



K. Suresh Kumar, PhD, PEng, MASCE Senior Wind Engineering Consultant Principal RWDI / Managing Director of RWDI India

RWDI Consulting Engineers (India) Pvt. Ltd
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Overview

Present	Principal RWDI / Managing Director RWDI India
Past	Many roles at RWDI Engineer at Tata Consulting Engineers, Mumbai, India
Education	Post-doc, Eindhoven University of Technology, The Netherlands PhD, Concordia University, Montreal, Canada MSc (Engg), Indian Institute of Science, Bangalore, India BTech (Civil), Kerala University, Trivandrum, India

Experience

Principal / Managing Director RWDI India **Senior Wind Engineering Consultant** **RWDI Consulting Engineers & Scientists**

Privately Held; 400 employees; Architecture and Civil Engineering industry
May 2006 - TD (more than six years) | Trivandrum, Kerala, India

Project director for client projects (buildings, long span roof and bridges) through one of the four company boundary-layer wind tunnels focusing on topics such as: structural wind loads, wind-induced cladding pressures, and general industrial aerodynamics. RWDI (India) Managing Director responsible for the day-to-day commercial and technical operation of the business unit in India. Currently involved in building a new facility including a wind tunnel in India.

Many Roles at RWDI **RWDI Consulting Engineers & Scientists**

Privately Held; 400 employees; Architecture and Civil Engineering industry
June 2000 - April 2006 (six years) | Guelph, Ontario, Canada

Joined RWDI in 2000 as a Senior Engineer and, became a senior specialist and Associate in 2003. Extensive research and engineering consulting include wind loading and wind-induced vibrations of flexible earth-bound structures around the world. Worked on a wide range of structural projects covering wind loading on tall buildings, stadiums, airports, long span bridges, spires.

Engineer

TATA Consulting Engineers

Privately Held; 5000 employees; Architecture and Civil Engineering industry
January 1992 – June 1992 (six months) | Mumbai, India

Worked on seismic analysis of nuclear reactor buildings.

Education

Eindhoven University of Technology, The Netherlands

Post-doc (Wind Engineering)
1997 - 1999

Project Title: “A study on pressure equalization of rainscreen facades: Full-scale experiments and computer simulations”

Concordia University, Montreal, Canada

PhD – Wind Engineering
1992 - 1997

Thesis Title: “Simulation of Fluctuating Wind Pressures on Low Building Roofs”

Indian Institute of Science, Bangalore, India

MSc (Engg) – Wind Engineering
1989 - 1991

Thesis Title: “Effect of Landing Platforms and Exit Closure on the Drag Force near the Top Portions of Tall Stacks”

Kerala University, Trivandrum, India

BTech (Civil Engineering)
1984 – 1988

Professional Society Memberships

Member of American Association of Wind Engineers

2000 – TD

Member of American Society of Civil Engineers

1998 – TD

Member of Indian Society for Wind Engineering

2012 – TD

Certifications

Licensed Professional Engineer of Ontario, Canada
2000 – TD

Research Grants

National Research Council of Canada

2002 – 2006

Category: Individual Research Grant

Amount: \$15,000/year for four years

Topic: Pressure Equalization and Wind Loading of Rainscreen Walls

Master's Student: Sudeesh Kala (graduated in 2005 & working with RWDI in Singapore)

Professional Duties

Member

ASCE Environmental Wind Engineering Committee

Reviewer

Conference papers, research proposals for National Research Council of Canada, and journal papers for Journal of Wind Engineering and Industrial Aerodynamics, Wind & Structures, ASCE Engineering Mechanics, Engineering Structures

Supervisor

Co-supervised a master's student along with Prof. T. Stathopoulos of Concordia University, Montreal, Canada. The student is graduated and employed at RWDI

Publications

Journal Papers – 21

Conference Papers – 45

Non-Refereed Contributions – 4

Recent Publications

K. Suresh Kumar, Aswin V. Kumar (2014). "Assessment of wind loads on a unique building façade – A case study", ICBEST 2014, Aachen, Germany.

Aswin Kumar, Rahul PS, K. Suresh Kumar (2013). "Performance optimization of tall buildings subjected to wind – An Indian scenario", 8th Asia-Pacific Conference on Wind Engineering, Chennai, India.

K. Suresh Kumar, C. Cini, V. Sifton (2012). "Assessment of design wind speeds for metro cities of India", 7th Bluff Body Aerodynamics & Applications Colloquium (BBAA7), Shanghai, China.

K. Suresh Kumar (2011). "Commentary on the Indian Standard for Wind Loads", Proceedings of the 13th International conference on Wind Engineering, Amsterdam, The Netherlands.

Wind Engineering Consulting Experience

I had the privilege to work as a wind engineering consultant, dealing with structural and cladding wind-induced loads, on many iconic structures around the world in the form of tall buildings, airports, stadiums, bridges and special slender structures. Few of the prestigious projects involved are listed below.

- (1) Air Force Memorial Spires, Arlington, Virginia, USA
- (2) Burj Khalifa, Dubai, UAE
- (3) World One, Mumbai, India
- (4) Tacoma Narrows Bridge, Tacoma, Washington, USA
- (5) New York Times, New York, USA
- (6) Kowloon Mega Tower, Kowloon, Hong Kong
- (7) Main Street Bridge, Ohio, Columbus, USA
- (8) Heathrow Airport Terminal 5, London, UK
- (9) Ironton-Russell Cable-stayed Bridge, Ironton, USA
- (10) Mumbai Airport Terminal & Air Traffic Control Tower, India