

Curriculum Vitae

Full name: Do Quang Thang

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Department of Naval Architecture
Faculty of Transportation Engineering
Nha Trang University
02 Nguyen Dinh Chieu St., Nha Trang City, Vietnam

EDUCATION

Nha Trang University	Nha Trang, Vietnam
Lecturer in Naval Architecture Department	Feb. 2019- Present
University of Ulsan	Ulsan, Korea
Ph.D. Naval Architecture and Ocean Engineering	Mar. 2016- Feb. 2019
Dissertation topic: Collision response of offshore cylindrical Structures and their residual strength.	
University of Ulsan	Ulsan, Korea
M.Sc. Naval Architecture and Ocean Engineering	Mar. 2014- Feb. 2016
Dissertation topic: Residual strength of damaged stiffened cylinder subjected to external hydrostatic pressure.	
Nha Trang University	Nha Trang, Vietnam
B.Sc. Naval Architecture and Ocean Engineering	Sep. 2005- Jan. 2010
Dissertation topic: Research on designing and building composite submarine model for Nha Trang Bay tourism.	

RESEARCH INTERESTS

- Nonlinear static and dynamic structural analysis
- Ocean Engineering, Structural Engineering
- Ultimate strength and damage assessments of steel-plated, cylindrical and thin-walled shell structures; particularly floating offshore structures.
- Design of crashworthy ship structures.
- Accidental loads on offshore structures.
- Experimental analysis of components of marine structures; structural impact and ultimate strength tests.

- Ship structural design
- Submarine structures
- Advanced and optimal structural design for stiffened cylinder structures

RESEARCH EXPERIENCE

Feb. 2019 – Present **Nha Trang University** **Vietnam**

Assistant Professor, Naval Architecture and Ocean Engineering.

Mar. 2014 – Feb.2019 **University of Ulsan** **Ulsan, Korea**

Ultimate Limit State Analysis Lab.

Graduate Research Assistant

Conducted and contributed to a significant number of experiments as follows:

- Dynamic mass impact tests on small-scale ring-stiffened cylindrical shells, stringer-stiffened cylindrical shells, tubular offshore wind turbine support structures at room and sub-zero temperature – arctic conditions and unstiffened steel plates focusing on rupture and perforation with reference to collision between offshore platforms and attending vessels.
- Ultimate strength tests on small-scale box girders having fracture damage.
- Implosion tests on small-scale aluminium tubes under external hydrostatic pressure.
- Repeated mass impact tests on single frame beams at room and sub-zero temperature with reference to ice loading on polar class vessels.
- External hydrostatic pressure testing of intact and damaged ring- and-stiffened cylindrical shells.
- External hydrostatic pressure testing of the intact and damaged ring- and stringer-stiffened cylinder cylinders – submarine pressure hull models or floating offshore structures.
- Large variety of experience gained through numerical analyses on buckling and ultimate strength of various marine structural elements and numerical simulations of collision using commercial software packages ABAQUS FEA and PATRAN.

Jun. 2010 - Feb. 2014

Nha Trang University, Vietnam

Naval Architecture Department

Lecturer

- Lecturer in Naval Architecture department, Nha Trang University

- Design wooden hull fishing boat.
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TEACHING RESPONSIBILITY

Undergraduate:

- Advised undergraduate students in their thesis.
- Subject for teaching: Strength of ships, Ship structural mechanics, Ship building and repairing technology; Introduction to Naval Architecture; Naval Architecture English

Graduate: Strength of ships

PUBLICATIONS and PRESENTATIONS

Journals:

International Journals

1. **Quang Thang Do**, Teguh Muttaqie, Sang-Hyun Park, Hyun Kyoung Shin. Predicting the collision damage of steel ring-stiffened cylinders and their residual strength under hydrostatic pressure. *Ocean Engineering* 2018; 169:326–43. (*SCI, Q1, IF: 3.07*)
2. **Quang Thang Do**, Teguh Muttaqie, Sang-Hyun Park, Hyun Kyoung Shin, Sang-Rai Cho. Ultimate strength of intact and dented steel stringer-stiffened cylinders under hydrostatic pressure. *Thin-Walled Structures* 2018; 132:442–60. (*SCIE, Q1, IF: 4.11*)
3. **Quang Thang Do**, Teguh Muttaqie, Hyun Kyoung Shin, Cho Sang-Rai. Dynamic lateral mass impact on steel stringer-stiffened cylinders. *International Journal of Impact Engineering* 2018; 116:105–26. (*SCI, Q1, IF: 3.64*)
4. Muttaqie, T., **Quang Thang Do**, Prabowo, A.R., 2019. Numerical studies of the failure modes of ring - stiffened cylinders under hydrostatic pressure. *Structural Engineering and Mechanics* 2019; 4, 431–443. (*SCIE, Q1, IF: 2.80*).
5. **Quang Thang Do**, Cho Sang-Rai, Hyun Kyoung Shin. Residual strength of damaged ring-stiffened cylinders subjected to external hydrostatic pressure. *Marine Structures* 2017; 56:186–205. (*SCIE, Q1, IF: 2.87*)
6. Sang-Rai Cho, Teguh Muttaqie, **Quang Thang Do**, Ha Young So, Jung-Min Sohn. Ultimate strength formulation considering failure mode interactions of ring-stiffened cylinders subjected to hydrostatic pressure. *Ocean Engineering* 2018; 161: 242–256. (*SCI, Q1, IF: 3.07*)
7. Cho Sang-Rai, Teguh Muttaqie, **Quang Thang Do**, Kim S, Kim SM, Han D-H. Experimental investigations on the failure modes of ring-stiffened cylinders under external hydrostatic pressure. *Int J Nav Archit Ocean Eng* 2018; 10: 711-729. (*SCI, Q1, IF: 2.24*)
8. Sang-Rai Cho, Muttaqie Teguh, **Quang Thang Do**, Park Sang Hyun, Kim Seung Min, So Ha Young, Jung Min Sohn. Experimental study on ultimate strength of steel-welded ring-stiffened conical shell under external hydrostatic pressure. *Marine structures* 2019; 67, 102634. (*SCIE, Q1, IF: 2.87*)

9. Mai The Vu, Mien Van, Duc Hong Phuc Bui, **Quang Thang Do**, Tuan-Tu Huynh, Sang-Do Lee and Hyeung-Sik Choi. Study on dynamic behavior of unmanned surface vehicle-linked unmanned underwater vehicle system for underwater exploration. *Sensors* 2020, 20, 1329. . (SCIE, Q1, IF: 3.28)
10. **Quang Thang Do**, Van Vu Huynh, Mai The Vu, Vu Van Tuyen, Nhut Pham-Thanh, Tran Hung Tra, Quang-Viet Vu, Sang-Rai Cho. A new formulation for predicting the extent damage of steel stiffened cylinders subjected to dynamic lateral mass impact. *Applied Sciences* 2020. (SCIE, Q1, IF: 2.47)
11. **Quang Thang Do**, Sang-Hyun Park, Sang-Rai Cho. Ultimate strength formulae of intact and damaged ring-stiffened cylinders under external hydrostatic pressure. *Chinese Journal of Ship Research*; 2019 14(2):25–34.
12. **Quang Thang Do**, Teguh Muttaqie, Dinh Ngoc Can Le, Byeong-Soo Seo, Sang-Hyun Park, Hyun Kyoung Shin. Fracture response and failure mode of H-shape tubular structures under dynamic mass impact. *International Journal of Impact Engineering*. (under review-2020) (SCI, Q1, IF: 3.17).
13. Aditya Rio Prabowo, **Quang Thang Do**, Cao B, Myung D. ScienceDirect ScienceDirect Land and Marine-based Structures subjected to Explosion Loading: A review on Critical Transportation and Infrastructure. *Procedia Structural Integrity*. 2020;27(2019):77–84.

Domestic Journals

1. **Quang Thang Do**. Research on designing and building the model of submarine”, *Nha Trang University Journal of Fisheries science and Technology*, Vietnam; 2013; 1: 32-38.
2. Vu Huynh Van, **Quang Thang Do**, Cong Luat Nguyen. Research on designing and building the model of tourist submarine. *Journal of Marine Science and Technology*, Vietnam; 2014 37: 86-91.
3. Vu Van Tuyen, **Quang Thang Do**, Le Van Hanh. Method of assessment the effect of uncertainties on the hull girder ultimate strength. *Journal of Marine Science and Technology*, Vietnam; 2020 61: 28-32.
4. **Quang Thang Do**, Van Nhu Huynh, Dinh Tu Tran. Numerical studies on residual strength of dented tension leg platforms under compressive load. *Journal of Science and Technology in Civil Engineering*; 2020 14 (3): 88–101.
5. **Quang Thang Do**. Deriving formulations for forecasting the ultimate strength of locally dented ring-stiffened cylinders under combined loads. *Science and Technology Development Journal*. 2020.

Presentations:

International Conferences

1. **Quang Thang Do**, Teguh Muttaqie, Sang-Hyun Park, Hyun Kyoung Shin, Cho Sang-Rai. Residual strength of dented stiffened cylinders under combined loads. In: *Proceeding of*

- Progress in the Analysis and Design of Marine Structures, Dubrovnik, Croatia, 2019: 116-125.
2. **Quang Thang Do**, Dinh Ngoc Can Le, BS Seo, HK Shin, S-R Cho. Fracture response of tubular T-joints under dynamic mass impact. ICCGS-2019, Lisbon, Portugal, 2019:75-84.
 3. **Quang Thang Do**, Sang-Hyun Park, Hyun Kyoung Shin, Kyu Nam Cho, Cho Sang-Rai. Ultimate strength formulations of intact and dented ring-stiffened cylinders under external hydrostatic pressure. In: Proceeding of the 32th Asian-Pacific Technical Exchange and Advisory Meeting on Marine Structures (TEAM), Wuhan University of Technology, China, 2018.
 4. **Quang Thang Do**, Teguh Muttaqie, Sang-Hyun Park, Hyun Kyoung Shin, Cho Sang-Rai. Residual strength of stringer-stiffened cylinder subjected to external hydrostatic pressure. In: Proceeding of the 3rd International Conference on Safety And Reliability of Ships, Offshore & Subsea Structures, Wuhan University of Technology, China, 2018.
 5. **Quang Thang Do**, Teguh Muttaqie, Hyun Kyoung Shin, Cho Sang-Rai. On the resistance of stringer-stiffened cylinders subjected to dynamic lateral mass impact. In: Proceeding of the 31th Asian-Pacific Technical Exchange and Advisory Meeting on Marine Structures (TEAM), Osaka, Japan, 2017.
 6. **Quang Thang Do**, Teguh Muttaqie, Hyun Kyoung Shin, Cho Sang-Rai. Numerical investigation on the responses of steel stringer-stiffened cylinders subjected to dynamic lateral mass impact. In: Proceeding of Annual Autumn Meeting of the Society of Naval Architects of Korea (SNAK), Yeosu, South Korea, 2017.
 7. **Quang Thang Do**, Hyun Kyoung Shin, Cho Sang-Rai. Residual strength of damaged stringer-stiffened cylinders subjected to hydrostatic pressure. In: Proceeding of Annual Spring Meeting of the Society of Naval Architects of Korea (SNAK), Busan, South Korea, 2017.
 8. **Quang Thang Do**, Hyun Kyoung Shin, Cho Sang-Rai. Numerical investigations on the buckling collapse behavior of dented ring-stiffened cylinders under combined axial compression and radial pressure. In: Proceeding of the 30th Asian-Pacific Technical Exchange and Advisory Meeting on Marine Structures (TEAM), Mokpo, South Korea, 2016.
 9. **Quang Thang Do**, Hyun Kyoung Shin, Hyun Heong Ahn, Jung Tae Kim, Cho Sang-Rai. Residual strength of damaged ring-stiffened cylinders subjected to hydrostatic pressure. In: Proceeding of the 7th International Conference on Collision and Grounding of Ships and Offshore Structures (ICCGS), Ulsan, South Korea, 2016.
 10. **Quang Thang Do**, Hyun Kyoung Shin, Cho Sang-Rai. Residual strength formulation for damaged ring-stiffened cylinders subjected to combined axial compression and radial pressure. In: Proceeding of Annual Autumn Meeting of the Society of Naval Architects of Korea (SNAK), Changwon, South Korea, 2016.
 11. **Quang Thang Do**, Hyun Kyoung Shin, Cho Sang-Rai. Numerical investigations on the collapse behavior of damaged stringer-stiffened cylinders subjected to hydrostatic pressure In: Proceeding of Annual Spring Meeting of the Society of Naval Architects of Korea (SNAK), Busan, South Korea, 2016.

12. **Quang Thang Do**, Cho Sang-Rai, Teguh Muttaqie. Derivation of strength formulation considering frame tripping for ring-stiffened cylindrical shell subjected to hydrostatic pressure. In: Proceeding of Annual Spring Meeting of the Society of Naval Architects of Korea (SNAK), Busan, South Korea, 2016.
13. Cho Sang-Rai, **Quang Thang Do**, Dac Dung Truong, Hyun Kyoung Shin. Numerical investigations on the behavior of the stiffened cylinders subjected to dynamic mass impact. Annual Autumn Meeting of the Society of Naval Architects of Korea, Busan, Korea, 2014.
14. **Quang Thang Do**, Cho Sang-Rai, Hyun Kyoung Shin. Numerical investigations on the residual strength of damaged ring-stiffened cylinders subjected to hydrostatic pressure. Annual Spring Meeting of the Society of Naval Architects of Korea, Jeju, Korea, 2015.
15. **Quang Thang Do**, Cho Sang-Rai, Hyun Kyoung Shin. Experiment investigation on the residual strength of locally damaged ring-stiffened cylinders subjected to hydrostatic pressure. Technical exchange meeting of Kyushu University and University of Ulsan 3 August 2015, Kyushu, Japan.
16. **Quang Thang Do**, Cho Sang-Rai, Hyun Kyoung Shin. Experimental and numerical investigations on the collapse behavior of damaged ring-stiffened cylinders subjected to hydrostatic pressure. Asian-Pacific Technical Exchange and Advisory Meeting on Marine Structures, TEAM 2015, Vladivostok, Russia, 2015.
17. Cho Sang-Rai, **Quang Thang Do**, Hyun Kyoung Shin. On the collapse behavior of dented ring-stiffened cylinders under external hydrostatic pressure. Annual Autumn Meeting of the Society of Naval Architects of Korea, Geo-je, Korea, 2015.