



## 強風防災・耐風構造分野

---

- **Effects of incoming turbulent flow on across-wind response of square-section super-tall buildings and identification of aero-dynamic damping**
- **Vortex-induced vibration of bladeless wind turbines**
- **Aerodynamic characteristic of retractable dome roofs with various rise-span ratios**
- **Effects of environmental parameters on pressure measurement via tubing systems and the structural response of a building: Experimental study**
- **Proposal of fluctuating wind force coefficient model and power spectrum density function for bluff bodies with various corner shapes**
- **Displacement measurement of middle floor using global navigation satellite system**
- **Wind pressure distribution on multi-slope and multi-level roofs of low-rise light-weight steel residential buildings**
- **Comparison of external and internal pressures in tornado-like flow obtained using different simulators world-wide**
- **Impact of tornado vortex induced aerodynamic loads on structural projections in low rise buildings**

今年度の共同利用・共同研究テーマとして採択された強風防災・耐風構造分野の研究課題に関連する研究集会を2022年2月28日(月)にオンライン(zoom)で開催します。本研究集会では、低層・高層建物の形状の影響、開閉式ドームの空力特性、竜巻に関する最新の研究成果や問題点を把握し、今後取り組むべき課題を議論します。

奮ってご参加いただきたく、ご案内申し上げる次第です。

**日付：2022年2月28日(月) 9:50～14:40**

**会場：オンライン (zoom)**

**申込：下記のフォームにご記入ください。後日参加情報をメールにてお送りします。**

<https://forms.gle/J1xTLb6HDRVegCERA>

## PROGRAM

JST Time (Speaker's local time)	Title / Presenter / Affiliation
9:50-10:00	Opening address
10:00- 10:20 (20:00-20:20)	(Temp) Effects of environmental parameters on pressure measurement via tubing systems and the structural response of a building: Experimental study Yeo DH (National Institute of Standards and Technology)
10:20-10:40 (9:20-9:40)	Effects of aspect ratio on across-wind response and aero-dynamic damping of squared super-tall buildings Shan W (Beijing Jiaotong University)
10:40-11:00 (9:40-10:00)	Flow dynamics and conditional POD analyses of local severe suction on the side walls of square-section buildings Cao Y (Shanghai Jiao Tong University)
11:00-11:20	Wind pressure coefficients of elliptical central open dome Lee JH (Seoul National University of Science and Technology)
11:20-11:40	Wind pressure characteristic of retractable dome roofs with various rise-span ratios Cheon DJ (Seoul National University of Science and Technology)
11:40-12:00	Evaluation of design force coefficients on tall building considering non-exceedance probability Kim YC (Tokyo Polytechnic University)
12:00-13:00	Lunch break
13:00-13:20 (12:00-12:20)	Wind pressure distribution on multi-slope and multi-level roofs of low-rise light-weight steel residential buildings Li Y (Tongji University)
13:20-13:40	Displacement measurement of middle floor of building using multiple GNSS antennas Tabuchi G (Japan Aerospace Exploration Agency)
13:40-14:00	Study on wind forces acting on rectangular prism with corner modification and its generalization Yoshida A (Tokyo Polytechnic University)
14:00-14:20 (11:00-11:20)	Comparison of external and internal pressures in tornado-like flow obtained using different simulators world-wide Sabareesh G (Bits-Pilani Hyderabad Campus)
14:20-14:40 (11:20-11:40)	Impact of tornado vortex induced aerodynamic loads on structural projections in low rise buildings Goyal R (National Institute of Construction Management and Research)
14:40-	Closing address