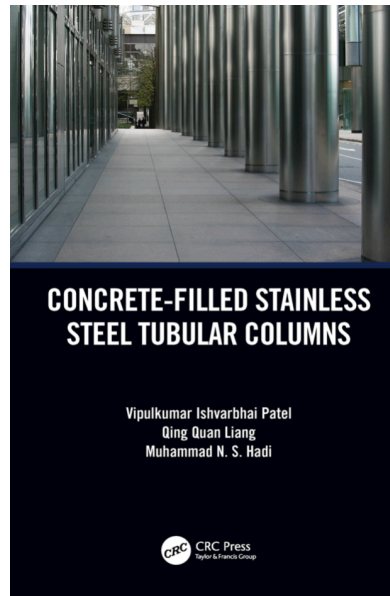




**Professor Vipulkumar I. Patel**



**Fig. 8.** Deformed shape for Specimen OST3-A.

The right-most image is from: Mostafa Fahmi Hassanein, Vipulkumar Ishvarbhai Patel, Mohamed Elchalakani and Huu-Tai Thai, "Finite element analysis of large diameter high strength octagonal CFST short columns", *Thin-Walled Structures*, February 2018, DOI: 10.1016/j.tws.2017.11.007

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### **Summary:**

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### **Selected Publications:**

#### **Book:**

Vipulkumar I. Patel, Qing Quan Liang and Muhammad N.S. Hadi, *Concrete-Filled Stainless Steel Tubular Columns*, CRC Press, Taylor & Francis, 2019

#### **Journal Articles, etc.:**

Vipulkumar Ishvarbhai Patel, "Nonlinear inelastic analysis of concrete-filled steel tubular slender beam-columns", PhD Dissertation, College of Engineering and Science, Victoria University, Melbourne Australia, January 2013

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Numerical analysis of circular concrete-filled steel tubular slender beam-columns with preload effects", *International Journal of Structural Stability and Dynamics*, Vol. 13, No. 3, 1250065, April 2013

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Numerical analysis of high-strength concrete-filled steel tubular slender beam-columns under cyclic loading", *Journal of Constructional Steel Research*, Vol. 92, pp 183-194, January 2014

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Behavior of biaxially-loaded rectangular concrete-filled steel tubular slender beam-columns with preload effects", *Thin-Walled Structures*, Vol. 79, pp 166-177, June 2014

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Nonlinear analysis of axially loaded circular concrete-filled stainless steel tubular short columns", *Journal of Constructional Steel Research*, Vol. 101, pp 9-18, October 2014

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Biaxially loaded high-strength concrete-filled steel tubular slender beam-columns, Part II: Parameter Study", *Journal of Constructional Steel Research*, Vol. 110, pp 200-207, July 2015

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Nonlinear analysis of circular high strength concrete-filled stainless steel tubular slender beam-columns", *Engineering Structures*, Vol. 130, pp 1-13, January 2017

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Nonlinear analysis of biaxially loaded rectangular concrete filled stainless steel tubular slender beam-columns", *Engineering Structures*, Vol. 140, pp 120-133, June 2017

Son Thai, Huu-Tai Thai, Thuc P. Vo and Vipulkumar Ishvarbhai Patel, "Size-dependant behaviour of functionally graded microplates based on the modified strain gradient elasticity theory and isogeometric analysis", *Computers & Structures*, Vol. 190, pp 219-241, October 2017

Mostafa Fahmi Hassanein, Vipulkumar Ishvarbhai Patel, Mohamed Elchalakani and Huu-Tai Thai, "Finite element analysis of large diameter high strength octagonal CFST short columns", *Thin-Walled Structures*, February 2018, DOI: 10.1016/j.tws.2017.11.007

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel and Muhammad N.S. Hadi, "Nonlinear analysis of rectangular concrete-filled double steel tubular short columns incorporating local buckling", *Engineering Structures*, Vol. 175, pp 13-26, 15 November 2018

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel and Mohammad N.S. Hadi, "Numerical analysis of axially loaded circular high strength concrete-filled double steel tubular short columns", *Thin-Walled Structures*, Vol. 138, pp 105-116, May 2019

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel, Muhammad N.S. Hadi, "Local-global interaction buckling of square high strength concrete-filled double steel tubular slender beam-columns", *Article 106244, Thin-Walled Structures*, Vol. 143, October 2019

Vipulkumar Ishvarbhai Patel, Qing Quan Liang, Muhammad N.S. Hadi, "Numerical study of circular double-skin concrete-filled aluminum tubular stub columns", *Engineering Structures*, Vol. 197, Article 109418, 15 October 2019

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel, Muhammad N.S. Hadi, "Experimental and numerical studies of square concrete-filled double steel tubular short columns under eccentric loading", *Engineering Structures*, Vol. 197, Article 109419, 15 October 2019

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel and Muhammad N.S. Hadi, "Behavior of eccentrically loaded double circular steel tubular short columns filled with concrete", *Engineering Structures*, Vol. 201, Article 109790, 15 December 2019

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, "Numerical simulations of circular high strength concrete-filled aluminum tubular short columns incorporating new concrete confinement model", *Article 106492, Thin-Walled Structures*, Vol. 147, February 2020

Vipulkumar Ishvarbhai Patel, "Analysis of uniaxially loaded short round-ended concrete-filled steel tubular beam-columns", *Engineering Structures*, Vol. 205, Article 110098, 15 February 2020

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel and Muhammad N.S. Hadi, "Nonlinear analysis of square concrete-filled double steel tubular slender columns incorporating preload effects", *Engineering Structures*, Vol. 207, Article 110272, 15 March 2020

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel and Muhammad N.S. Hadi, "Experimental and numerical investigations of eccentrically loaded rectangular concrete-filled double steel tubular columns", *Journal of Constructional Steel Research*, Vol. 167, Article 105949, April 2020

Vipulkumar Ishvarbhai Patel, Qing Quan Liang and Muhammad N.S. Hadi, “Numerical analysis of circular double-skin concrete-filled stainless steel tubular short columns under axial loading”, Structures, Vol. 24, pp 754-765, April 2020

Huu-Tai Thai, Trung-Kien Nguyen, Seunghye Lee, Vipulkumar Ishvarbhai Patel and Thuc P. Vo, “Review of Nonlinear Analysis and Modeling of Steel and Composite Structures”, International Journal of Structural Stability and Dynamics, Vol. 20, No. 4, 2030003, April 2020

Mizan Ahmed, Qing Quan Liang, Vipulkumar Ishvarbhai Patel and Muhammad N.S. Hadi, “Computational simulation of eccentrically loaded circular thin-walled concrete-filled double steel tubular slender columns”, Engineering Structures, Vol. 213, Article 110571, 15 June 2020