



**Professor Yoo Sang Choo**

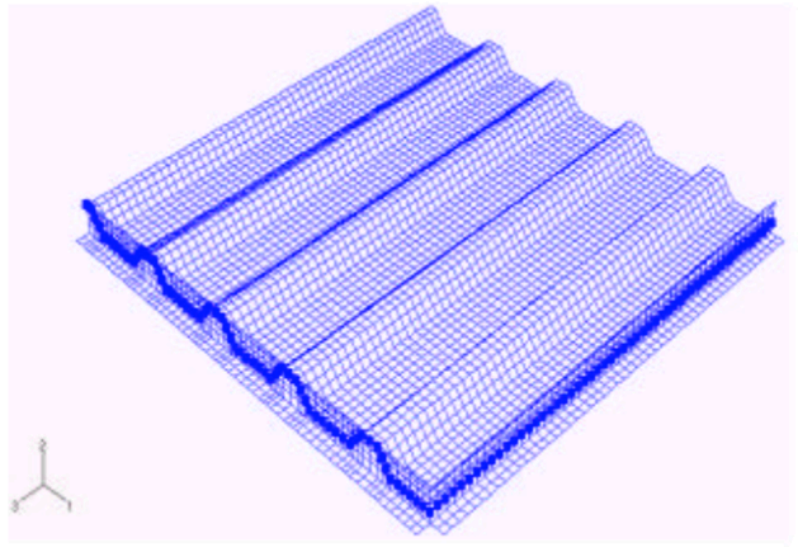


Figure 2: Quarter finite element model for corrugated panel.

From: J.W. Boh, L.A. Louca and Y.S. Choo, "Force based failure modeling of corrugated panel subjected to blast loading", Proceedings of the Thirteenth International Offshore and Polar Engineering Conference, Honolulu, Hawaii, USA, May 25-30, 2003

See:

[https://www.researchgate.net/profile/Ys\\_Cho](https://www.researchgate.net/profile/Ys_Cho)

<https://www.eng.nus.edu.sg/cee/staff/choo-yoo-sang/>

<https://scholar.google.com/citations?user=sRiFBtwAAAAJ&hl=en>

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### **Biography:**

Professor Yoo Sang Choo is an Adjunct Professor in National University of Singapore. He served as the 106th President of The Institute of Marine Engineering Science & Technology (IMarEST), and IMarEST's first President from Asia.

Professor Choo graduated from the University of Manchester with B.Sc. First Class Honours in 1977, and was supervised by Professor Michael R. Horne for his M.Sc. and Ph.D. projects. He worked on strength of plate girders subjected to combined loads, and structural behaviour of deepsea production systems. He then joined VO Offshore (U.K.) as Senior Structural Engineer to design floating and fixed offshore structures. He returned to Singapore in 1984 and worked for McDermott South East Asia on the design, analysis and installation of offshore platforms. He joined the National University of Singapore in 1987, and served as Director of CAE/CAD/CAM Centre from 1995 to 1999.

Professor Choo has served in many scientific and technical committees of international organizations and conferences, and hosted as Chairman or Co-Chairman for some of the conferences and symposia. He served as President of Singapore Structural Steel Society from 1992 to 1994, and in the Board of Directors, International Society of Offshore & Polar Engineers (ISOPE) during 2000-2002, and President of Society of Naval Architects & Marine Engineers Singapore from 2012-2015. He has been Guest Professor in Delft University of Technology during 2000-2012, delivering lectures on construction and installation of offshore structures. He was Guest Professor in University of Southampton (in 2011) and Seoul National University (in 2014), and was Royal Academy of Engineering Distinguished Visiting Fellow in University of Oxford (in 2014). He has served as member of Editorial Board for Journal of Marine Structures, International Journal of Ships and Offshore

Structures, Journal of Marine Engineering and Technology, Journal of Ocean Science & Technology and International Journal of Ocean Systems Engineering.

Professor Choo is Founding Director of the Centre for Offshore Research and Engineering (CORE) when it was set up in National University of Singapore in 2003, and continues to serve as Director (Research) of CORE. He is Chairman of Singapore Mirror Committee for International Standards Organisation TC67/SC7 Offshore Structures, and is member of International Institute of Welding Sub-commission XV-E: Tubular Structures. He represents Singapore in the Standing Committee of the International Ships and Offshore Structures Congress. Professor Choo has received a number of international and national recognitions, including Lifetime Achievement Award – Maritime Academics, two ISOPE Awards for his significant contributions to the International Society of Offshore & Polar Engineers. He and his research team won the Stanley Gray Award 2001 for best paper in offshore technology presented by IMarEST (UK), and the Prestigious Engineering Achievement Awards 2003 and 2015 presented by the Institution of Engineers Singapore. He is co-recipient of the James Watt Medal 2005 from the Institution of Civil Engineers (UK), and received the Stanley Gray Medal 2005 from IMarEST (UK). He has been invited to deliver keynote papers or presentations in many international conferences and symposia. He receives the Kurobane Award in 2015 from the International Institute of Welding (IIW) Sub-commission XV-E for his outstanding contributions and achievements in the field of tubular structures.

Professor Choo was conferred the Honorary Fellowship of Singapore Structural Steel Society (SSSS) in 2004 in recognition of his technical expertise, outstanding contribution and development in Offshore and Structural Engineering. He has served as technical consultant in major offshore projects, and initiated or participated in international joint industry projects. He is Principal Investigator in a number of R&D projects, including the Structural Integrity Management Programme on Offshore Structures, and Joint Industry Project on Grouted Joints.

### **Qualifications:**

BSc Hons (First Class) (1977), University of Manchester, England  
MSc (1979), University of Manchester, England  
PhD (1981), University of Manchester, England  
Fellow, The Institute of Marine Engineering Science & Technology (UK)  
Fellow, The Royal Institution of Naval Architects (UK)  
Fellow, American Society of Civil Engineers (USA)

### **Selected Publications:**

Choo, Y. S. and Kim, J. H. (2000). Dynamic stability of rectangular plates subjected to pulsating follower forces. *AIAA Journal*, 38, 353-361  
X.D. Qian, A. Romeijn, J. Wardenier and Y.S. Choo, “An automatic FE mesh generator for CHS tubular joints”, Proceedings of the Twelfth International Offshore and Polar Engineering Conference, Kitakyushu, Japan, May 26-31, 2002  
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Choo, Y. S., Liang, J. X., and Lim, L. V. (2003). Static strength of elliptical hollow section X-joint under brace compression. Proceedings of the 10th International Symposium on Tubular Structures, Madrid, Spain, 253-258.  
Gayathri, V., Shanmugam, N.E. and Choo, Y. S. (2004). “Concrete-filled tubular columns part 1- cross-section analysis.” *International Journal of Structural Stability and Dynamics*, 4(4), 459-478.  
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X.Qian, Robert H. Dodds Jr. and Y.S. Choo, “Elastic-plastic crack driving force for tubular X-joints with mismatched welds”, *Engineering Structures*, Vol. 27, pp 1419-1434, 2005

N. Choi, Y. S. Choo, and B. C. Lee, “A hybrid Trefftz plane elasticity element with drilling degrees of freedom,” *Computer Methods in Applied Mechanics & Engineering*, vol. 195, no. 33–36, pp. 4095–4105, 2006.

Choo, Y. S., Choi, N., and Lee, B. C. (2010). A new hybrid-Trefftz triangular and quadrilateral plate elements. *Applied Mathematical Modelling* 34(1): 14–23

W. Shen, Y.S. Choo, Stress intensity factor for a tubular T-joint with grouted chord, *Eng. Struct.*, 35 (2012), pp. 37–47