

### Structural Engineer



#### Profession

Structural Engineer

Associate Professor  
Tokyo National University of Fine Arts & Music, Dept of Architecture

#### Current Position at Arup

Associate Director

Joined Arup 1996

#### Qualifications

BA in Architecture with minor in Structural Engineering,  
Dept of Architecture  
University of California at Berkeley, 1994

MSc (Eng), Dept. of Civil & Environmental Engineering,  
University of California at Berkeley, 1996

First Class Licensed Architect in Japan, 1998

#### Committees

Structural Design Working Group, AIJ

#### Selected Publications

M.Kanada, et al. 'Alternative Modern', documentation of lecture series and discussion with Toyo Ito, Jun Aoki, Ryue Nishizawa, and Sosuke Fujimoto, TN Probe, Tokyo 2005

M.Kanada, 'Suspended Structure' (chapter 8), *Visual Introduction to Architecture*, Shokoku-sha, Tokyo 2002

M.Kanada, 'Evolving design of structure.' *Kenchiku Bunka*, no.658 vol. 57 April 2002, pp28-29.

#### Awards

**Gengo Matsui Award 2002**  
for structural design of Maison Hermes

**Building Construction Society Award 2003**

For Maison Hermes

**American Wood Design Award 2004**

For Maibara Kindergarten

#### Architecture Review Award 2005

For Tomochi Forestry Centre

#### Lectures

**Cornell University, USA**

Visiting Lecturer Fall 2005

**Kyoto University of Art and Design**

Visiting Lecturer 2004

#### Key Data

Mitsuhiro Kanada has worked in the US, Japan, and the UK. He leads a multidisciplinary engineering team to provide holistic design solutions for challenging international projects.

#### Relevant Projects

**Ove Arup & Partners, London**

(April 2005 ~ )

**Pabellon Puente, Zaragoza Spain**

(Zaha Hadid Architects)  
300m long bridge pavilion that provides the pedestrian access to the Expo site. This footbridge is also used as pavilion during the Expo period. Steel structure with sprayed concrete soffit to achieve the 3 dimensional form in economical manner. It is currently under construction and will open to public in June 2008.

**Taichung Metropolitan Opera House, Taichung Taiwan**

(Toyo Ito & Associates, Architects)  
36,000m<sup>2</sup> opera house including 2,000 seat Grand Theatre, 800 seat Play House, and 200 seat Black Box. The structure is a continuous doubly curved surface made of truss wall reinforcement cage and self compacting concrete.

**Ove Arup & Partners, Tokyo**

(October 1999 ~March 2005)

**Tomihoro Museum**

(aat+Makoto Yokomizo Architects)  
Competition winning entry for a 3,000m<sup>2</sup> museum dedicated to Tomihoro Hoshino. Involved in the project from the competition stage as project engineer. Completed in October 2004.

**Oura Town Hall**

(Taira Nishizawa Architects)  
Competition winning entry for a 10,000m<sup>2</sup> town hall. Responsible for developing an innovative steel fastening system approved by Minister of Land, Infrastructure and Transportation.

#### Smart Shoji Development Project

Product design consultant to a furniture manufacturer, Uchida Yoko, to develop their new line of space furniture products.

**Maibara Kindergarten**

(Shuhei Endo Architectural Institute)  
Project manager for a 1100m<sup>2</sup> public kindergarten. Roof features free-form timber grid shell structure that won 2004 American Wood Design Award.

**Maison Hermes**

(Renzo Piano Building Workshop)  
Project engineer for a 7,000m<sup>2</sup> commercial building in Tokyo. The structure employs "stepping column" seismic control concept used for the first time for building structure in the world.

**Mind Body Column**

(Antony Gormley)  
Collaboration with Antony Gormley, a British artist, for his 15m tall cast steel sculpture. It is base isolated with friction pendulum devices to reduce the earthquake force to the extremely slender sculpture.

**NTT Telecommunication Tower**

Structural engineer for a 150m tall cable-stayed telecommunication tower situated on top of a base-isolated 60m tall building. The tower was completed in 2004.

**Ove Arup & Partners, London**

(September 1997 ~ October 1999)

**Termibus Bilbao, Spain**

(Grimshaw Architects)  
Project engineer for a 1,500m<sup>2</sup> bus terminal in Bilbao, Spain. The bus terminal was designed with reusable unit parts, so that after 5 years, the terminal structure can be reused as 90 smaller bus stops throughout the city.

**Ove Arup & Partners, Tokyo**

(September 1996 ~ August 1997)

**Toyota Stadium, Japan**

(Kisho Kurokawa Architect & Associates)  
Structural engineer for a 45000-seat multi-purpose stadium. The permanent roofs are suspended from 92m tall inclined masts at 4 corners of the stadium. Air-inflated membrane retractable roofs travel along the edge of the permanent roof.