

Christian Rieser, PE, SE, PEng

**Technical Director
Senior Structural Engineer**

Christian_rieser@hotmail.com

+1 (917) 376-4088

Brooklyn, NY

US Citizen

OVERVIEW

Technical Director of knippershelbig, Christian has extensive experience with bridge design, non-linear and dynamic finite element analysis, research, structural steel design and detailing, reinforced and post tensioned concrete design, and lightweight structures for buildings and glazing. In addition to his engineering competence, he has over twenty years of experience in project management, site and shop supervision, engineering team leadership, and preparation of design submittals.

LICENSES AND CERTIFICATIONS

Professional Engineer (PE) : CA, NY, NJ, PA, MA, DC, VA, MD, TX, MT, FL, TN, IL, AZ

Structural Engineer (SE): IL

Professional Engineer (PEng): AB, ON

EDUCATION

2003 - 2005 **Ecole Nationale des Ponts et Chaussées, Paris** Diplôme d'ingénieur (grade de mastère)- civil engineering,

1998 - 2005 **Technical University of Munich**, Diplom Ingenieur - civil engineering

1993 - 1997 **University of Pittsburgh** Bachelor of Science - economics, graduated magna cum laude

RESEARCH, EDUCATION, AND PUBLICATIONS

Pratt Institute, Integrated Building Systems– Jury member for studio project- 2020- 2024

European Union SYNPEX research project on the synchronized pedestrian excitation of footbridges. Compilation of research and field measurement for the development of a European dynamics guideline for the design of pedestrian bridges

Fédération Internationale du Béton Working party Guidelines for the design of pedestrian bridges. Research and compilation for the guidelines document

Design and Construction of the Nelson Mandela Pedestrian Bridge in Creil, International Bridge Conference, Pittsburgh 2015, with Raphaël Royer de Véricourt, Adrien Quaglia, Jean-François Blassel, and Minh Man Nguyen

Advanced method for fine-tuning of structurally indeterminate interdependent cable systems, Proceedings of the International Association for Shell and Spatial Structures (IASS) Symposium 2015, with Matteo Dini, Raphaël Royer de Véricourt, Adrien Quaglia, and Jean-François Blassel

Design and Construction of the St. Patrick's Pedestrian Bridge, Proceedings of Footbridge 2014, 5th International Conference with Jean-François Blassel, Tom Cooper, Michael McDonagh, and Daniel Garcia

Impact of the 2013 Alberta Floods on the Construction of St. Patrick's Pedestrian Bridge in Calgary, Canada, Proceedings of the 9th International Conference on Small and Medium Span Bridges, Calgary with Jean-François Blassel, Tom Cooper, Bill Campbell, and Kimberly Haddow

Construction of St. Patrick's Pedestrian Bridge in Calgary, Canada, Proceedings of the 9th International Conference on Small and Medium Span Bridges, Calgary with Jean-François Blassel, Tom Cooper, Michael McDonagh, and Brent Whitcomb

ENPC Diploma thesis – Dynamics of pedestrian bridges and French SYNPEX guidelines for pedestrian excitation of footbridges

Technical University of Munich – Dept. of Structural Dynamics – Teaching assistant for first through fourth semester structural engineering course, seminar and grading of exams

PROFESSIONAL EXPERIENCE

Current- 2018 **knippershelbig Inc.**, New York - Technical Director; notable projects:

Confidential, Orlando FL– Management of structural design team for design, fabrication, and construction supervision of 50,000 sq ft steel grid-shell canopy clad with ETFE pillows over a roller coaster attraction.

Student Center at John Hopkins University, Baltimore – Review of structural design team for the 150,000 sq ft student center with dowel laminated panel roof and glulam framing on reinforced concrete below grade structure. Engineer of record the for the complex offset roof structure designed by Bjarke Ingles Group currently in construction.

Vagelos Laboratory for Energy Science and Technology, UPenn, Philadelphia –

Review and supervision of structural design and façade engineering, and engineer of record the for the complex seven story structure with ETFE shading for Behnisch Architekten currently nearing completion.

Airport Metro Connector, Los Angeles – Structural design of numerous façade systems for 9.5-acre airport metro connector designed by Grimshaw Architects in Los Angeles for Aragon Construction.

Tree structures at Amazon Nashville Office, Nashville, TN Supervision of structural design and engineer of record for the 40 ft tall glass fiber composite tree canopies clad with ETFE membrane for the lower roof of the building with Enclos.

Wharf Waterbuilding, Washington, DC Management of structural design and engineer of record for the two-story reinforced concrete and steel at the Wharf Development in downtown Washington, DC with HWKN architects.

Engineer of record services for specialty façade contractors including Penn Plaza (40ft high structurally glazed glass fin façade), Tiffany building renovation (IGU's from doubly curved exterior lites), 618 Pavonia (a 27- story unitized curtainwall). 520 Fifth Ave (75 story, unitized curtain wall with terracotta infill), and others.

2016-2018 **Eckersley O'Callaghan LLC**, New York - Senior Associate; notable projects:

MOMA entrance stair, New York, Structural design of the monumental stair for the Museum of Modern Art renovation with Diller Scofidio and Renfro architects.

2012 – 2016 **RFR consulting engineers** Paris, France - Senior Project Manager; notable projects:

St. Patrick's Bridge, Calgary – project manager and engineer for the fabrication and construction phase of the 188 m long network arch pedestrian bridge. Fabrication and site inspection, review of cable stressing, interaction with client, fabricator, and contractor.

Nelson Mandela Footbridge, Creil, France – Independent review of the design calculation for 100 m long suspension bridge with concrete deck.

Footbridge over the Scarpe River, Arras, France – Project manager and engineer of 45 m steel and concrete balanced cantilever pedestrian bridge over the Scarpe River.

Samaritaine– Review of contractor submittals of glazed and special structures for the \$891 million department store renovation designed by SANAA architects.

Maison des Avocats, Paris – Review of contractor submittals of glazed and special structures for courthouse skyscraper complex designed by Renzo Piano Building Workshop.

TGI Futur Palais de Justice de Paris– Review of contractor submittals of glazed and special structures for courthouse skyscraper complex designed by Renzo Piano Building Workshop.

2005 – 2012 **Schlaich Bergermann and Partner LP**, New York - Associate; notable projects:

World Trade Center Tower One Antenna, New York – Project manager and engineer for 122 m steel truss guyed antenna and ring structure. Complete structural design from schematic design to site supervision for landmark project.

Transbay Transit Center, San Francisco – Project manager and engineer for building superstructure and for glazed and special structures including seismic analysis and blast analysis of critical infrastructure project.

Revere Footbridge, Boston, Project manager and engineer for cable-stayed footbridge.

2004 - 2005 **RFR consulting engineers**, Paris - Diplomant and Engineer; notable projects:

Passerelle d'Escales Footbridge, Saint Sever, France – Project engineer for 54m composite lenticular truss footbridge. Winner of prize "Plus beaux ouvrages de construction métallique 2008", catégorie "Petits ouvrages".

Lyon confluence pedestrian bridge, Lyon, France – Engineer for 74 m steel arch truss pedestrian bridge, completion 2009.

2003 – 2004 **Schlaich Bergermann und Partner**, Stuttgart – Intern; notable projects:

Second Vivekananda Bridge, Kolkata, India- assistance for main bridge and caisson foundation design check and project management, completion 2007.

Bernesga and Torio Roadway Bridges, Leon, Spain – assistance for structural analysis and design for B&D bid, completed 2006.