



## Professor Alice Mathai

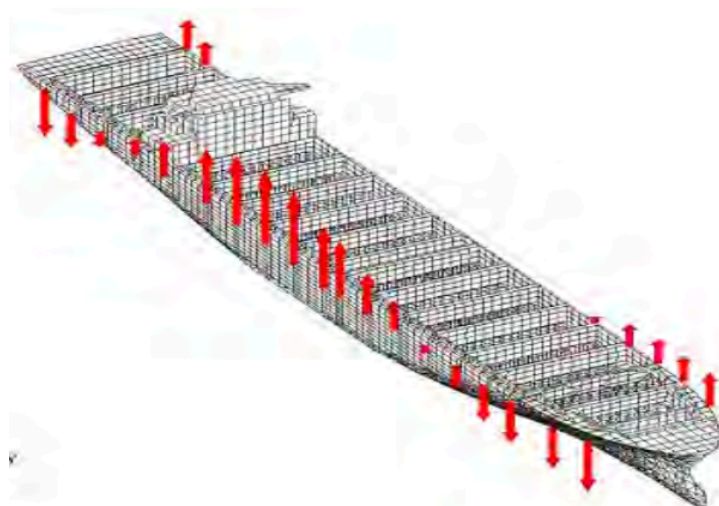


Fig.1. Container Ship Subjected to torsional action

From: Alice Mathai, George John P. and Mathew Jose Jin, "Ultimate Torsional Strength Analysis of Container Ship", International Journal of Engineering Science and Technology, (IJEST), ISSN:0975-5462, Vol. 5, No. 03, March 2013, pp 512-518

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Department of Civil Engineering  
Mar Athanasius College of Engineering, Kothamangalam, India

### Education:

BTech 1987 Calicut University, India  
MTech 1991 CET Trivandrum, India  
PhD 2006 Cochin University, India

### Courses Taught:

1. Engineering Mechanics, 2. Solid Mechanics, 3. Structural Analysis, 4. Advanced Structural Design, 5. Finite Element Analysis

### Selected Publications:

#### Journal Articles:

1. Alice Mathai & Nandakumar C.G , Finite Element Analysis of Submarine Hull, Journal of Institution of Engineers, (India) Marine Division, Vol. 85, pp 4-8 July 2004.
2. Sanya Maria Gomez & Alice Mathai, Numerical Analysis of Carbon Fibre Reinforced Air Craft Wing, International Journal of Earth Sciences and Engineering, ISSN 0974-5904, Volume 04, No 06 SPL, Oct. 2011, pp 648-651.
3. Sreelatha P.R. and Alice Mathai, Linear and Nonlinear Buckling Analysis of Stiffened Cylindrical Submarine Hull, International Journal of Engineering Science and Technology, (IJEST), ISSN:0975-5462, Vol. 4, No. 06,

June 2012, pp 3003-3009

4. Devika Venu, Dr. Alice Mathai, and Prof. Jayasree Ramanujan, Finite Element Analysis of Interface Ring of a Rocket Launcher, International Journal of Innovative Research in Science, Engineering and Technology, (IJIRSET), ISSN:2319-8753, Vol. 2, Issue 3, March 2013, pp 579-586
5. Alice Mathai, George John P. and Mathew Jose Jin, Ultimate Torsional Strength Analysis of Container Ship, International Journal of Engineering Science and Technology, (IJEST), ISSN:0975-5462, Vol. 5, No.03, March 2013, pp 512-518
6. Alice Mathai, Alice T.V. and Ancy Joseph, Shear Strength Assessment of Ship Hulls, International Journal of Engineering and Innovative Technology, (IJEIT), ISSN:2277-3754, Vol. 2, Issue 8, February 2013, pp161-165
7. Alice Mathai, George John P. and Jini Jacob, Direct Strength Analysis of Container Ships., International Journal of Engineering Research and Development (IJERD) ISSN:2278 -067X, Vol. 6, Issue 5, (March 2013), pp 98-106.
8. Alice Mathai, Suja Subramanian and George John P. Analytical Investigations of Carbon Fiber Reinforced Polymer Stiffened Cylindrical Submarine Hull, International Journal of Engineering Science and Technology, (IJEST), ISSN:0975-5462, Vol. 5, No. 07, July 2013, pp 1553-1558
9. Alice Mathai, Shiney Varghese and T.V. Alice (Department of Civil Engineering, Mar Athanasius College of Engineering, Kothamangalam), "Finite Element Buckling Analysis Of Stiffened Plates", International Journal of Engineering Research and Development, Vol. 10, No. 2, pp. 79-83, February 2014

#### **Conference Papers:**

1. Alice Mathai, Sreekala K, and Nandakumar C.G., Prediction of Collapse pressure for Submarine Hulls, Proceedings of 1st International Seminar SAFE'99 on Safety & Fire Engineering, Cochin, India, November 24-24, 1999.
2. Alice Mathai & Nandakumar C.G. , Analytical Investigations on Collapse of Cylindrical Submarine Shells, Proc. of National Conference on Material Processing and Failure Analysis, NIT Trichy-620015, June 19-20, 2003.
3. Alice Mathai & Nandakumar C.G. , Geometrical Nonlinear Analysis of Submarine Shells, International Congress on Computational Mechanics & Simulation, IIT Kanpur, 9-12 December 2004.
4. Alice Mathai & Nandakumar C.G. , Linear Buckling Analysis of Submarine Cylindrical Shells Using Finite Element Method, Proceedings of 5th International Conference of Computation of Shell and Spatial Structures, Salzburg, Austria, June1-4, 2005.
5. Jaya M. Chandran & Alice Mathai, Analytical Investigations on Stiffened Steel Silos, Proceeding of 2nd National Conference on Recent Advances in Civil Engineering, Kochi , India Dec. 3-4, 2006.
6. Mathew Jose Jin & Alice Mathai, Torsional Strength Analysis of Ship Hulls, Proceeding of 4th National Conference on Recent Advances in Civil Engineering, Kochi, India Sept.16-18,2010.

7. Jini Jacob & Alice Mathai. Direct Strength Analysis of Container Ships, Proceedings of 7th Structural Engineering Convection, Annamalainagar, T.N., India, Dec.8-10, pp 1287-1295, 2010