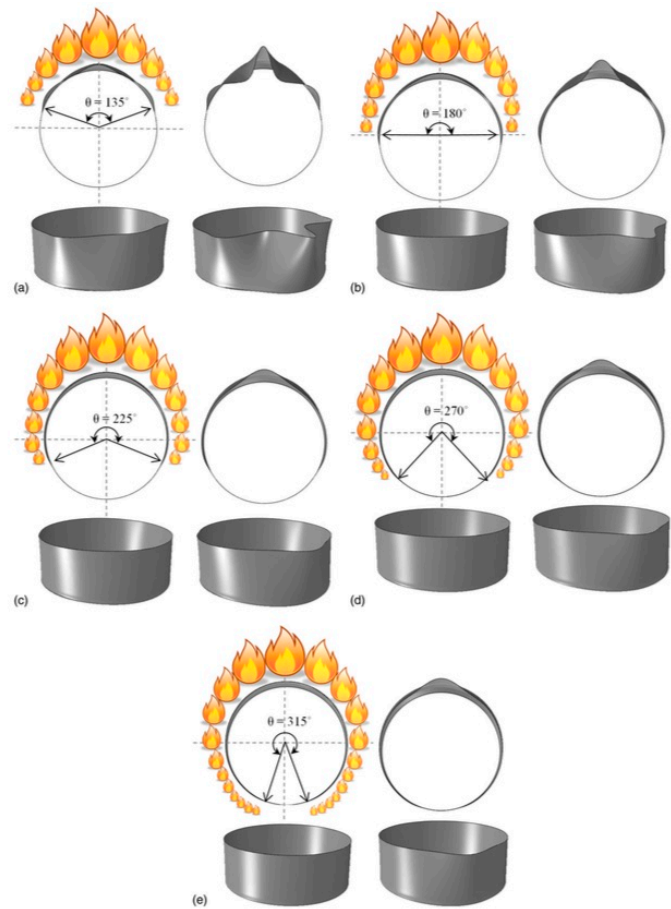




**Professor Jean C. Batista-Abreu**



**Fig. 14.** Buckling (left) and postbuckling (right) deformed configuration of open tanks with different areas exposed to fire, corresponding to (a) 135; (b) 180; (c) 225; (d) 270; (e) 315°

From: Batista-Abreu, J. and Godoy, L., "Thermal Buckling Behavior of Open Cylindrical Oil Storage Tanks under Fire." ASCE Journal of Performance of Constructed Facilities, Vol. 27, Special Issue: Analysis of Structural Failures Using Numerical Modeling, pp. 89–97, 2013

See:

<https://www.bucknell.edu/academics/engineering-college-of/academic-departments/mechanical-engineering/faculty-and-staff/jean-batista-abreu>

<https://scholar.google.com/citations?user=RUGs44IAAAAJ&hl=en>

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**Selected Publications:**

- Burgos, C.A., Batista Abreu, J.C., Calabró, H.D., Jaca, R.C., Godoy, L.A. (2015) Buckling estimates for oil storage tanks: Effect of simplified modeling of the roof and wind girder, *Thin-Walled Structures* 91 (2015) 29-37
- Batista Abreu, J.C, Vieira Jr., L.C.M., Abu-Hamd, M., Schafer, B.W. (2014), Review: development of performance-based fire design for cold-formed steel, *Fire Science Reviews* 3 (1): 1
- Li, Z., Batista Abreu, J.C., Leng, J., Ádány, S., Schafer, B.W., Review: Constrained finite strip method developments and applications in cold-formed steel design, *Thin-Walled Structures* 81 (0) 2-18, August 2014
- Godoy, L.A., Batista Abreu, J.C. (2012), Buckling of fixed-roof aboveground oil storage tanks under heat induced by an external fire, *Thin-Walled structures*, 52 (2012) pp. 90-101
- Batista-Abreu, J. and Godoy, L., "Thermal Buckling Behavior of Open Cylindrical Oil Storage Tanks under Fire." *ASCE Journal of Performance of Constructed Facilities*, Vol. 27, Special Issue: Analysis of Structural Failures Using Numerical Modeling, pp. 89-97, 2013
- Batista-Abreu, J., and Godoy, L. A. (2009). "Investigación de causas de explosiones en plantas petrolíferas: El accidente de Buncefield." *Rev. Int. Desastres Nat. Accid. Infraestruct. Civ.*, 9(1-2), 187-202.
- Batista-Abreu, J., and Godoy, L. A. (2011). "Investigación de causas de explosiones en una planta de almacenamiento de combustible en Puerto Rico." *Rev. Int. Desastres Nat. Accid. Infraestruct. Civ.*, 11(2), 109-123.