

Sandra L. Vásconez

Work Experience

Senior Instructor, 2007 – Present

University of Colorado, Boulder, CO

Teaches courses related in Architectural Engineering and Environmental Design Departments. Serves as academic advisor for 15+ undergraduate students. Co-manage the IESNA Lighting Lab used by undergraduate and graduate students for projects and product testing. Serves as faculty advisor for the Illuminating Engineering Society (IES) Student Chapter. Serves in several departmental committees.

Undergraduate courses in Architectural Engineering:

- Engineering Projects (freshman level)
- Illumination II (junior level)
- Advanced Lighting Design (senior level)
- Sustainable Lighting Workshop (senior level)
- Architectural Engineering Design (senior level)

Undergraduate courses in Environmental Design:

- Lighting Design I (junior level)

Lighting Certificate for Environmental Design Instructor and Administrator 2014 -present

Civil, Environmental and Architectural Engineering Department

University of Colorado, Boulder, CO

Co-creator of Lighting Certificate taught in the Environmental Design Department. In charge of curriculum development, instruction, and certificate administration.

Interim Undergraduate Education Assistant Chair, 2013 – 2014

Civil, Environmental and Architectural Engineering Department

University of Colorado, Boulder, CO

Led the Civil, Environmental and Architectural Engineering undergraduate programs, undergraduate recruiting programs, and undergraduate orientation programs. Served as chair of the department's Curriculum Committee. Worked closely with undergraduate advising staff and provides input into their annual performance evaluations.

Rocky Mountain Lighting Academy Co-Director and Instructor, 2012 – present

Lighting Program; Civil, Environmental and Architectural Engineering Department

University of Colorado, Boulder, CO

Conceived and steered the creation of the Rocky Mountain Lighting Academy (RMLA). Formed and managed RMLA Advisory Board. Successfully launched RMLA; developed marketing materials and content for website. Currently, communicates with advisory board and sponsors; coordinates and manages RMLA courses and logistics; co-teaches design course.

Project Manager and Assistant Designer, 2004 – 2007

Quenroe Associates, Boulder, CO

Managed design and installation of museum exhibits; assisted principal on providing design services and consultation on museum planning, museum exhibition, and lighting design.

Manager of Program Development, 1998 – 2002

Lighting Research Center (LRC), Rensselaer Polytechnic Institute (RPI), Troy, NY

Managed the *Demonstration and Evaluation of Lighting Technologies and Applications (DELTA) Program*, and the Lighting Research Center *Partner's Program*. As such, was responsible for planning, scheduling, budgeting, and overseeing the implementation of field evaluations and product testing; collaborated on content development to show results and lessons learned; supervised review process to produce publishable documents. Acted as principal investigator for several design and research projects. Participated in lighting design projects. Managed budget of \$400,000 and delivered on-time, on-budget results.

Systems Security Administrator, 1994 – 1995

MCI Customer Delivery Services, Colorado Springs, CO

Provided customer service to internal clients; authorized access to company's system applications; coordinated flow of information between customers and advanced support technicians to drive timely problem resolution.

Staff Assistant, 1993 – 1994

MCI Citicorp Account, New York, NY

Assisted account manager and sales staff, created monthly progress reports; produced sales presentations, contracts, and proposals.

Internships/Assistantships

- Exhibition Design Internship, 2003, Quenroe Associates, Boulder, CO
- Museum Internship, 2004, Denver Art Museum, Denver, CO
- Senior Gallery Assistant, 2003-2004, Victoria H. Myhren Gallery, University of Denver, CO

Teaching Experience**Guest Speaker**

Light and Color, Professional Decorative Painters Association, 2010 Education Summit

Introduction to Lighting Design, Westwood College, Denver North College, November 2010

Lecturer

Westwood College, Denver North College, Denver, CO, summer 2008

Lighting course offered by the Department of Interior Design.

Colorado State University, Fort Collins, CO, spring 2007

Women in Art course offered by the Department of Art History.

Adjunct Assistant Professor, 1998 – 2002

Rensselaer Polytechnic Institute, LRC, Troy, NY

Taught graduate courses; assisted in the development, organization, and coordination of graduate courses; organized and carried out orientation seminars for incoming graduate students; participated in faculty meetings, task forces, and thesis committees; contributed to the growth of MS in Lighting Program.

Graduate courses:

- Lighting Technologies
- Lighting Design Workshop: Lighting in Developing Countries
- Lighting Workshop: Visualization

Outreach Education Instructor, 1998 – 2002

Rensselaer Polytechnic Institute, LRC, Troy, NY

Developed outreach education curricula for seminars and training classes; co-authored and managed the development and implementation of basic to intermediate internet-based educational programs to educate people within the field of lighting; prepared manuals and conducted training classes and seminars for industry professionals of different knowledge-base as part of the Outreach Education Program team.

Seminars taught (selected list):

Lighting Education Program, NCQLP Lighting Certification Course, Somerset, NJ, 2003, 2002

Lighting for Offices, Schools, and Health Care Facilities, Seminars for Lighting Professionals, Troy, Buffalo, Long Island, Plattsburgh, Syracuse, and New York City, NY, 2002

LED Institute, LRC, Troy, NY, 2001, 2002

Fiber Optic Lighting Institute, LRC, Troy, NY, 2001, 1999

Lighting Education Program, Indian Society of Lighting Engineers, Troy, NY, 2000

Lighting Fundamentals: An Introduction to the Art and Science of Lighting, LRC, Troy, NY, 1998

Online education (co-author):

Lighting Education Online: Residential Lighting, 2005

Lighting Education Online, 2002

Training manuals (co-author):

Technical Guide for Effective Energy-Efficient Lighting, for the New York Energy \$martSM Small Commercial Lighting Program, NYSERDA, 2003

Guide to Using LEDs in Accent Lighting Applications, for the Alliance for Solid-Stated Illumination Systems and Technologies, LRC, 2003

Grants

IES Education Institution Grant; \$439,525. "Broadening the impact of the Lighting Program at CU Boulder through increased course offerings tailored specifically to engineering graduate students, architectural design students, and industry professionals". C. Walter Beamer IV, co-author.

Fundraising

David L. DiLaura Faculty Fellowship in Architectural Engineering, \$100,000. Grass-roots effort to engage CU Lighting alumni.

Certifications and Professional Memberships

The American Alliance of Museums (AAM), Member, 2017

International Association of Lighting Designers (IALD), Educator Member, 2015-present

National Council on Qualifications for the Lighting Professions (NCQLP) Lighting Certified, 2002–present

Illuminating Engineering Society of North America (IES), 1998-present

Education

M.A. Art History and Museum Studies, 2005, University of Denver, Denver, CO

M.S. in Lighting, 2000, LRC, Rensselaer Polytechnic Institute, Troy, NY

Relevant courses:

Human Factors in Lighting

Light

Lighting Design

Lighting Applications

Lighting Technology

Research Design Methods

B.A. Modern Foreign Languages, *summa cum laude*, 1993, The King's College, Briarcliff Manor, NY

Publications

Vásconez, S., P. Boyce, and J. Brons, 2004. "Controlling Tuberculosis Transmission with Ultraviolet Radiation". Lighting Research Center, Rensselaer Polytechnic Institute, Troy, NY

Frering, D., and S. Vásconez, 2002. "Lighting Education Online: Development of an Interactive, Internet-based Education Program in Lighting." *Right Light 5 Proceedings*, 5: 159-66.

Narendran, N., S. Vásconez, P. Boyce, and N. Eklund, 2000. "Just-Perceivable Color Differences between Similar Light Sources in Display Lighting Applications." *Journal of the Illuminating Engineering Society*, 29, 68-77.

Principal Investigator/Technical Writer (selected list):

Field Test DELTA: Integrated Skylight Luminaire, Issue 1, Jan 2003. RPI

Lighting Answers: MR-16 Lamps, Vol. 6, Issue 2, Sept. 2002. RPI

DELTA Snapshots: Gas Station Canopy Lighting, Issue 13, Feb 2002. RPI

DELTA Portfolio, Lighting Case Studies: Clifton Park Rest Area, Vol. 3, Issue 4, Dec 2001. RPI
DELTA Portfolio, Lighting Case Studies: Saratoga Medical Associates, Vol. 3, Issue 3, Dec 2001. RPI
DELTA Snapshots: Lighting for Multimedia Auditoriums, Issue 12, Nov 2001. RPI
DELTA Snapshots: Outdoor Entry Lighting, Issue 11, Aug 2001. RPI
DELTA Snapshots: Retail Lighting, Issue 10, Aug 2001. RPI
DELTA Portfolio, Lighting Case Studies: Ballston Spa High School, Vol. 3, Issue 2, Aug 2001. RPI
DELTA Portfolio, Lighting Case Studies: Hudson Valley Community College, Vol. 3, Issue 1, May 2001. RPI
Specifier Reports: Energy-Efficient, Ceiling Mounted Residential Luminaires, 1999. RPI
Specifier Reports: Parking Lot and Area Luminaires, 2004. RPI, Troy, NY

Conference Presentations

- S. Vázquez, H. Jepsen, L. North, *Control Me!* Lightfair International, Las Vegas, NV, 2001
- S. Vázquez, *Just-Perceivable Color Differences between Similar Light Sources in Display Lighting Applications*, IESNA Annual Conference, New Orleans, LA 1999

Museum and Gallery Exhibitions and Design

United States

Denver Art Museum, Denver, CO, 2010. Assisted with redesign of American Indian permanent galleries.
Beauty and its Discontents, Victoria H. Myhren Gallery, 2007. Led CU lighting students on exhibit lighting installation
National Outdoor Leadership School, Lander, WY, 2006-07. Project management. Assisted with design of permanent exhibition.
George Washington Permanent Exhibition, Donald W. Reynolds Museum and Education Center, Mount Vernon, VA, 2006, Lighting focusing assistant
In Limbo, Victoria H. Myhren Gallery, 2005, Lighting
Traveling Bolivia through the Wonders of Weaving, Museo de las Américas, Denver, 2004, Lighting
Robert Colescott & Glenn Ligon, Victoria H. Myhren Gallery, 2004, Lighting
Faculty Triennial, Victoria H. Myhren Gallery, 2004, Exhibition planning, Installation, Lighting
BFA, Victoria H. Myhren Gallery, 2004, Exhibition planning, installation, lighting
Poetry & Stone: Cab Childress Architect, Victoria H. Myhren Gallery, 2004, installation, Lighting
Precolumbian Permanent Exhibit, Museo de las Américas, Denver, 2004, Lighting
H2O, Victoria H. Myhren Gallery, 2003, Exhibition planning, installation, lighting
The Heart of Spain, Alexandria Museum of Art – 2003, Preparator and lighting focusing assistant
Ursuline Convent, New Orleans, LA, 2004. Permanent exhibition design assistant
The Quest for Immortality Traveling Exhibition, Guggenheim Hermitage Museum, Las Vegas NV, 2005. Exhibition design assistant
Reinstallation and design on entire collection, The Cleveland Museum of Art, Cleveland OH, 2003-06. Exhibition design assistant
Art... And All That Jazz! DU Art Auction, Cable Center, Denver CO, 2004. Exhibition planning and installation
Painting a New World, Denver Art Museum, Denver CO, 2004. Spanish translation of exhibit legends and tombstone labels.
Quest for Immortality Traveling Exhibition, New Orleans Museum of Art, LA 2003. Exhibition design assistant

International

Museo O'higiniano y de Bellas Artes de Talca, Chile, 2005-07. Project management. History and fine arts permanent exhibition design assistant

Service

IALD Education Trust Board of Directors, 2018-2019

CLUE (Community Lighting for the Urban Environment) Competition Judge, 2018

Architectural Engineering ABET Coordinator – 2016-2018

IES Research Symposium Committee Member, 2016 – 2020

College of Engineering; University of Colorado, Boulder

Undergraduate Education Council, 2013 – 2014

Civil, Environmental and Architectural Engineering Department; University of Colorado, Boulder

IES Student Chapter Advisor, 2007 – present

Curriculum Committee, 2017 – 2018, 2010 – 2012

Operations Committee, AY 2016, 2009 – 2013, [co-chair 2011-2012]

Curriculum Committee Chair, 2013 – 2015

Environmental Engineering Search Committee, 2013

Civil, Environmental and Architectural Engineering Cooperative Representative, 2011-2013

Building Systems Search Committee, 2010, 2011

Computer Committee, 2008 – 2010

Freshman Advising, 2008 – 2009; 2013 – 2014

AEI Student Chapter Advisor 2007 - 2013

Architectural Engineering Institute

AEI Academic Council Member, Represented CU's Architectural Engineering, 2010 – 11

NCQLP, Member of Board of Directors, 2000 – 2002

Awards

The Max S. Peters Faculty Service Award, 2018

Architectural Engineering Faculty Appreciation Award, 2018

Chair, David L. DiLaura Faculty Fellowship in Architectural Engineering, 2013-Present

Marinus Smith Award, 2013, University of Colorado-Boulder

Architectural Engineering Faculty Appreciation Award, Civil, Environmental and Architectural Engineering, 2013

Service Award; Civil, Environmental and Architectural Engineering, 2012

Outstanding Faculty Advisor; Civil, Environmental and Architectural Engineering, 2011

Award of Merit, *Lighting Education Online*, Society for Technical Communication, 2003

Buell Scholarship, 2003, University of Denver

Award of Merit, *Outdoor Lighting DELTA Snapshot*, Society for Technical Communication, 2001

Distinguished Technical Communication Award, *Energy-Efficient Ceiling Mounted Residential Luminaires Specifier Report*, Society for Technical Communication, 1999.

Award of Merit, *Energy-Efficient Ceiling Mounted Residential Luminaires Specifier Report*, International Technical Publications Competition 1999

Litecontrol Scholarship, 1996

National Collegiate Minority Leadership Award, 1992