### Yoshinori Nito P.E. S.E.

Nationality; Japanese Date of Birth; 4 August 1969

**Education**; MSc in Engineering, 1995 Tokyo Denki University

Bsc in Engineering, 1993 Tokyo Denki University

**Employment History**;

04/1995 – 03/1997 Structural Design Group Co., Ltd. Structural Engineer

5-9-9 Hiroo, Shibuya-ku, Tokyo 150 Japan

http://www2r.biglobe.ne.jp/~sdg/

04/1997 – 03/1998 Structural Design Group Co., Ltd. Project Manager

Seoul Office

yungjiun Bid. 664-35 Yeoksam-Dong Kangnam-gu Seoul Republic of Korea

04/1998 – 09/2002 Dewhurst Macfarlane and Partners Associate

in Association with Goldreich Engineering, P.C. 45 East 20<sup>th</sup> Street New York, NY 10003 USA

http://www.dewmac.com/frame.html

9/2002 – 4/2009 Rafael Viñoly Architects PC Façade Engineer

50 Vandam Street New York, NY 10013 USA

http://www.rvapc.com/flashindex.html

10/2002 – 12/2009 engineers network Co., Ltd. Partner

Established in Tokyo, Japan

1/2010 – Present Yoshinori Nito Engineering and Design PC Principal

212 West 22<sup>nd</sup> Street Unit 4G New York NY 10011

http://www.ynedpc.com

Established in New York, USA

### Professional Experience;

Prior to founding engineers network Co., Ltd. in 2002 and Yoshinori Nito Engineering and Design PC in 2010, Yoshinori Nito began his career as a structural designer / engineer to work on Makuhari Messe North Hall convention center with Structural Design Group Co., Ltd. Having worked on the large scale projects in Japan and South Korea under supervision of a well-known engineer Kunio Watanabe, he cultivated his expertise in engineering and was well trained to approach a structural design.

After he lived in South Korea for a year to complete Samsung Jong-ro Tower, he moved to New York in 1998 and became one of the first members of Dewhurst Macfarlane and Partners New York office where he was an Associate for three years and extended his specialist knowledge and experience in structural glass and custom curtain wall / façade systems. He was involved as lead designer / engineer for both main structure and façade system on Carl Icahn Laboratory at Princeton University, and Regional Performing Art Center Philadelphia, and Winter Garden Glass Atrium School of Business at the University of Chicago.

He has developed his skill in designing and engineering both heavy and light weight structures using various materials in both large and small scale projects include convention center, high-rise building,

museum, laboratory, residential, office, retail, hotel, hospital.

He applies his expertise in long span structure, high rise building, hybrid structure, tensile structure, shell, cable supported glass wall, self standing glass structure. He has been familiar about intensive structural analysis in linear static or non linear dynamic and large deflection, buckling, temperature change, time history in seismic event, construction sequence, and finite element method (FEM) analysis.

He has received 14<sup>th</sup> Annual Japan Consultants Association (JSCA) award for designing "Museum Cone of Mori Arts Center" in 2003. It is the most honorable award for a structural engineer in Japan.

He has invented many creative and sophisticated structural solutions, joint details and material use through the structural design of each project. Three of his inventions have been approved as his patents.

#### **Projects Summary;**

#### 04/1995-04/1996 Makuhari Messe North Exhibition Hall Chiba, Japan

Architect Fumihiko Maki/ Maki and Associates Engineer Structural Design Group Co., Ltd.

Title, Role Project engineer

Period Construction documents

Site area 43,960 m² Floor area 37,176 m²

Structure Roof: 216m wide and 96m long steel trusses

Back stay cables and cast steel connectors

Frame: Steel in concrete structure

Foundation: Cast-in place concrete / precast piles

Construction Cost \$180 millions Completion Date Oct 1997

http://www25.big.or.jp/~k wat/messe2/index.htm

#### 04/1996-04/1998 Samsung Jung-ro Tower Seoul, Republic of Korea

Architect Rafael Viñoly Architects PC
Engineer Structural Design Group Co., Ltd.
Title, Role Lead engineer / Project manager

Period Schematic design to Construction administration

Site area 5,033 m<sup>2</sup> Floor area 58.744 m<sup>2</sup>

Structure 135m(443ft) High Rise Building

Frame: Vertical steel cylinder shells
Steel in concrete structure
Observatory: Steel truss (The Top Cloud)

Foundation: Spread footing

Construction Cost \$200 millions Completion Date June 1999

http://www25.big.or.jp/~k wat/KOR sam/index.htm

#### 1998 Ulsan Football Stadium Ulsan, Republic of Korea

Architect POS-AC

Engineer Structural Design Group Co., Ltd.

Title, Role Project engineer

Period Construction documents

Site area 21,966 m² Floor area 81,550 m²

Structure Roof: Steel trusses with back stay cable

Frame: Precast prestressed concrete structure

Foundation: Spread footing

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Construction Cost \$150 millions Completion Date June 2001

http://www25.big.or.jp/~k wat/KOR ulsan/index.htm

#### 1998-1999 Van Andel Institute for Education in Grand Rapids, Michigan USA

Architect Rafael Viñoly Architects PC Engineer Dewhurst Macfarlane & Partners

Title, Role Project engineer

Period Design developments to Construction administration

Floor Area 152,849sq ft

Structure Steel structure and cast in place concrete shear wall

Foundation: Spread footing

Construction Cost \$45 millions Completion Date May 2000

The Concrete Industry Board, Inc., 1999 Award of Merit

### 1998-1999 Center for Molecular and Cellular Biology, Queens College New York, New York USA

Architect Rafael Viñoly Architects PC
Engineer Dewhurst Macfarlane & Partners
Title, Role Lead engineer / Project manager

Period Schematic design to Construction documents

Floor Area 70.000sq ft

Structure laboratory: Precast prestressed concrete

Tower: Cast in place concrete Foundation: Spread footing

Construction Cost \$15 millions Status Unbuilt

#### 1999-2001 Kimmel Center for the Performing Arts Philadelphia, Pennsylvania USA

Architect Rafael Viñoly Architects PC Engineer Dewhurst Macfarlane & Partners

Title, Role Engineer in charge of Verizon Hall (Main Concert Hall)
Period Design developments to Construction administration

Total Floor Area 456,394 sq ft

101,000 sq ft for Verizon Hall (2,500 seats) 27,000 sq ft for Perlman Theatre (650 seats)

Structure Steel truss structure

Foundation: Spread footing

Construction Cost \$230 millions Completion Date Dec 2001

#### Architectural Record

 $\underline{\text{http://archrecord.construction.com/projects/portfolio/archives/0203Kimmel-3.}} \\ \text{asp}$ 

American Institute of Steel Construction, 2002 Engineering Awards of Excellence

http://www.aisc.org/MSCTemplate.cfm?Section=Back\_Issues1&template=/ContentManagement/ContentDisplay.cfm&ContentID=3932

New York Association of Consulting Engineers, 2002 Engineering Excellence Award

American Council of Engineering Companies, 2002 Grand Award

British Consultants and Contractors Bureau, 2003 British International Expertise Award

Institution of Structural Engineer (UK), 2003 Structural Achievement Award

General Building Contractors Association, 2003 Building Excellence Award American Institute of Steel Construction, 2003 Innovative Design and Excellence in Architecture Using Structural Steel Award

### 1999-2000 Bengt Sjostrom / Starlight Theatre Rock Valley College Rockford,

Illinois USA

Architect Studio/Gang Architects

Engineer Dewhurst Macfarlane & Partners
Title, Role Lead engineer / Project manager

Period Schematic design to Construction administration

Floor Area 135,000 sq ft

Structure Roof: Retractable steel roof

Frame: Steel structure + Masonry shear wall

Foundation: Spread footing

Construction Cost \$8.5 millions Completion Date Oct 2003

#### Architectural Record

http://archrecord.construction.com/projects/bts/archives/perform/03\_bengt/overview.asp

Engineering Record "\$1-Million Kinetic Skylight is Showstopper in Illinois" http://enr.construction.com/news/buildings/archives/030616.asp

#### 2001-2002 Apple Computing Flagship Store, Chicago USA

Architect Bohlin Cywinski Jackson Architects
Engineer Dewhurst Macfarlane & Partners
Title, Role Lead engineer / Project manager

Period Design developments to Construction documents
Structure Self standing glass stair / bridge / Façade with glass fins.

Completion Date May 2003

# 2000-2003 Carl Icahn Laboratory, Lewis-Sigler Institute for Integrative Genomics Princeton University, New Jersey USA

Architect Rafael Viñoly Architects PC
Engineer Dewhurst Macfarlane & Partners
Title, Role Lead engineer / Project manager

Period Schematic design to Construction administration

Floor Area 92,032 sq ft

Structure Steel structure and cast in place concrete shear wall

Foundation: Spread footing

Façade: glass walls suspended by stainless steel cables

Construction Cost \$48 millions Completion Date May 2003

#### Architectural Record

http://archrecord.construction.com/projects/bts/archives/universities/03\_Carll cahn/overview.asp

arcspace.com

http://www.arcspace.com/architects/vinoly/vinoly\_lcahn/vinoly\_icahn\_index.ht m

New York Council Society of American Registered Architects, 2003 Award of Excellence

## 2000-2003 University of Chicago Graduate School of Business Chicago, Illinois USA

Architect Rafael Viñoly Architects PC
Engineer Dewhurst Macfarlane & Partners

Title, Role Lead engineer for Winter Garden Glass Atrium
Period Design developments to Construction documents

Floor Area 399.129 sq ft Façade Area 35,000 sq ft

Structure Palm tree type steel structure

Foundation: Spread footing

Construction Cost \$15 millions for Winter Garden \$180 millions for overall

Completion Date 2004

#### 2000-2001 Helmut Lang New Retail Store Aoyama Tokyo, Japan

Architect Gluckman Mayner Architects
Engineer Dewhurst Macfarlane & Partners
Title, Role Lead engineer / Project manager

Period Schematic design to Construction documents

Structure Post-tension Concrete and steel in concrete structure

Façade: Glass façade & Glass fins Foundation: Cast-in place concrete pile

Status Unbuilt

#### 2001-2003 Mori Arts Center, Tokyo City View Tokyo, Japan

Architects Gluckman Mayner Architects, Mori Building, Irie Miyake

Engineer Yoshinori Nito + DMP
Title, Role Lead Designer, Principle

Period Schematic design to Construction administration Structure Façade: Horizontal steel rings & vertical rods

Roof Frame: Steel truss structure

Completion Date April 2003

#### 2001-2003 Mori Arts Center, Museum Museum Cone Tokyo, Japan

Architects Gluckman Mayner Architects, Mori Building, Irie Miyake

Engineers Yoshinori Nito + DMP
Title, Role Lead Designer, Principle

Period Schematic design to Construction administration

Façade Area 1,000 sq m

Structure Cable net shell and steel cylinder funnel frame

(Single layer cable net + horizontal compression rings)

Foundation: Cast-in place concrete pile Façade: Integrated DPG connecters

Construction Cost \$12 millions Completion Date April 2003

#### Architectural Record

http://archrecord.construction.com/projects/bts/archives/museums/0401\_mori/overview.asp

Building Design & Construction

http://www.bdcmag.com/magazine/articles/bdc0403mori.asp

The Chicago Athenaeum American Architecture Award 2004 <a href="http://www.chi-athenaeum.org/archawards/2004/moriarts.html">http://www.chi-athenaeum.org/archawards/2004/moriarts.html</a>

Mori Art Museum Press Release

http://www.mori.art.museum/contents/press/mam pr e 030611.pdf

Reed Construction Data "Lofty Ambitions"

http://www.reedconstructiondata.com/article/CA404413.html

2002-2004 Nasher Museum of Art, Duke University Durham, North Carolina USA

Architect Rafael Viñoly Architects PC

Title, Role Project engineer

Period Schematic design to Construction administration

Floor Area 65.876 sq ft

Structure steel roof framing supported by precast concrete walls

Foundation: Spread footing

Precast/Prestressed Concrete Institute, 2006 Design Award Honorable

Mention

2002-2006 Howard Hughes Medical Institute, Jenelia Farm Research Campus

Leesburg, Virginia USA

Architect Rafael Viñoly Architects PC

Title, Role Lead engineer in charge of self standing glass structures

Period Schematic design to Construction administration

Floor Area 501.818 sq ft

Structure Stainless Steel structure

Aluminum Steel structure Load bearing glass structure 25ft long Glass Beam Foundation: Spread footing

2002-2009 Brooklyn College West Quad Brooklyn, New York USA

Architect Rafael Viñoly Architects PC

Title, Role Project engineer

Period Schematic design to Construction administration

Floor Area 136.595 sq ft

Structure Steel structure and cast in place concrete shear wall

Foundation: Spread footing

2002-2009 UCSF Helen Diller Family Cancer Research Building San Francisco,

California USA

Architect Rafael Viñoly Architects PC

Title, Role Facade engineer for curtain wall suspended by cable

Period Schematic design to Construction documents

Floor Area 161.761 sq ft

Structure Glass walls suspended by stainless steel cables

2002-2008 Cleveland Museum of Art Cleveland, Ohio USA

Architect Rafael Viñoly Architects PC

Title, Role Lead engineer in charge of self standing glass structures

Period Schematic design to Construction administration

Floor Area 475.876 sq ft

Structure Portal rigid frame between glass beam and glass wall

Double story high glass wall Double story high glass cube

Glass façade by suspended glass fins

2002-2003 WTC Competition World Cultural Center New York, New York USA

Architects Rafael Viñoly Architects PC

Title, Role Project engineer for latticework structure

Period Proposal
Floor Area 9,041,760 sq ft
Structure Steel truss structure

Status Second place at competition, unbuilt

2004-2009 Penn Medicine, Center for Advanced Medicine Philadelphia,

Pennsylvania USA

Architect Rafael Viñoly Architects PC

Title, Role Lead engineer for main structure and curtain wall of the

atrium

Period Schematic design to Construction administration

Floor Area 7,211,880 sq ft Structure Steel structure

Stainless steel hanger rods

Machinery finished stainless steel connectors

Aluminum curtain wall framing

2004 City Crossing Winnipeg, Canada - International Design Competition,

**Third Place** 

Architect Yoshihara McKee Architects
Engineer engineers network Co., Ltd.
Title, Role Lead Designer, Principle

Period Proposal

Structure Canopy for cable net and compression steel ring

Status unbuilt

2002-2004 Etoile Shinsaibashi Building Osaka Japan

Architect Kengo Kuma and Associates Engineer engineers network Co., Ltd. Title, Role Lead Designer, Principle

Period Schematic design to Construction administration

Facade Area 2,542 m2 Structure Steel structure

Aluminum curtain wall framing

2006-2008 New Y's Retail Store New York NY USA

Architects Ishigami Design Office, Ralph Sobel Architect

Engineer engineers network Co., Ltd.
Title, Role Lead Designer, Principle

Period Schematic design to Construction administration

Structure Steel structure and masonry shear wall

Glass facade

Foundation: spread footing

2005 New JR Iwamizawa Station Building Hokkaido Japan - Design

**Competition Finalist** 

Architect Masatomo Kojima auds Engineer engineers network Co., Ltd. Title, Role Lead Designer, Principle

Period Proposal

Structure Steel shell structure

Glass façade supported by cables

Foundation: Spread footing

Status one of 6 finalists at competition, unbuilt

2005-2007 Glass Sculptures "Tom Na H-iu"

Artiest Mori Mariko Studio

Engineer engineers network Co., Ltd.
Title, Role Lead Designer, Principle

Period Schematic design to Construction administration

Structure 5 meter tall self standing glass shell structure

Status built at Tokyo 2005, at London 2006, at Denmark 2006 at

Singapore 2007, at New York 2007

2006-2007 Oshima-en TeaSHop Saitama Japan

Architect Yoshihara McKee Architects
Engineer engineers network Co., Ltd.
Title, Role Lead Designer, Principle

Period Schematic design to Construction administration

Structure Wood frame

Foundation: Spread footing

2006 AIA Small Projects Award (SPP Journal)

2004 East Futako-Tamagawa District Category 1 Urban Redevelopment Tokyo

Japan - International Design Competition Finalist

Architect Kengo Kuma and Associates Engineer engineers network Co., Ltd. Title, Role Lead Designer, Principle

Period Proposal

Structure wood frame for long span roof

steel frame

Status one of 5 finalists at competition, unbuilt

2008- Taniguchi Residence Kishiwada-shi, Osaka, Japan

Architect 8 Project Architect, Atelier KYU

Engineer Yoshinori Nito Engineering and Design PC
Period Schematic design to Construction administration

Structure cast in place concrete structure

2007- Hamori Apartment 111 E10th Ave. New York New York USA

Architect Shirley Leon design Ops, Formactiv PC
Engineer Yoshinori Nito Engineering and Design PC
Period Schematic design to Construction administration

Structure Timber frame

2009-2010 1 5<sup>th</sup> Ave Apartment New York New York USA

Architects Yoshihara McKee Architects

Engineers Yoshinori Nito Engineering and Design PC
Period Schematic design to Construction administration
Structure Steel structure, Glass and Aluminum frame

2008- 4 East 43<sup>rd</sup> Street New York NY USA

Architect Aki Ishida Architect PLLC

Engineer Yoshinori Nito Engineering and Design PC
Period Schematic design to Construction administration

Structure Steel structure

2009- Ferris Lin Residence Waccabuc, Town of Lewisboro Westchester

County New York, USA

Architect Chan-li Lin AIA

Engineer Yoshinori Nito Engineering and Design PC
Period Schematic design to Construction administration

Structure Steel truss structure

Footing: Spread footing

2009- Ardesia Wine Bar, 52<sup>nd</sup> Street New York, NY USA

Architect Aki Ishida Architect PLLC

Engineer Yoshinori Nito Engineering and Design PC
Period Schematic design to Construction administration

Structure Glass engineering and aluminum frame

2009 Urban Shed International Design Competition New York NY USA

Architect Aki Ishida Architect PLLC

Engineer Yoshinori Nito Engineering and Design PC

Title, Role Lead Designer, Principle

Period Proposal

Structure Aluminum frame

http://www.urbanshed.org/

2009 Open Paradox - Korean Advanced Institute of Science and Technology

Republic of Korea - International Design Competition Third Place

Architect Genseng Chicken Architecture

Engineer Yoshinori Nito Engineering and Design PC

Title, Role Lead Designer, Principle

Period Proposal

Structure Steel truss structure

AIA New York Design Award 2010

http://cfa.aiany.org/files/2010 DesignAwardsLunch PR April8.pdf

2010- Sasakawa Residence Tokyo Japan

Architect Kohei Sasakawa Architect

Engineer Yoshinori Nito Engineering and Design PC

Title, Role Lead Designer, Principle

Period Proposal

Structure Steel structure + cast in concrete retaining wall

Foundation Spread footings

2010- Ventilation Tower Glass Façade Tokyo Japan

Architect/Engineer Yoshinori Nito Engineering and Design PC

Title, Role Lead Designer, Principle Period Schematic Design

Structure Stainless Steel Cable Truss

Corner Clamp and Curved laminated Safety Glass

2010- The International Multiple Sclerosis Management Practice – IMSMP at

57<sup>th</sup> Street New York USA

Architect Yoshihara McKee Architects

Engineer Yoshinori Nito Engineering and Design PC

Title, Role Lead Designer, Principle

Period Schematic design to Construction administration Structure Steel structure for new stair and machineries

Concrete ramp

Evaluation and Reinforcement for concrete flat slab

Writing & Publish;

GA Material Space GLASS 02 A.D.A EDITA Tokyo Co., Ltd. http://www.ga-ada.co.jp/japanese/ga\_sozai/ga\_sozai\_02.html

Detail magazine 159 Jan 2004 Shokokusha

#### http://www.shokokusha.co.jp/detailback.html

Nikkei Architecture 2003 8-4 No.750 Nikkei Business Publications, Inc. http://www.japandesign.ne.jp/HTM/MAGAZINE/NIKKEI-AR/750/

Nikkei Architecture 2003 8-18 No.751 Nikkei Business Publications, Inc. http://www.japandesign.ne.jp/HTM/MAGAZINE/NIKKEI-AR/751/

Visual Architecture December 2003 Vol.40 304 Kenchikugohou Corporation <a href="http://www.k-gaho.co.jp/backnumber.html">http://www.k-gaho.co.jp/backnumber.html</a>

Steel Design 2003 Vol.2 Kenpohsha

Structure No.88 Oct. 2003 JSCA <a href="http://www.jsca.or.jp/vol2/123publish/str">http://www.jsca.or.jp/vol2/123publish/str</a> list/str list5.html

Intelligent Glass Solutions February 2004 "The Amazing Glass Cone"

Intelligent Glass Solutions January 2005

"The use of laminated stone glass in the designing of a curtain wall for the Etoile Shinsaibashi Building"

Kenchiku Gijutsu March 2009

http://www.glassfiles.com/library/17/article927.htm

#### Personal Award;

JSCA Award (Japan Structural Consultants Association) as structural designer/engineer of Museum Cone of Mori Arts Center project on June 2003 <a href="http://www.jsca.or.jp/vol2/22prize/2003/nitoh.html">http://www.jsca.or.jp/vol2/22prize/2003/nitoh.html</a>

#### **Professional Affiliations;**

Architectural Institute of Japan (AIJ) 26-20, Shiba 5-Chome, Minato-ku, Tokyo 108-8414 Japan www.aij.or.jp/1993-1996, 06/2009

Japan Structural Consultants Association (JSCA) 3-2 Kudankita 1-Chome, Chiyoda-ku, Tokyo 102 Japan www.jsca.or.jp/vol2/31webmst/english.html 03/2003-Present Time

American Institute of Steel Construction (AISC)
One East Wacker Drive Suite 700 Chicago, IL 60601-1802
<a href="https://www.aisc.org/">www.aisc.org/</a>
11/2005-Present Time

State of Connecticut Department of Consumer Protection Registered as Professional Engineer (license #24355) <a href="https://www.ct.gov/dcp">www.ct.gov/dcp</a>. 03/2006-Present Time

State of New York, Office of the Professions Registered as Professional Engineer (license #087022) http://www.op.nysed.gov/ Structural Engineers Association of New York 536 LaGuadia Place New York NY 10012 <a href="http://seaony.org/">http://seaony.org/</a> 04/2010-Present Time

#### **Recent Academic Papers**;

1 Write a paper for: Architectural Institute of Japan

Speaker at Conference on August 2, 2002 in Hokuriku, Japan Read a paper for: Architectural Institute of Japan in August 2, 2002

Title: "Buckling Examination of the Glass Support Structure for

ROPPONGI HILSS (Museum Cone) - Part 1 Buckling

Test"

Reference No.: 20372

Written by: Yoshinori Nito, Yumi Fujikawa

Published in: August 2002

Write a paper for: Architectural Institute of Japan

Title: "Buckling Examination of the Glass Support Structure for

ROPPONGI HILSS (Museum Cone) - Part 2 Analysis of

the Buckling Strength"

Reference No.: 20373

Written by: Yoshinori Nito, Yumi Fujikawa

Published in: August 2002

Write a paper for: Glass Processing Days (GDP)

Title: "Structural Design of the Museum Cone"

Written by: Yoshinori Nito

Speaker at Conference on June 20th 2005 in Tampere, Finland

http://www.glassprocessingdays.com/

http://www.glassfiles.com/library/17/article927.htm

#### Patents;

1 Patent for: Structure of Cable Net Shell and Glass Support Structure

Patentees: Yoshinori Nito + Yumi Fujikawa

Asahi Glass Building Componet Engineering Co., Ltd.

Date of apply: April 30, 3004

Reference No.: 2004-135253 for Japan Patent Office

2 Patent for: Invention of Support Fittings for Cable Net Shell and

Glass Support Structure

Patentees: Yoshinori Nito + Yumi Fujikawa

Asahi Glass Building Componet Engineering Co., Ltd

Date of apply: April 30, 3004

Reference No.: 2004-135254 for Japan Patent Office

3 Patent for: Invention of Connection Joint for Compression Rings of

Cable Net Shelll

Patentees: Yoshinori Nito + Yumi Fujikawa

Asahi Glass Building Componet Engineering Co., Ltd

Date of apply: April 30, 3004

Reference No.: 2004-135255 for Japan Patent Office