

## Half-day Seminar Series in “Structural Use of Glass”

Organized by  
Façade Group, Hong Kong Institute of Steel Construction  
Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University

Supported by  
Structural Division, The Hong Kong Institution of Engineers (TBC)  
Hong Kong Façade Association (TBC)

Date:	24/5, 31/5, 14/6, 21/6, 28/6 and 5/7 of 2019
Venue:	Room Y301 for 14/6 seminar, Room TU103 for other seminars, The Hong Kong Polytechnic University, Hunghom, Kowloon
Time:	1:45 pm (registration) for 2:00pm to 5:00pm

### Highlights

Code of Practice for Structural Use of Glass was published in 2018 and fully implemented in February 2019. It involves considerable new techniques and considerations for design of glass used as structural elements. This seminar series is conducted by eminent speakers involved heavily with the drafting of the code with an objective to share the insight on the behavior, analysis and design of glass structures. It covers a wide range of knowledge from glass material, structural design of glass pane, application of laminated glass, glass connection, testing, measurement, practical consideration and quality control.

The seminars are specially tailored for a full spectrum of glass and façade engineering-related professionals such as engineers, surveyors, architect, project managers, facility managers and technical personnel who interact frequently with glass and façade or have been practicing façade engineering works and would like to better equip themselves by taking a closer look at the latest glass and façade engineering knowledge through case studies.

### Language

Cantonese supplemented by English.

### Fees & Registration

Course fee: HK\$3,200 (6 lectures); HK\$2,700 (5 lectures); HK\$2,200 (4 lectures);  
HK\$1,700 (3 lectures); HK\$1,200 (2 lectures); HK\$600 (1 lecture).

Registration will be accepted on a first-come, first-served basis as seats are limited.

This half-day seminar series is recommended for 3 CPD hours for each seminar.  
Those who complete all 6 lectures will receive a Certificate of Attendance.

Should you have further query, please do not hesitate to contact Mr. Tommy Li at [man@hkisc.org](mailto:man@hkisc.org).

## Programme

Lecture	Date & Venue	Theme	Speaker(s)
1	24/5/2019 (Fri)  <b>TU103</b>	<b><u>Latest Requirement on Structural Use of Glass</u></b> <ul style="list-style-type: none"> <li>• Safety Requirement against Broken Glass and the Design Provisions</li> <li>• Design Methodology</li> <li>• Connection of Glass Pane</li> <li>• Updated Testing and Measurement</li> </ul>	<b>Ir Dr. Dominic Yu</b> <i>Principal</i> Alpha Consulting Limited
2	31/5/2019 (Fri)  <b>TU103</b>	<b><u>Non-linear Integrated Design and Analysis</u></b> <ul style="list-style-type: none"> <li>• Introduction of second-order analysis and Direct analysis.</li> <li>• Application in Structural Steel works and Glass &amp; Façade Engineering.</li> <li>• Case Studies</li> </ul>	<b>Dr. Y.P. Liu</b> <i>Director</i> NIDA Technology Co. Ltd.
3	14/6/2019 (Fri)  <b>Y301</b>	<b><u>Laminated Glass</u></b> <ul style="list-style-type: none"> <li>• Design of Laminated Glass with or without Composite Action</li> <li>• Testing and Quality Control of Laminated Glass</li> <li>• Design of Laminated Glass Beam/Fin</li> <li>• Design of Glass Balustrade</li> </ul>	<b>Ir Dr. Dominic Yu</b> <i>Principal</i> Alpha Consulting Limited
4	21/6/2019 (Fri)  <b>TU103</b>	<b><u>Analysis and Design of Glass Pane</u></b> <ul style="list-style-type: none"> <li>• Analysis and Design of Glass Pane with and without Hole Opening</li> <li>• Design of Glass Canopy and Glass Wall</li> <li>• Design Provisions of Curtain Wall</li> </ul>	<b>Ms. HY Huang</b> <i>Associate</i> Alpha Consulting Limited
5	28/6/2019 (Fri)  <b>TU103</b>	<b><u>Quality Assurance &amp; Quality Control</u></b> <ul style="list-style-type: none"> <li>• Latest Requirement and Supervision for Heat Soak Process</li> <li>• Latest Requirement and Quality Control of Structural Glazing Application</li> <li>• Glass in Typhoon</li> </ul>	<b>Ir Dr. Dominic Yu</b> <i>Principal</i> Alpha Consulting Limited
6	5/7/2019 (Fri)  <b>TU103</b>	<b><u>Design Considerations of Curtain Wall and Façade Systems</u></b> <ul style="list-style-type: none"> <li>• Selection of system and Good Practice</li> <li>• Fire Protections and Smoke Seal</li> <li>• Non-Combustibility Materials</li> <li>• Performance Tests</li> </ul>	<b>Ir Dr. Dominic Yu</b> <i>Principal</i> Alpha Consulting Limited

**INDIVIDUAL REGISTRATION FORM**  
***(To be replied on or before 17 May 2019)***

**Half-day Seminar Series in “Structural Use of Glass”**

Registration Procedure:

1. Please complete and return the form by Email to [man@hkisc.org](mailto:man@hkisc.org) for preliminary registration.
2. Post the completed registration form together with a crossed cheque payable to “**Hong Kong Institute of Steel Construction Limited**” to Mr. Tommy Li, at:

Room ZS 972, Department of Civil and Environmental Engineering,  
The Hong Kong Polytechnic University, Hunghom, Kowloon, Hong Kong

*Please be reminded that application will not be accepted without submission of appropriate fee.  
The completed application form together with the appropriate fee must reach the Secretariat at least 7 days before the commencement date of the first lecture*

I would like to enroll the follow session(s). Please tick the appropriate box to indicate your choice:

<input type="checkbox"/> 6 lectures package: HK\$3,200	<b>Lecture:</b> <input type="checkbox"/> Lecture 1 – 24/5/2019 (Fri) <input type="checkbox"/> Lecture 2 – 31/5/2019 (Fri) <input type="checkbox"/> Lecture 3 – 14/6/2019 (Fri) <input type="checkbox"/> Lecture 4 – 21/6/2019 (Fri) <input type="checkbox"/> Lecture 5 – 28/6/2019 (Fri) <input type="checkbox"/> Lecture 6 – 5/7/2019 (Fri)
<input type="checkbox"/> 5 lectures package: HK\$2,700	
<input type="checkbox"/> 4 lectures package: HK\$2,200	
<input type="checkbox"/> 3 lectures package: HK\$1,700	
<input type="checkbox"/> 2 lectures package: HK\$1,200	
<input type="checkbox"/> 1 lecture package: HK\$600	
<b>Total Amount: HK\$</b> _____	
<b>Payment:</b> I enclosed a crossed cheque (No.: _____ Bank: _____) payable to “ <b>Hong Kong Institute of Steel Construction Limited</b> ” for the registration fee.	

Personal Details:

Full Name: \_\_\_\_\_

Company: \_\_\_\_\_ Position: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**GROUP REGISTRATION FORM**  
***(To be replied on or before 10 May 2019)***

**Half-day Seminar Series in “Structural Use of Glass”**

Registration Procedure:

1. Please complete and return the form by Email to [man@hkisc.org](mailto:man@hkisc.org) for preliminary registration.
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*Please be reminded that application will not be accepted without submission of appropriate fee.  
The completed application form together with the appropriate fee must reach the Secretariat at least 7 days before the commencement date of the first lecture*

We (**Group of 5+**) would like to enroll the follow session(s). Please tick the appropriate box to indicate your choice:

<input type="checkbox"/> 6 lectures package: HK\$3,000 x _____ person(s) = HK\$_____	<b>Lecture:</b> <input type="checkbox"/> Lecture 1 – 24/5/2019 (Fri) <input type="checkbox"/> Lecture 2 – 31/5/2019 (Fri) <input type="checkbox"/> Lecture 3 – 14/6/2019 (Fri) <input type="checkbox"/> Lecture 4 – 21/6/2019 (Fri) <input type="checkbox"/> Lecture 5 – 28/6/2019 (Fri) <input type="checkbox"/> Lecture 6 – 5/7/2019 (Fri)
<input type="checkbox"/> 5 lectures package: HK\$2,600 x _____ person(s) = HK\$_____	
<input type="checkbox"/> 4 lectures package: HK\$2,100 x _____ person(s) = HK\$_____	
<input type="checkbox"/> 3 lectures package: HK\$1,600 x _____ person(s) = HK\$_____	
<input type="checkbox"/> 2 lectures package: HK\$1,100 x _____ person(s) = HK\$_____	
<input type="checkbox"/> 1 lecture package: HK\$550 x _____ person(s) = HK\$_____	
<b>Total Amount: HK\$_____</b>	
<b>Payment:</b> We enclosed a crossed cheque (No.: _____ Bank: _____) payable to “ <b>Hong Kong Institute of Steel Construction Limited</b> ” for the registration fee.	

Contact Details:

Company: \_\_\_\_\_ Contact Person: \_\_\_\_\_

Postal Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Biography of speaker



*Ir Dr. Dominic YU*

*BEng (Civil), MSc (Fire), PhD (Str.), MHKIE, MHKISC, MHKICA  
Principal (Structural Fire and Façade), Alpha Consulting Limited*

Ir Dr. Dominic YU is a research engineering-based specialist in the structural design and use of glass. He is Principal (Structural Fire and Façade) of Alpha Consulting Limited, providing consultancy services on glass and facade engineering, non-linear integrated design and analysis, structural fire engineering analysis and design, steel and composite design etc. He is a Part-time Lecturer in Fire Safety Engineering Programme of University of Central Lancashire & CityU SCOPE. He is also a Visiting Lecturer for MSc Module of Façade Engineering in the Civil Engineering Programme at the Hong Kong Polytechnic University. Before joining Alpha Consulting Limited, Dr. Yu served as a Specialist Test Consultant and Approved Signatory of Research Engineering Development Façade Consultants Limited (RED Façade and Fire HOKLAS Testing Laboratory).

Dr. Yu obtained Doctoral Degree of Philosophy in Structural Engineering, Master Degree in Fire Safety Engineering, and Bachelor Degree in Civil Engineering. He worked as a Research Associate in the Department of Civil and Structural Engineering at the Hong Kong Polytechnic University to serve as a Technical Secretary of the consultancy study contributing to the “Code of Practice for the Structural Use of Steel 2005” and the 2011 version. He also compiled the Explanatory Materials of the Steel Code for Buildings Department. Dr. Yu is Professional Consultant for Consultancy Study of “Code of Practice for Structural Use of Glass 2018” for Buildings Department.

Dr. Yu is also actively serving the industry and the university by delivering various technical seminars and lectures. He delivered over 100 technical seminars in various institutions including HKIE, HKISC, HKIS, RICS, HKICW, CASA, HKPA, HKFA, BD, ArchSD, HD, etc., in which over 70 seminars since 2012 for the topics related to “Glass and Façade Engineering” including Statutory Requirements, Analysis, Design, Testing, Quality Control, Production, Practical Consideration, Installation and Inspection.



## Biography of speaker



**Dr. Yao-Peng Liu** is Director of NIDA Technology Co., Ltd, providing an analysis and design software for Structures, Industrial Solutions and Training. NIDA Technology Co. Ltd. (NCTL) is established to achieve the vision “Nonlinear Integrated Design and Analysis (NIDA)” and make practical use of “Second-order Direct Analysis Method” in structural engineering. NCTL aims to promote the industrialization of new research outcome and enhance the design level of engineering community.

Dr. Liu obtained Doctoral Degree of Philosophy in Civil and Structural Engineering at the Hong Kong Polytechnic University in 2009. His research interests include:

- Finite element analysis including numerical method, development of beam-column, cable and shell elements, plastic analysis, etc.;
- Second-order direct analysis and design of steel and/or composite structures;
- Performance-based design on earthquake engineering and fire engineering;
- Construction and offload analysis of long-span steel structures;
- Nonlinear large deflection analysis of flexible barrier system, etc.

Dr. Liu is a Guest Professor at Southwest Jiaotong University 西南交通大學 and Shenyang Jianzhu University 瀋陽建築大學. Dr. Liu has published over 80 international journal and conference papers. He also served as Associate Editor of SCI International Journal “Advanced Steel Construction”; Associate Editor of “Journal of Algorithms & Computational Technology”; and Progress in Steel Building Structures 《建筑钢结构进展》.

Apart from academic research, Dr. Liu has made significant contributions on the drafting work of the new Chinese Steel Code “GB50017-2017”. He involves in the development of advanced structural analysis program **NIDA** and **RCD**. He also provides engineering consultancy for the design of many large-scale steel structures and seismic evaluation of existing buildings in Hong Kong, Macau, Singapore, India and Myanmar.

## Biography of speaker



**Ms. Huang Hui-Yi** is an Associate of Alpha Consulting Limited, providing design and consultancy services on glass and facade engineering, non-linear integrated design and analysis etc. She has over 15 years of experience on glass & façade engineering, structural steel design and finite element analysis. Before joining Alpha Consulting Limited, she served as Designer of United Reliance (Panyu) Structural Glass Engineering Co., Ltd.

Ms. Huang obtained Master Degree in Engineering Mechanics and Bachelor Degree in Theoretical and Applied Mechanics. She worked as a Research Assistant in the Department of Civil and Structural Engineering at the Hong Kong Polytechnic University for the research of non-linear analysis, time-history analysis and modal analysis of steel structures. She also participated in programming of non-linear design and analysis software NIDA.