the faces of diners.

Grazing the plaster walls from above and below are PAR30 lamps, positioned 6 in. on center and dramatically dimmed to increase lamp life and overall warmth. Recessed MR16 fixtures with dichroic filters fill the middle of the wall's shapes. Because the success of the wall lighting depended on the concealment of sources, pockets were created at the ceiling and floor to hide the fixtures. Compensating for the lack of recess depth, the floor was raised 7 in. and a lip added to limit the view into

the pocket. During construction, a full-scale mockup was performed to ensure accuracy. The end result is a stunning wall that appears to glow from within.

The frosted glass booths, designed to provide shifting fields of color across the restaurant, continuously change the dining experience. Yet their inclusion presented a problem: Once they were installed, fixture access would be difficult. To resolve the concern, the lighting design team opted for a long-life, tri-color LED system that blends color slowly throughout the evening. This computer-controlled lighting fades through six colors over a two-hour period to provide the desired effect with minimal maintenance. project Morimoto Restaurant location Philadelphia, PA, USA client Stephen Starr lighting designer Focus Lighting, Inc.—Paul Gregory, J.R. Krauza, Jaie Bosse and Derek Wadlington architect Karim Rashid, Jalan Sahba and Lisa Rusakov engineer Steve Shore photographer J.R. Krauza lighting manufacturers RSA Lighting; Color Kinetics; LiteLab; Tokistar; ALM; Kurt Bonk

IALD

award of merit

2002 AWARDS

Qiora Store & Spa New York, New York, USA

In the Qiora Store & Spa, lighted by Johnson Schwinghammer Lighting Consultants, Inc., Shiseido's new skincare brand is presented in a unique sensory experience Multi-color temperature lamps, controlled separately in multiple zones, are veiled by translucent organza fabric panels. As visitors circulate through the space, volumes of white light constantly shift in color temperature and intensity, producing an impression of trees swaying or clouds passing behind the drapery. The light creates a calm, glowing landscape that unites product with space.

details

project Qiora Store & Spa location New York, New York, USA client Hiroko Sueyoshi Planners for Shiseido Cosmetics lighting designer Johnson Schwinghammer Lighting Consultants, Inc.—William Schwinghammer architect ARO—Stephen Cassell, Adam Yarinksy, Scott Abrahams, Josh Pulver, Eunice Seng, Rosalyn Shieh and Kim Yao engineer/mechanical engineer Lilker Associates structural engineer Selnick/Harwood Consulting Engineers PC photographers David Joseph; Reid Freeman lighting manufacturers A&L Lighting; Lutron Electronics

Far left: As night falls and the exterior of the store fades into darkness, Qiora takes on the appearance of a glowing lantern.

Left and above: The rectangular plan of the spa is divided into guarters with the north and south walls covered with vertically staggered, randomly spaced three-lamp fluorescent striplights. The four control zones of the spa area are divided into three control channels, each independently controlling three color temperatures of fluorescent light: 3500K, 4100K and 5000K. The zones fluctuate continually, creating endless contrasts in color temperature and intensity. To enhance the play of light and color, hard surfaces in the space are veiled by suspended translucent organza fabric panels, which add a layer of texture and visual richness. The fabric panels also serve as dividers, shielding the more intimate spaces of the lounge and cabins. Products are backlighted to highlight their curved contours and rounded silhouettes, contributing visual interest. Fiber optics uplight the displays of bottles, jars and tubes, cycling through shades of white light during the day and blue at night.

citation citation citation

for historic preservation

Frist Center for the Visual Arts

Nashville, Tennessee, USA

details

The mission for this adaptive reuse project in downtown Nashville was to restore majesty and grandeur to a landmarked art-deco post-office building turned museum. The lighting solution, conceived by Susan Brady Lighting Design, Inc., employs a multi-layered lighting approach to contribute depth, drama and focus and relies on broad washes of illumination to provide a backdrop for highlighted architectural features and to set the stage for the stunning array of refurbished period fixtures found throughout the building. New areas are lighted to complement and not compete with the sense of history.

Above: The exterior illumination lends the Frist Center a dramatic nighttime presence. Punched openings, three-dimensional pilasters and banners are articulated by floodlights mounted along window bases. The highlighted details stand out against an exterior facade bathed in metal halide light from streetpole-mounted floodlights.

Top: The blend of art-deco style and subtle modernity is immediately apparent when one enters the building. Decorative grilles backlighted with fluorescent coves, accented architectural elements adorning doorways and a series of lanterns equipped with induction lamps greet visitors and seem to speak to another time.

Above: In the lobby, original fixtures punctuate the space and have been rehabilitated with new lamping, glass and details. Pendants combine a shaft of dimmable compact fluorescents with halogen ceiling accents and MR16 downlights, while sconces are equipped with compact fluorescent lamps. All elements are controlled on individual dimmable zones to provide flexibility, and the extensive use of fluorescent, metal halide and induction lamping throughout the project achieves energy efficiency and facilitates maintenance. project Frist Center for the Visual Arts location Nashville, TN, USA client Frist Center for the Visual Arts lighting designer Susan Brady Lighting Design, Inc.—Susan Brady, IALD, Attila Uysal and Kim Loren (Rear Plaza Lighting by Hodgson and Douglas with Susan Brady Lighting Design, Inc.) architect Tuck Hinton Architects— Seab Tuck and Mary Roskilly engineer Arup Associates and IC Thomasson Associates, Inc. photographer Timothy Hursley lighting manufacturers Rambush Decorating Co.; Bega; Elliptipar; Kim Lighting; Lighting Services Inc; USA Illumination; Linear Lighting; Poulsen Lighting

citation citation

for integration into an urban environment

Glowing Walls Zurich, Switzerland

The lighting design for this office space evolved from the interplay of three factors: the lively urban context, ergonomic comfort conditions of the workspace and the expressed wish of the company to communicate its corporate identity. By dimming the glowing walls and allowing the manipulation of the internal lighting environment to register externally as well, the boundary between private workspace and the surrounding streetscape dissolves. The result, internal changes translate into shifts in the public realm.

Above: During the day, the office space is visible through custom printed textile canvases that frame the windows. At night, the glowing walls come alive, serving as a fusion of art and advertising and visually stimulating the neighboring streetscape. At its most extreme, the walls are hypnotic, drawing passersby and exuding a sense of mystery.

Right: This lighting design of luminous walls is uniquely tailored to the structure of the building. The fixtures are positioned along a structural grid contained within each of the glowing walls to introduce daylight into the workspace. On overcast days, the daylight is supplemented by the warm glow of the walls, which provides glare-free illumination for the working environment.

details

project Glowing Walls location Zurich, Switzerland client oos ltd_open operating system lighting designer oos ltd_open operating system—Severin Boser, Andreas Derrer, Christoph Kellenberger and Lukas Bosshard graphic design Froilein—Valeria Bonin photographer oos ltd_open operating system

honorable mention honora

AIST Tokyo Waterfront, Tokyo, Japan

This national laboratory, located in a newly redeveloped waterfront area in Tokyo, alludes to the technological advancement of Japan with its double-glazing wall and the exposed colored ducts, which serve as air conduits for contaminants. Careful to minimize glare on the surrounding neighborhood, Takeshi Konishi+ALG subtly lights the 180 ducts, which emerge at night as the skeleton of the building. Taking advantage of the building's transparency, the lighting design illuminates interior walls, allowing people in the corridors and elevators—visible from outside—to appear in silhouette. Three PAR lamps grouped in a single fixture that is mounted 21 meters from the floor suffuse the atrium with a warm glow. Accessible from the roof, the fixture projects light onto a large reflector at the roof of the entrance, flooding the soaring space with light and transforming it into an enormous lantern after dark. The ducts are delineated with MR16 spotlights and 5W xenon lamps.

project AIST Tokyo Waterfront location Tokyo, Japan client National Institute of Advanced Industrial Science and Technology (AIST) lighting designer Takeshi Konishi+ALG (Architectural Lighting Group) architect Nihon Sekkei, Inc.—Yuji Iwahashi engineer Nihon Sekkei, Inc. Engineering Department research Nihon Sekkei, Inc. Engineering Department photographer Yuji Iwahashi lighting manufacturers EPK; Kreon; Erco; Matsushita

Aqua Hall, Kobe, Japan

details

details

A wedding hall located adjacent to the port of Kobe, the Aqua Hall was illuminated by the Takenaka Corp. to enhance its glass double-skin structure, which stands suspended over a pool. At night, mists of water lighted by underwater fixtures, encircle the jewel-box-like building, whose glass screen walls are internally luminous and visible to passersby. The Hall's interior was designed to heighten the drama of a wedding. Its key element is a transparent glass floor that bisects the space and allows a view of the pool below. The bottom of the glass is covered with mesh optical fiber, which shifts through a palette of six colors for a variety of effects. The glass screen walls as well as the concrete ceiling are illuminated with fluorescent fixtures concealed at floor level, producing a clean look and enhancing the space's simple architectural lines.

project Aqua Hall location Kobe, Japan client Kobe Meriken Park Oriental Hall lighting designer Takenaka Corp.—Akihiko Kunimoto architect Takenaka Corp.—Akihiko Kunimoto, Shuichi Sugimura and Morihiko Miwa engineer Takenaka Corp.— Takashi Kawano, Junya Sakai, Yoshiyuki Kuramachi and Muneaki Ohara renderings Takenaka Corp.—Akihiko Kunimoto; Kobe Meriken Park Oriental Hotel—Mari Matsushita lighting manufacturers Aromac Corp.; Ushio Lighting; Nippo Electric Co., Ltd.

Mickey and Friends Parking Structure at the Disneyland Resort, Anaheim, California, USA

For the world's largest parking structure, the design team at Fisher Marantz Stone devised a lighting scheme that not only responds to functional requirements, contains light spill and facilitates maintenance, but also introduces into the utilitarian building the whimsy and magic associated with Disneyland. A colorful facade, created by light reflecting from floor tiles, greets guests as they approach and builds a sense of anticipation. Linear fluorescent fixtures recessed in concrete beams provide uplight and downlight along pedestrian egress paths, and compact fluorescent reflector lamps, concealed in the base of steel bollards, separate vehicular and pedestrian traffic both physically and visually. To minimize impact on nearby residences, the rear of the building is equipped with louvers that shield the garage interior and weatherproof fluorescent strips hidden in the parapets, which illuminate car ramps and delineate the traffic pattern.

details

project Mickey and Friends Parking Structure at the Disneyland Resort location Anaheim, CA, USA client Disney Enterprises, Inc. lighting designer Fisher Marantz Stone—Paul Marantz, FIALD and Scott J. Hershman, IALD architect Wolf Architecture—Harry Wolf; Widom, Wein, Cohen engineer OBM Electrical Engineers—Robert McCoy; Walker Parking Consultants/Engineers Inc. photographer Disney Enterprises, Inc. lighting manufacturers C.W. Cole Lighting; Kim Lighting; Litecontrol; Quality Lighting

honorable mention honor

Sendai Mediatheque, Miyagi, Japan

Lighting Planners Associates' lighting plan helped to inform the design of key architectural elements—plates, tubes and skin—of this building. Featuring double-glass exteriors and thin walls, the architecture is transparent, revealing the 13 tubes which, during the day, invite daylight into the interior and at night, are uplighted with 3500K lamps. The luminous tubes create a sense of architectural tension and contribute visual drama. With ceiling heights varying from floor to floor, a different lighting solution is employed on each level to address individual functions. On the first floor, downlights provide general illumination as well as exhibition and events lighting. The library on the third and fourth floors is equipped with custom pendants lamped with 150W metal halide sources.

Fluorescent light illuminates the seventh floor while downlights supplement the natural light in the sixth-floor art gallery.

project Sendai Mediatheque location Miyagi, Japan client Sendai City lighting designer Lighting Planners Associates Inc.– Kaoru Mende, IALD and Hiroyasu Shoji, IALD architect Toyo Ito & Associates, Architects mechanical engineers Sogo Consultants; Ohtaki E&M Consulting Office; ES Associates Consulting Engineers structural engineer Sasaki Structural Consultants photographers Toyo Ito & Associates, Architects; Naçasa & Partners; Toshio Kaneko

Suba, New York, New York, USA

Challenged with creating a unique dining experience inside a dilapidated old building on Manhattan's Lower East Side, the design team at Ann Kale Associates infuses this Latin/Spanish restaurant with a quiet drama and warmth that belie the small budget and add a touch of romance to a stark environment of exposed brick walls, gyp-board ceilings and polished concrete floors. A combination of 60-degree recessed downlights and track-mounted MR16 accents provides general illumination to the tapas lounge while recessed spotlights highlight the bottle display. Patrons descend to access two subterranean dining floors. The first, a study in simplicity, is lighted with only two effects: Incandescent underwater jelly-jars concealed under a dining island bathe the brick walls in waves of shimmering light and track-mounted downlights flatter diners at their tables. In the second dining room, a skylight glows red via four recessed steplights as track-mounted MR16 floodlights wash the lower portion of the walls to produce an atmosphere of intimacy. MR16 spotlights highlight the bar, while a series of festoon lamps lights a wall, silhouetting the DJ.

project Suba location New York, New York, USA client Phil Morgan and Yann de Rochefort lighting designer Ann Kale Associates—Ann Kale, IALD and Nelson Jenkins architect Andre Kikoski Architecture & Design—Andre Kikoski photographer Peter Aaron/Esto lighting manufacturers Light Solutions; RSA Lighting; Cooper/Halo; Hydrel; Lightolier; Luceplan; Legion; GE

The Thomas Jefferson Memorial-2001 Relighting, Washington, D.C.

The relighting of the Thomas Jefferson Memorial fully reveals the architectural glory of this historical landmark, bringing to life details not seen before and creating a unified statement through light. The stunning solution replaces a system designed in the late 1960s-early '70s and by incorporating recent advances in technology, achieves greater energy efficiency, decreasing energy consumption by 78 percent. In the portico area, downlights lamped with 100,000-hour induction sources produce a warm glow while pole-mounted metal halide floodlights bathe the facade and

steps in cool light. Inside, 400W metal halide floodlights fitted with light amber filters add drama to the statue and enhance its bronze surfaces. Above, LEDs highlight the text frieze. The coffered dome, lighted for the first time, is revealed with metal halide uplights concealed at its base. A computerized control system monitors the entire lighting system and alerts maintenance personnel of lamp failures.

details

details

details

project The Thomas Jefferson Memorial—2001 Relighting location Washington, D.C. client The National Park Service, U.S. Department of Interior lighting designer The Mintz Lighting Group Inc.—David A. Mintz, FIALD and Kenneth A. Douglas, IALD architect John Russell Pope electrical engineer Summer Consultants, Inc.—James M. Stewart additional credit This project was made possible through a partnership between the National Park Service, the National Park Foundation and Osram Sylvania photographer Peter Aaron/Esto lighting manufacturers Northstar Lighting; Winona Lighting; ETC; Valmont Poles; Osram Sylvania

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IALD TRUST AWARDS 2002 SCHOLARSHIPS AND GRANTS

The 2002 IALD Education Trust Fund has awarded three scholarships and two grants to lighting design students from around the world. This year's recipients were chosen from over 20 applicants in Asia, Australia, Europe and the U.S. who submitted materials that were reviewed by the Scholarship Committee comprised of chair Julie Reeves-Blankenheim, LC, IALD Education Trust Fund president Fred Oberkircher, LC, Robert Prouse, IALD and D.W. Schweppe, IALD.

Left to right: Peping Dee Jr., Craig Spring, André Tammes, IALD, Eleni Savvidou and Conor Sampson

This year's winners are ... Peping Dee Jr., a Master of Science in Lighting candidate at Rensselaer Polytechnic Institute (RPI) in Troy, NY. Dee also earned his Bachelor of Architecture and Bachelor of Building Science degrees with a minor in lighting from RPI and is the recipient of the IALD Trust's \$3,000 scholarship and a trip to Lightfair 2002.

The Lighting Design Alliance Scholarship of \$2,000 and \$500 for travel to Lightfair 2002 was awarded to Craig Spring of the University of Colorado at Boulder. Spring holds a Bachelor of Science in architectural engineering and is pursuing a Master of Science in the same subject.

Recipient of the \$2,000 Architectural Lighting/IALD Education Trust Scholarship, Conor Sampson earned a BArch, Architecture Professional degree in 1996 from McGill University in Montreal, Canada and is completing the Master in Lighting Design program at Parsons School of Design, New School University this year.

Two additional grants of \$500 each were awarded to Eleni Savvidou and Lei Feng. Savvidou is enrolled in the Master in Lighting Design program at Parsons School of Design, New School University and has a Bachelor of Science in electrical engineering from the Aristotle University of Thessaloniki, Greece. Feng is a Master of Design Science (Illumination Design) student at the University of Sydney and earned a Bachelor of Architecture from Shanghai Tong Ji University in China.

TLP AWARDS TWO

Philadelphia-based lighting design firm, The Lighting Practice, Inc., has awarded two scholarships of \$1,000 each to Shannon Zura, a lighting design graduate student in Temple University's theater department, and Patrick Yu, a fourth-year student majoring in lighting design in Pennsylvania State University's five-year architectural engineering program. This is the second year of the firm's scholarship program, which was initiated by Alfred R. Borden IV, president of The Lighting Practice, and the firm's VP, Helen K. Diemer. According to Borden, the scholarships serve as "both an important investment in the lighting design profession and a good way to introduce our consulting firm to talented future lighting designers." Added Diemer, "The students nominated by their professors for the scholarships can look forward to rewarding careers in lighting design."

ROBERT BRUCE THOMPSON LIGHT FIXTURE DESIGN COMPETITION

The winners of the first Robert Bruce Thompson Light Fixture Design Competition were announced June 3 at the New Product Showcase that kicked off Lightfair 2002. Open to any full-time student enrolled in accredited academic degree programs in architectural engineering, architecture, interior design, theater or industrial design, the competition is administered by a charitable trust established in memory of Robert Bruce Thompson, VP of sales and marketing for Shaper Lighting, who passed away in 1999.

This year's first-place winner and recipient of a \$5,000 cash prize is Jay Wratten, a fifth-year Bachelor of Science candidate in architectural engineering from the University of Kansas. His fixture, The Wave (below), is a direct/indirect pendant with alternating up- and downlight

panels. According to the judges, the design is "innovative, forward-thinking and creatively integrates form and function."

Second-place winner Peping Dee Jr. submitted Io (above left), a direct/indirect pendant that lights the environment as well as the task and features an aluminum reflector, acrylic bottom diffuser and glass rims that are available in various colors. Judges praised the fixture for its "classic lighting form" and usefulness in a "broad cross-section of applications." Dee, who received \$2,500, is a Master of Science candidate in lighting at Rensselaer Polytechnic Institute.

Conor Sampson, who is pursuing a Master in Lighting Design at Parsons School of Design, New School University, took third place for his Deplis pendant (above right), which shifts configurations by a mechanism of pulleys to become an uplight, downlight or an up/downlight. Praised by judges for its "innovative approach" to a linear pendant, the fixture sports an aluminum frame, fiberglass panel with silk strands and a red cylindrical counterweight. Sampson was awarded \$1,000.

STUDENTS EXCEL AT LIGHT MOVES

During the 2002 Lumen Awards Banquet, which was held June 19 at the Chelsea Piers in New York City, the winners of the IESNY Student Design Competition, Light Moves 2002, were announced. This year, instead of creating light boxes, entrants were asked to construct a model or sculpture that displays light in motion. According to contest rules, the light should imply movement without the model of light fixtures moving and the design should be static with no motors.

First place in the 2002 competition was awarded to Philipp Metternich, who is completing a Master of Lighting Design degree this year at Parsons School of Design, New School University. Metternich holds a BA (Hons) in architecture from Manchester University and an MArch (Diploma) from the

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Bartlett School of Architecture in London. This year's secondplace winners are Chiao Yun-Yu of the New York School of Interior Design; Kumiko Jitsukawa, who is enrolled in the Associate in Applied Science degree program also at the New York School of Interior Design; and Chien-Chun Chen, who is completing the Master of Lighting Design program this year at Parsons School of Design, New School University.

Light Moves 2002 was judged by Barbara Horton, Frank Conti, Diana Mesh and Christina Trauthwein.

Light Moves 2002 produced these winning results designed by the following students: (1, 2) Philipp Metternich; (3) Chiao Yun-Yu; (4) Chien-Chun Chen; (5) Kumiko Jitsukawa

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LIGHTFAIR INTERNATIONAL 2002: A COLOR REVOLUTION IN SAN FRANCISCO

BY JAMES L. CROWELL, IESNA

NATIONAL

Monday, the fifth of June was a typical fogged-in day in San Francisco, making the world look black and white. A quick walk from my hotel on Union Square took me through the retail business center of San Francisco to the Moscone Center. It occupies several blocks and is mostly underground, transforming the area into a low-profile streetscape. Riding the escalators down to the exhibition halls, I observed people looking happy just to be out of the office and probably having more fun in San Francisco than home. When you look around a huge hall of exhibitors, your eyes adjust to the light levels, and among the exhibitors were the usual purveyors of specular reflectors with

raw fluorescents challenging your ability to see after passing—visual pollution at its worst. As a lighting consultant, I had my design radar on high looking for the elusive new designs and trend-setting products. Here, the black and white of the morning mist turned to pure color.

This year is what I perceive to be a color revolution with LEDs. These new small sources are challenging every designer's resources and changing the possibilities of lighting as never before. They're everywhere, and although LEDs have dominated the electronic consumer market for years, they are showing up in some awesome uses in architectural lighting.

Technically, they are light-emitting diodes, semi-conductor chips that convert electricity into cold light in a very small, long-lasting light source. Most traffic lights today use LEDs.

Luminaire manufacturers design new fixtures based on the development of lamp source technology and the smaller the sources, the more interesting the final products. LEDs have emerged and now are shrouded in various direct-view linear sources. There is a new world of Art in Light emerging with the ability to electronically control color in light. MR16 manufacturers are designing lamps with integral colored lenses and colored glass is appearing in non-traditional dichroic form. It's an exciting time in the lighting industry.

LIGHT EMITTING DIODES

Color Kinetics has dominated the LED market for some time. They always have an interesting exhibit because colored light is their business, and this year, they started the color party with iColor Accent, an LED tubular fixture that can be used indoors/outdoors as a directview linear light source. Available in 1-, 4- and 8-ft. lengths, the fixture is controlled in 1-ft. intervals.

Around the corner, tucked in amongst the mega displays was a small vendor potentially giving other LED developers a run for their money: Texas-based Bright Lighting showed Color Stream (below), a linear source that looks like neon and is housed in a high-impact-resistant plastic tube. The exciting news here is that each 1meter length contains 60 individually controllable pixels of red, green and blue, allowing one to create uniform

Color Stream from Bright Lighting

color or color patterns. We're talking pixels in lighting and this ultimately allows the lighting designer to become the color artist. Watch for this product debut in August.

TIR Systems Ltd. challenges the LED creative mind with the Destiny Illuminated Pole for exterior use and Destiny Color Bar for interior applications. Available in 6-, 8- and 10-ft. lengths, these wall-mounted units come in a variety of finishes.

Small packages make LED solutions unique and Modular Lighting rounds out the color package with glazed LED luminaires. Tiny luminaires in round, square and elevated shapes for use in ground, on walls or wherever creative minds can place them. Now, the interior designer and architect can place lights to guide people through their spaces with color and visual interest.

Are LEDs toys or functional lighting? This is a quandary when viewing the new products of Solarcap

(Continued on page 35)

(Continued from page 32)

Lighting. Powered solely by solar cells embedded in sealed fixtures, the Light-Emitting Tiles, the Ground Flashers and the Cat's Eyes are truly engineering genius. They can be used in any ground condition including wet environments. I have three samples that have been in the bottom of my pool for over two months and use others as movable path lights.

COLOR AND MR16 LAMPS

Using a standard MR16 in a pendant luminaire has always created problems when the fixture has translucent or opaque materials such as colored glass. Consequently, in response, Ushio has introduced a new lamp called the Frostline. It's a new all-frosted lamp (including the back

and lens) that eliminates the "rainbow" back light that is annoying in some light sources. The color revolution continues with an additional new MR16, the Popstar (above right), which allows colors to be added to one's design without the added expense of colored filters and gels. High-quality dichroic coatings are applied to the front cover glass of these MR16 lamps to provide deep color saturation.

MP Lighting of Vancouver, Canada enters the color package arena with two low-voltage pendant fixtures 77 C and 77M. The fixtures feature 5-in.-diameter clear glass shades with parabolic dichroic focusing lens units and are suspended on coaxial cable. Shades are available in clear and frosted; non-dichroic units are offered in clear, clear green and clear cobalt.

Putting light where you want it is part of lighting design, and new accessories allow the lighting designer to fine-tune the product. BEES Germany has some amazing MR16 halogen accessories. The company offers snoots with colored filters, barn doors and pendant mirrors, all of which attach directly to the MR lamp.

Popstar from Ushio

Xenon Light presents pure simplicity in design with Stilo, a classic cable suspension pendant available in a 4-ft., 6-in. package. The fixture takes an MR11 lamp and a cable glider allows for precision height adjustment.

NOTEWORTHY OFFERINGS

• Ivalo Lighting showcased Aliante, which uses a new technology that allows hidden insulated current bearing wire (UL approved) to power up the pendant's fluorescent lamp and ballast to provide direct/indirect illumination. The fixture takes a standard TRHO fluorescent lamp.

• Teka Illumination introduced Bali High Light, a Best of Category winner this year for Landscape and Fountain Lighting (page 36). This is a great fixture that measures only 4 in. in diameter, uses a 10W G4 long-life xelogen lamp and is available in brass and copper.

• And finally, a manufacturer has sought out the advice and opinion of architects and designers before introducing a new recessed fixture. RSA Lighting challenges the recessed market with Quiet Ceiling, a virtually trimless recessed MR16 luminaire. With Quiet Ceiling, the mudding compound is applied right to the edge of the fixture trim, providing an almost non-existent seam between the ceiling and the trim. Two aiming features allow the

Perl (clear) pendant fixture from MP Lighting

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Bali High Light from Teka Illumination

designer ultimate flexibility in final installation.

I went to San Francisco not expecting much new, perhaps a new gizmo here or there, or new enclosures or finishes. The color revolution is here. Light is a powerful language. Using light and color is now becoming an art form. It's not going away, and it's now up to the lighting designers of the world to take this new technology and use it creatively. The "Blue Towers" of light, commemorating 9/11 in Manhattan, is an example of how people perceive light as both form and emotion. This new technology is changing the way we perceive light. The next few years should be rewarding and exciting as manufacturers develop new colored light venues and designers and architects add colored light to their designs.

James L. Crowell, IESNA is principal of Crowell Design in Radnor, PA.

For more information on the products mentioned, visit the following manufacturer websites:

www.colorkinetics.com www.brightlights.com www.modularinternational.com www.solarcap-lighting.com www.ushio.com www.tirsys.com www.xenonlight.com www.ivalolighting.com www.mplighting.com www.teka-illumination.com www.rsalighting.com

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The shortest distance between two points blah, blah, blah...

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PATENT PENDING

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2002 NEW PRODUCT SHOWCASE

Architectural Lighting was proud to sponsor once again the New Product Showcase at Lightfair International 2002 in San Francisco. This year's New Product Showcase received a total of 140 submissions. The entries, grouped into five major categories, were presented by Teal Brogden, IALD, MIES, LC; Nancy Clanton, IALD, IESNA; Leslie Davis, LC, IESNA; and Michael J. Siminovitch. Twenty-three products received the Best of Category Award for demonstrating exceptional benefits to lighting professionals. From the 23, four finalists were chosen to receive Awards of Distinction—

NATIONAL

Best New Product of the Year

Cooper Lighting Lumière Monaco

The Lumiére Monaco series of area and accent fixtures is designed around the latest HID lamp technology. Included are Monaco 2002, which accepts the new 39W metal halide T4 lamp and Monaco 2001, which uses 39W and 70W T6 lamps. A third model, Monaco 2000, is lit with a 1-in., 20W MR8 halogen lamp. Fixtures boast field-adjustable photometrics (narrow spot to wide flood), secure vertical and horizontal aim lock, rugged lens for glare control and weep holes for water drainage. A glare shield accessory provides additional glare and beam control. Construction is rugged, precision-machined, corrosion-resistant aluminum alloy. Monaco accepts MR16 fixture-sized accessories, including louvers, lenses and color or dichroic filters. Various ballast housings and mounting systems are offered. **Circle No. 50**

Energy Award, Technical Innovation Award, Design

Excellence Award and the coveted Best New Product of the

Year Award. In addition, two Judges Citations and a Roeder

Award were also presented at the 2002 event. This year's Best

New Product of the Year was awarded to the Lumière

Michael Barrere, IESNA, LC; Linda Cummings, IALD,

LC; Elwyn Gee, LC; Ray Holstead, IESNA, PE; and

Jurors for the 2002 New Product Showcase were

Monaco from Cooper Lighting.

Patrick Quigley, IALD.

Design Excellence Award

Peerless Lighting Lightedge

Lightedge extruded, anodized aluminum fixtures feature extruded end caps and are offered in a range of angular and curved profiles in indirect or slotted indirect/open versions. Fixtures are available in modular 4-, 8- and 12ft. sections and in custom lengths of up to 24 ft. A system of steel alignment

pins and set screws aligns and secures fixture sections, end caps and joiners in a variety of configurations. Lightedge uses T8, T5 and T5/HO lamps. Optical systems meet IES requirements for ceiling uniformity and reduced glare on computer and video screens. Circle No. 51

(Continued on page 40)

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For a complete product overview, visit us at:

www.luminis.com

(Continued from page 38)

Technical Innovation Award

Accessmount LLC Accessmount Removable Fixture Mounting System

The Accessmount Removable Fixture Mounting System allows easy mounting and removal of fixtures without the use of a ladder and fixture replacement without rewiring. Compatible with most surface-mounted fixtures and canopies, the system consists of a two-piece set of 6-in.-diameter disks, including the Base Mount, which is attached and wired to the overhead J-box (or equivalent) and the Fixture Mount, which is attached and wired to the light fixture. When the two are mated, circular contacts provide correct continuity regardless of the axial orientation; when separated, no wire or connection remains between the two parts. **Circle No. 52**

Energy Award

LaMar Lighting Occusmart Voyager

The Occusmart-Voyager series is designed with internal motion sensor by the Watt Stopper, bi-level ballast and optional battery backup. Occusmart bi-level fixtures operate at a low standby light level, offering security with full light output instantly upon occupancy. A lamp condition-

ing circuit keeps new lamps lit for 100 hours to ensure long lamp life and proper operation. Available in various sizes and lamp/ballast combinations, the series is easily installed, features sensitivity and dwell-time adjustments and is ideal for applications where maximum light levels are not required on a constant basis. All units are UL-listed as emergency power and lighting equipment when equipped with battery backup. **Circle No. 53**

Judges Citations

Tridonic Tridonic PCA DSI/DALI Compact Fluorescent Ballast

The PCA DSI/DALI system now includes a twolamp 26W compact fluorescent digital ballast. The ballast features 100- to 3-percent dimming, universal input voltage and compatibility with linear, BIAX and other DALI system components. Two-way DALI communication provides ability to obtain individual fixture-operating information. **Circle No. 54**

Starfield Controls TaskRite

The TaskRite DALI-compatible lighting control system features modular components, plugtogether wiring and multi-station DALI-powered dimming. Manual control is provided by a dim-

mer/switch that can be assigned to any one of 16 zones and is equipped with a built-in interface that makes standard occupancy sensors smarter and DALI-compatible. Scene controllers capture and recall up to 16 light, curtain and screen settings. Screen control mounts locally to remote relays and is DALI-compatible, allowing additional control via remote up/down buttons or the TaskRite scene controller. Bus wiring facilitates installation and operation. **Circle No. 55**

(Continued on page 43) ARCHITECTURAL LIGHTING

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FIBER OPTIC LIGHTING

PERFORMANCE ORHYPE?

Fiber optic lighting is more than sparkle. Yes, it's great for effects, star fields, pools, etc. Several companies offer products to do those things. But only one company has the advanced technology to create beams that project light. NoUVIR luminaires have zoom focus. Beam diameters adjust smoothly and evenly from 50° floods clear down to tight 5° spotlight beams. All the light is inside the beam. There is no scatter, halo or aberration.

This high-tech fiber optic lighting is literally replacing tracklights, fluorescents and click strips. Museums are starting to specify fiber optic lighting only. The collections need to be protected from the fading and damage caused by lights containing ultraviolet and heat. Good fiber optic lighting has absolutely zero UV and zero IR content.

Only NoUVIR gives you the intensity, focus and control to light a single diamond from a hidden light source in a case top or reach across a room to illuminate a painting. NoUVIR lights priceless objects from Jefferson's draft of the Declaration of Independence to the rare Diceratops at the Smithsonian.

Created for museums and art, the 50 different luminaires give performance so powerful that architects and designers are crossing over and demanding NoUVIR for client's art collections, lighting rooms from hidden sources, protecting expensive wines in restaurants and showing off fine merchandise in retail cases.

How can you insure real performance?

✔ Look for patents. NoUVIR has 17.

✔ Read the warranty. NoUVIR offers a 10-year warranty on fiber and hardware.

✓ Ask for real measured photometry; focus, intensity and throw for every luminaire. NoUVIR prints the data in its catalog.

✓ Compare spectral outputs. NoUVIR color temperature is 3200°K. Our color balance equals sunlight. Our CRI is a perfect 100. NoUVIR has zero UV and zero IR. No UV and no IR... NoUVIR[®]. One NoUVIR projector powers 32 fibers and 32 different luminaires. NoUVIR offers over 50 miniature lights from close-up pinspots to the elegant eyeball shown above. Control is so exact you can light through a crytal bowl, frame a large shell in a display or light artifacts (the ruby slippers) next to one another at different intensities. Finally it is possible to do true lighting design.

NoUVIR Researc

For design and performance data, call NoUVIR Research. 302-628-9933. Ask for our 130-page catalog.

Our catalog is so full of great design information, it is required reading in a number of museums and government insitutions.

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Stand out from the crowd...

Color changing

downlight

(Continued from page 40)

Roeder Award

Color Kinetics iColor Accent

Powered the patented Chromacore technology, which utilizes microprocessor-controlled, multicolored LEDs to generate millions of colors and a variety of color changing effects, iColor Accent low-voltage, direct-view linear light offers long source life, low power consumption and solid-state operation. Each iColor Accent unit is designed for interior and exterior use and meets specifications for use in

wet and damp locations. Available in 1-, 4- and 8-ft. lengths, fixtures are controlled in 1-ft. intervals, enabling intricate effects and light shows. iColor Accent can be controlled via a DMX512 lighting console, PC or a Color Kinetics controller. Each unit adapts to fit most mounting environments and comes with a UV-resistant diffuse plastic lens, providing a viewing angle in excess of 270 degrees. Circle No. 56

Part of creating a superior lighting system is understanding the subject.

The subject being the worker. We know that for every worker there is a preferred lighting environment. We also know, the more comfortable the surroundings for an

lighting environment. We also know, the more comfortable the surroundings for an individual, the more performance increases. With Tridonic's fully digital ballast technology we've created a product and system that allow maximum flexibility in individual lighting control. Using a PC, Palm or standard wall switch, individuals can dim their fluorescent lighting from 100% to 1%, avoiding screen glare, excess lighting or to prevent unnecessary eyestrain. The result, simply keeping workers productivity at it's best. Whether your lighting needs are for more flexibility, efficient energy usage, or better maintenance management, Tridonic is the solution for you. For more information, call us at 1-866-TRIDONIC or contact us by email at sales, usa@tridonic.com

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allows individual dimming control and lighting of track

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LaMar Lighting

LaMar Lighting's Occusmart-Voyager series consolidates state-of-the-art internal motion sensor technology by The Watt Stopper with bi-level ballasts and optional battery backup. This results in a safe, reliable,

energy-efficient luminarie perfect for wherever full illumination is not needed constantly. Available in various sizes, lamp/ballast combinations. Features include easy installation, 100-hr. lamp conditioning circuit, sensitivity and dwell-time adjustments. Please visit our website at www.occusmart.com.

Circle No. 51

Lightolier

Calculite Square and Rectangular CFL Downlights. This coordinated family of square- and rectangular-aperture

recessed downlights utilizes triple-tube compact fluorescent lamps up to 57W.

Lithonia Lighting

The Avante surface/suspended mount luminaire features contemporary, low-profile styling and efficient and effective light distribution. This newest addition to the Avante recessed direct/ indirect line is suitable for general area lighting or task-specific illumination in both new construction and remodeling applications. T5/HO, T8 and compact

Circle No. 54

fluorescent configurations are available in 2-, 4- or 8-ft., field-joinable units for continuous rows.

Circle No. 52

Lithonia Lighting

Aeris is a new line of premier low-profile architectural area and roadway lighting. The line is available in two sizes with a choice of different distributions to provide uniform, effective coverage of roadway, parking lots, walkways and campuses. A wall-mount option allows lensup orientation for indirect lighting of atriums and lobbies to

provide a consistent look from exterior to interior. High-performance optics and precision-designed reflectors provide energy savings and superior photometric performance.

Circle No. 56

Lithonia Lighting

The Synergy lighting control system offers flexible and scalable solutions that satisfy the diverse requirements of building owners and occupants over a broad range of applications from schools, churches and office buildings to arenas and convention centers. The Synergy system integrates all aspects of lighting control

including low-voltage switching, architectural dimming, occupancy sensing and daylight harvesting into a single platform. And with BACnet protocol native to its design, Synergy controls seamlessly integrate with building automation systems (BAS).

Circle No. 57

Osram Sylvania

Best of Category Award winner. Sylvania Octron Curvalume XPS Ecologic. These highlumen T8 U-shaped lamps provide 3,000 initial lumens, 85 CRI and 18,000-30,000 hours.

Circle No. 58

Teka Illumination

Bali High Light is a small-scale copper and brass landscape lighting fixture intended for higher mounting heights.

Circle No. 59

Zaneen Lighting Systems

Best of Category Award winner. Fontana: Zaneen Lighting Systems introduces this free-flowing, low-voltage, wire

chandelier that can be installed with the freedom to create many desired shapes. Available in different sizes and coordinating wall sconces as well. Applications: Hotels, restaurants and boardrooms.

Circle No. 60

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Retail: How to Satisfy Design & Meet Energy Requirements

BY MICHAEL McCOWN

endpoint

n retail environments, where the general trend has been fewer clerks on the floor, lighting and general space design must serve as the "silent salesperson," guiding customers to key merchandise and inspiring them to make a purchase. This is especially important when one considers that 90 percent of purchasing decisions are made at the point of sale.

Lighting, of course, also affects perception of the space, enhancing merchandising themes, conveying moods and telling customers both from the outside and inside what kind of store it is—including the quality of the products, the type of customer targeted, the price point and the type of service that can be expected.

With Enron and California's energy crisis in the headlines over the past few years, owners are becoming much more concerned about energy. A corporation operating at a 20-percent margin has to sell \$5 worth of products and services for every \$1 that goes into operating the lighting system. Meanwhile, tougher energy codes are being implemented across the country. The National Energy Policy Act of 1992 requires that all states adopt energy codes as stringent as ASHRAE/IES 90.1-1989. ASHRAE/IES 90.1 has since been revised in 1999 and is even more stringent. The table below expresses the progress of energy codes on a state-by-state basis as of January of this year (source: Building Codes Assistance Project): Some owners choose very short runs of track to cope with code, but this can defeat the purpose of using track by increasing installation costs while reducing design quality and flexibility. Suppose we substituted a comparable low-voltage system in this application. The 400W low-voltage system could be assigned a planned load value of 480W because that is the maximum load of the system. Both systems produce the same light output but the low-voltage system would save 240W in load calculations or one-third. Multiply this by the hundreds of feet of track in a typical retail installation and low-voltage lighting becomes an attractive solution.

Besides energy codes, low-voltage track can also be more economical than line-voltage systems, which require multiple low-voltage lampholder/transformer pairs, the cost of which can add up significantly. In contrast, a low-voltage system can be satisfied with a single remote transformer per line of track. The primary reason for this difference is the cost per watt of the transformers. Typically, the cost ratio will be about 2:1 in favor of the remote transformer, not counting additional savings in reduced transformer maintenance and lower air-conditioning costs.

Besides low-voltage track, another strategy is to use ceramic arc metal halide (CMH) lamps whenever possible. They offer a rated service life of about 10,000 hours (compared to 2,000-3,000 hours for typical halogen and

ASHRAE/IES 90.1-1999 or equivalent being adopted (11 states)	AZ, CA, FL, KY, MA, ME, NJ, NY, OH, TX, UT		
ASHRAE/IES 90.1-1989 (23 states)	AR, CO, CT, DE, GA, HI, IA, KS, LA, MD, MN, MT, NC, ND, NH, OK, OR, PA, RI, SC, VA, WA, WI		
State-Owned Only (8 states)	AL, IL, IN, MO, NE, NM, NV, VT		
Weaker/None (8 states)	AK, ID, MI, MS, SD, TN, WV, WY		

Satisfying a retail space's design goals and prevalent energy codes can be a difficult process of reconciliation. New and remodeled stores face tough challenges inbalancing lighting quality and energy consumption. Owners desire a greater degree of independence from their utilities but understand that any compromises on lighting quality may make these stores less competitive. Changing a track lighting scheme to fluorescent, for example, can reduce the size of the load but can also change the image of the store and result in less design flexibility as merchandise layouts change. There are two solutions that can help designers and owners satisfy their design goals, desire to reduce operating costs and local energy codes.

The first is to specify low-voltage track systems versus line-voltage track. Typically, energy codes count line-voltage track as the greater of either wattage consumed or a multiplier per linear foot. In California, for example, a surface-mounted 16-ft. line-voltage track system drawing 400W would be assigned a planned load value of 720W (16 ft. x 45W/ft.) because the system has the flexibility to expand to a higher wattage by adding more track heads.

4,000-6,000 hours for MR16 lamps); excellent color rendering; and up to five times greater light output than comparable halogen lamps. A full range of PAR20/PAR30/PAR38 and ED17 CMH lamps are available. New modular, compact ballast designs and system compatibility with standard halogen and low-voltage sources enable designers to mix and match light sources, fixtures and accessories to match design performance to the exact requirements of the application. For example, a given installation might include CMH track fixtures for general lighting and wall washing at higher mounting heights, while halogen or a low-voltage system provides accent lighting and sparkle. Besides meeting the critical design goals of the space, this system will reduce energy costs, make it easier to comply with energy codes and may reduce the size of the air conditioning load significantly. In terms of lifecycle costs, both pure low-voltage and CMH track systems are competitive with other technologies.

Michael McCown is commercial product manager at Juno Lighting, Inc.