



**Professor Theodoro Antoun Netto**



From: Allan R. de Souza, Theodoro A. Netto and Ilson P. Pasqualino, "Materials selection for sandwich pipes under the combined effect of pressure, bending and temperature", Proceedings of the 26th International Conference on Offshore Mechanics and Arctic Engineering, OMAE2007, June 10-15, San Diego, California, 2007, Paper No. OMAE2007-29128, 2007

See:

<http://subsea.egr.uh.edu/faculty/netto>

[https://prabook.com/web/theodoro\\_antoun.netto/833692](https://prabook.com/web/theodoro_antoun.netto/833692)

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### **Summary:**

Theodoro Antoun Netto, Brazilian marine engineer, educator. Achievements include patents pending for Sandwich pipes for ultra-deep waters; research in more than 70 publications among technical reports and papers related to the offshore oil industry. President Brazilian Students Association, Austin, Texas, 1994—1995; Member of American Society of Mechanical Engineers (OMAE 2001 Conference Appreciation award).

### **Education:**

Bachelor of Science in Naval Architecture, Fed.U Rio de Janeiro, 1988.

Master of Science in Ocean Engineering, COPPE - Federal University Rio de Janeiro, 1991.

Doctor of Philosophy in Engineering Mechanics, University Texas, Austin, 1998.

### **Selected Publications:**

T. Netto, S. Estefen, Ultimate strength behaviour of submarine pipelines under external pressure and bending, J. Constr. Steel Res., 28 (5) (1994), pp. 137-151

Netto T.A. and Estefen S. F. (1996), "Buckle Arrestors for Deepwater Pipelines", International Journal of Marine Structures, Vol.9 pp.873-883.

S. Kyriakides, T. -D. Park and T. A. Netto, "On the design of integral buckle arrestors for offshore pipelines", Applied Ocean Research, Vol. 20, Nos. 1-2, February-April 1998, pp. 95-104, Special Issue: Offshore Technology in Focus

Netto, T.A., Kyriakides, S. and Ouyang, X., 1999. On the initiation and propagation of buckles on a beam on a nonlinear foundation. *ASME J. Applied Mechanics* 66, 418-426.

T. A. Netto and S. Kyriakides, "Dynamic performance of integral buckle arrestors for offshore pipelines. Part I: Experiments", *International Journal of Mechanical Sciences*, Vol. 42, No. 7, July 2000, pp. 1405-1423

T. A. Netto and S. Kyriakides, "Dynamic performance of integral buckle arrestors for offshore pipelines. Part II: Analysis", *International Journal of Mechanical Sciences*, Vol. 42, No. 7, July 2000, pp. 1425-1452

S. Kyriakides and T. A. Netto, "On the dynamics of propagating buckles in pipelines", *International Journal of Solids and Structures*, Vol. 37, Nos. 46-47, November 2000, pp. 6843-6867

S. Kyriakides and T. A. Netto, "Dynamic propagation and arrest of buckles in pipe-in-pipe systems", pp. 199–205 in *Proceedings of the 21st International Conference on Offshore Mechanics and Arctic Engineering (Oslo, 2002)*, vol. 4, edited by T. Jones et al., ASME, New York, 2002. Paper OMAE2002-28600.

S. Kyriakides and T. A. Netto, "On the dynamic propagation and arrest of buckles in pipe-in-pipe systems", *International Journal of Solids and Structures*, Vol. 41, No. 20, October 2004, pp. 5463-5482

S. F. Estefen, T. A. Netto, and I. P. Pasqualino, "Strength analyses of sandwich pipes for ultra deepwaters", *J. Appl. Mech. (ASME)* 72:4 (2005), 599–608.

Netto, T. A., Ferraz, U. S., Estefen, S. F. (2005). Effect of corrosion defects on burst pressure of pipelines. *Journal of construction steel research* 61:1985-2004

Oliveira Jr SC, Pasqualino IP, Netto TA (2006) Experimental analysis of metal-composite pipes under external pressure. In: *25th International conference on offshore mechanics and arctic engineering*. Hamburg: American Society of Mechanical Engineers, paper no. OMAE2006-92485, 2006

Allan R. de Souza, Theodoro A. Netto and Ilson P. Pasqualino, "Materials selection for sandwich pipes under the combined effect of pressure, bending and temperature", *Proceedings of the 26th International Conference on Offshore Mechanics and Arctic Engineering, OMAE2007*, June 10-15, San Diego, California, 2007, Paper No. OMAE2007-29128, 2007

A.A. Motta, E.A.P. Silva, N.F.F. Ebecken and T.A. Netto, "Offshore platforms survivability to underwater explosions: Part I", *WIT Transaction on Modeling and Simulation*, Vol. 45, WIT Press, 2007

Netto, T. A., Ferraz, U. S., Botto, A. (2007). On the effect of corrosion defects on the collapse pressure of pipelines. *International journal of solids and structures* 44:7597-7614

A.P. Teixeira, C. Guedes Soares, T.A. Netto and S.F. Estefen, "Reliability of pipelines with corrosion defects", *International Journal of Pressure Vessels and Piping*, Vol. 85, pp 228-237, 2008

L.-H. Lee, S. Kyriakides and T.A. Netto, "Integral buckle arrestors for offshore pipelines: Enhanced design criteria", *International Journal of Mechanical Sciences*, Vol. 50, No. 6, June 2008, pp. 1058-1064

Netto TA. On the effect of narrow and long corrosion defects on the collapse pressure of pipelines. *Appl Ocean Res.* 2009; 31(2): 75–81.

Netto TA. A simple procedure for the prediction of the collapse pressure of pipelines with narrow and long corrosion defects—correlation with new experimental data. *Appl Ocean Res.* 2010; 32(1): 132–134

Luciana Loureiro Silva and Theodore A. Netto, "On the dynamic collapse of cylindrical shells under hydrostatic and impulsive pressure loadings", *Mecánica Computacional Vol XXIX*, págs. 7787-7797, Eduardo Dvorkin, Marcela Goldschmit, Mario Storti (Eds.) Buenos Aires, Argentina, 15-18 Noviembre 2010

Sergio B. Cunha and Theodoro A. Netto, "Analytical solution for stress, strain and plastic instability of pressurized pipes with volumetric flaws", *International Journal of Pressure Vessels and Piping*, Vol. 89, pp 187-202, January 2012

L. A. L. Martins, F. L. Bastian, and T. A. Netto, "Structural and functional failure pressure of filament wound composite tubes," *Mater. Des.*, vol. 36, pp. 779–787, Apr. 2012.

Luciana L. Silva, Marcelo A. Savi, Paulo C.C. Monteiro Jr. and Theodoro A. Netto, "On the nonlinear behavior of the piezoelectric coupling on vibration-based energy harvesters", *Shock and Vibration*, Vol. 2015, Article ID 739381, 2015

Helio da Cunha Bisaggio and Theodoro Antoun Netto, "Predictive analyses of the integrity of corroded pipelines based on concepts of structural reliability and Bayesian inference", *Marine Structures*, Vol. 41, pp 180-199, April 2015

N.S. Silva, T.A. Netto, F.L. Bastian and R.A.F. Silva, "On the effect of the ply stacking sequence on the failure of composite pipes under external pressure", *Marine Structures*, Vol. 70, Article 102658, March 2020