Tomasz Wierzbicki

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Education:

Ph.D. in Applied Mechanics, 1965Institute of Fundamental Technological Research, Warsaw, PolandS.M. in Engine Design, 1960Warsaw Technical University, Warsaw, PolandB.S. I took a unified program that led directly to the Master of Science.

MIT Service:

1983 to date: Professor of Applied Mechanics, Department of Ocean Engineering, MIT; currently the Department of Mechanical Engineering

Principal Publications in last five years: (Selected from last two years)

- 1. Elham Sahraei1, Rich Hill, Tomasz Wierzbicki, (2011) Calibration and finite element simulation of pouch lithium-ion batteries for mechanical integrity, Journal of Power Sources, Volume 201, 1 March 2012, Pages 307–321
- Luo, M., Wierzbicki, T. (2010). "Numerical failure analysis of a stretch-bending test on dual-phase steel sheets using a phenomenological fracture model", International Journal of Solids and Structures, Volume 47, Issue 22-23, Pages 3084-3102.

- 3. Li, Y., Wierzbicki, T., Sutton, M. et al., (2010). "Mixed mode stable tearing of thin sheet Al6061-T6 specimens: experimental measurements and finite element simulations using a Modified Mohr-Coulomb fracture criterion", International Journal of Fracture, 168(1), 53-71.
- 4. Li, Y., Luo, M., Gerlach, J. and Wierzbicki T. (2010). "Prediction of Shear-Induced Fracture in Sheet Metal Forming", Journal of Materials Processing Technology, Volume 210, Issue 14, Pages 1858-1869.
- Li Y., Wierzbicki T., 2010. "Prediction of plane strain fracture of AHSS sheets with postinitiation softening", International Journal of Solids and Structures, Volume 47, Issue 17, Pages 2316-2327.
- 6. Beese, A. M., Luo M., Li, Y., Bai, Y., Wierzbicki, T, "Partially coupled anisotropic fracture model for aluminum sheets", Engineering Fracture Mechanics, Volume 77, Issue 7, Pages 1128-1152 (2010).
- 7. Bai, Y., Wierzbicki, T., "Application of the extended Coulomb-Mohr model to ductile fracture", International Journal of Fracture, Vol. 161, p.1-20 (2010)..
- 8. Y. Bao and T. Wierzbicki (2005), "On the cut-off value of negative triaxiality for fracture", Engineering Fracture Mechanics, 72(7): 1049-1069.
- 9. Bao, Y.B. and Wierzbicki, T. "On fracture locus in the equivalent strain and stress triaxiality space," International Journal of Mechanical Sciences, 2004, 46(1): 81-98.

Scientific & Professional Societies:

Society of Naval Architects and Marine Engineers American Society of Mechanical Engineering International Society of DE

Honors & Awards:

Maximilian T. Huber Award for the best work in Mechanics, Polish Academy of Sciences, 1974 Chairman of the Euromech Colloquium No. 121 on "Dynamics and Crushing of Plastic Structures", 1978

Chairman of the Summer School on "Dynamics of Plastic Structures", International Center for Mechanical Sciences, Udine, Italy, 1979

Polish Academy of Sciences award for the book "Design of Structures to Dynamic Loads", 1979 Co-chair, First International Symposium, "Structural Crashworthiness", UK, 1983

Co-chair, Second International Symposium, "Structural Failure", Cambridge, MA, 1988

Alexander von Humboldt Foundation, Senior US Scientist Award, 1988-1989

Co-chair, Third International Symposium, "Structural Crashworthiness and Failure", UK, 1993 Member of the Editorial Boards of the International Journal of Impact Engineering and International Journal of Vehicle Design