

Dr. J. Rasty, Ph.D., PE, MBA

BOOK/EDITORIAL PUBLICATIONS:

1. P. Worsley, J. Baired, and J. Rasty, Book Section: "Mechanical Aspects," Explosively Driven Pulsed Power – Helical Magnetic Flux Compression Generators, Springer Publishing, 2005, pp. 53-125.
2. J. Rasty, A. Ertas, and R. Couvillion, Editors, "Proceedings of the Third Joint ASME/SDPS International Graduate Student Technical Conference", March 31- April 2, 2005, Lubbock, TX
3. J. Rasty, A. Ertas, and R. Couvillion, Editors, "Proceedings of the Second Joint ASME/SDPS International Graduate Student Technical Conference", March 25-27, 2004, Longview, TX
4. J. Rasty, R. Couvillion, and A. Ertas, Editors, "Proceedings of the First Joint ASME/SDPS International Graduate Student Technical Conference", March 28-29, 2003, Houston, TX
5. Bellet, M., Rasty, J., Editors, "Volume 3: Composite Materials, Manufacturing, Fatigue, and Fracture," ASME Engineering Systems Design and Analysis, ASME Publishing, 1996.
6. East, I.I., Veniali, F., Rasty, J., Gransberg, D.D., Ertas, A., Editors, "Integrated Design and Process Technology," Society for Design and Process Science Publishing, 1996.
7. Rasty, J., Book Section: "Residual (Internal) Stress Considerations in Design," The Engineering Design Process, A. Ertas, and J.C. Jones, John Wiley & Sons Publishing, 1993.

JOURNAL PUBLICATIONS

8. Chwan-Li Shen, James K. Yeh, Jahan Rasty, Yong Li, and Bruce A. Watkins, "Protective effect of dietary long chain n-3 PUFA on bone loss in intact middle-aged male rats," *British Journal of Nutrition* (Accepted Nov. 8, 2005).
9. Rasty, J., Le X., Baydogan, M., and Cardenas-Garcia, J.F., "Measurement of Residual Stresses in Neuclear-grade ZR-4(R) Tubes: Effect of Heat Treatment," *Journal of Experimental Mechanics* (Accepted Nov. 2005)
10. Barry J. Henry, MD, Mike Kenison, BS, Catherine McVay, PhD, Rial Rolfe, PhD, Suzanne Graham, MD, Jahan Rasty, PhD, James Slauterbeck, MD, Eugene J. Dabezies, MD, "The Effect of Local Hematoma Blocks on Early Fracture Healing," *Feature Article in the Journal of Orthopedics*, Vol. 25, No. 11, November 2002, pp. 1259-1262.
11. Sofuoglu, H., Rasty, J., "Flow Behavior of Plasticine used in Physical Modeling of Metal Forming Processes," *Journal of Tribology International*, Vol. 33, Issue 8, October 2000, pp. 523-529.

12. Sofuoglu, H., Rasty, J., "On the Measurement of Friction Coefficient Utilizing the Ring Compression Test" *Journal of Tribology International*, Vol. 32, Issue 6, January 2000, pp. 327-335.
13. Rasty, J., Kolarik, W., and Chen, B.M., "Designing Surface Mounted Components for High Reliability," *Journal of Energy Resources Technology*, Vol. 116, No. 3, September 1994, pp. 232-239.
14. Rasty, J., and Tamhane, P., "Application of the Finite Element Method to the Quasi-Static Thermoelastic Analysis of Prestress in Multilayer Pressure Vessels," *ASME Transactions, Journal of Pressure Vessel Technology*, Vol. 116, No. 3, August 1994, pp. 254-260.
15. Hashemi, J., Rasty, J., Li, S., and Tseng, A.A., "Integral Hydro-Bulge Forming of Single and Multi-Layered Spherical Pressure Vessels," *ASME Transactions, Journal of Pressure Vessel Technology*, Vol. 115, No. 3, August 1993, pp. 249-255.
16. Sofuoglu, H., Rasty, J., "3-D Simulation of the Extrusion Process Utilizing the Physical Modeling Technique," *Journal of Energy Sources Technology*. Vol. 115, No. 1, March 1993, pp. 32-40.
17. Rasty, J. and Chapman, D., "Isothermal and Thermomechanical Finite-Element Analysis of the Tube Drawing Process Utilizing a Fixed, Tapered Plug," *Journal of Materials Engineering and Performance*, Vol. 1, No.4, August 1992, pp. 547-554.
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CONFERENCE PUBLICATIONS & PRESENTATIONS:

19. Murat Baydogan, Hüseyin Çimenoglu, E. Sabri Kayali, and Jahan Rasty, "Effect of Retrogression and Re-aging Treatment on Stress Corrosion Cracking Resistance of 7075 Aluminum Alloy", Proceedings of the 135th TMS (The Minerals, Metals & Materials Society) Conference, March 12-16, 2006, San Antonio, TX.
20. Yanzhang Ma, Jianjun Liu, Chun-Xiao Gao, Allen White, W. N. Mei, and Jahan Rasty, "High-pressure X-ray diffraction study of the giant dielectric constant material CaCu₃Ti₄O₁₂: evidence of stiff grain surface", 2006 American Physical Society (APS) March Meeting, March 13-17, 2006; Baltimore, MD.
21. J. Rasty, M. Baydogan, K. Ramkumar, and J.F. Cardenas-Garcia, "Measurement of Residual Stresses in Nuclear-Grade Zircaloy-4(R) Tubes – Effect of Heat Treatment," 2nd Residual Stress Summit, August 10-12, 2005, Vancouver, Canada.
22. K.V. Ramkumar, and J. Rasty, "Effect of Combined Corrosion and Residual Stress on Fatigue Failure", proceedings of the 2004 Society for Experimental Mechanics (SEM) X International Congress, June 7-10, 2004, Costa Mesa, California.

23. J.F. Cardenas-Garcia, and J. Rasty, "The Indentation Test Revisited: Obtaining Poisson's Ratio", proceedings of the 2004 Society for Experimental Mechanics (SEM) X International Congress, June 7-10, 2004, Costa Mesa, California.
24. Chawn-Le Shen, Dale M. Dunn, James, K. Yeh, Bruce A. Watkins, Yong Li, Ali Raja, and Jahan Rasty, "Dietary n-3 Polyunsaturated Fatty Acids Prevent Aging-induced Bone Loss in Male Rats." To be presented at the Experimental Biology Conference, Washington D.C., April 2004.
25. David Hemmert, John Mankowski, Jahan Rasty, Andreas Neuber, Xiaobin Le, James Dickens, and Magne Kristiansen, "Conductivity Measurements of Explosively Shocked Aluminum and OFHC Copper Used for Armature Material in a Magnetic Flux Compression Generator," Presented at the Pulsed Power Conference, Dallas, Texas, June 16-18, 2003.
26. Jahan Rasty and Xiaobin Le, James Dickens, Andreas Neuber, and Magne Kristiansen, "Design Criteria for Prevention of Armature Turn-Skipping in Helical Magnetic Flux Compression Generators," Presented at the Pulsed Power Conference, Dallas, Texas, June 16-18, 2003.
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28. Rasty, J., Le, X., Neuber, A., Dickens, J., Kristiansen, M. "Effect of Scaling on Armature Expansion Angle in Magnetic Flux Compression Generators," Proceedings of the Ninth International Conference on Megagauss Magnetic Field Generation and Related Topics, Moscow-St. Petersburg, Russia, July 7-14, 2002, pp. 191-196.
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30. Rasty, J., Le, X., Neuber, A., Dickens, J., and Kristiansen, M." Experimental and Numerical Investigation of the Armature/Stator Contact in Magnetic Flux Compression Generators," Proceedings of the 28th IEEE International Conference on Plasma Science, Las Vegas, Nevada, June 17-22, 2001
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35. Dutta, N., Rasty, J., "Determination of Elastic-plastic Boundary around Cold-expanded Holes Using Elastic Strain," Proceedings of the 1999 Society for Experimental Mechanics (SEM) Spring Conference, June 7-9, 1999, Cincinnati, Ohio.
36. Dutta, N., Rasty, J., and Rassaian, M., "Evolution of Internal Stresses in Co-Drawing Bimetallic Rods," Proceedings of the 1998 Society for Experimental Mechanics (SEM) Spring Conference, June 1-3, 1998, Houston, Texas.
37. Dutta, N., Rasty, J., and Rassaian, M. "Finite Element Analysis of Elastic-Plastic Zone Around Cold-Expanded Holes," Post-Conference Proceedings of the 1997 Society for Experimental Mechanics (SEM) Spring Conference, June 2-5, 1997, Bellevue, Washington, pp. 108-115.
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40. Rasty, J., H. Shin, "The Effect of Machining Operations on Changes in Curvature and Redistribution of Residual Stresses," *Proceedings of the 1995 ASME/Winter Annual Meeting - Symposium on Recent Advances in Structural Mechanics*, November 12-17, 1995, San Francisco, CA, PVP-Vol. 321/NE-Vol.18, pp. 65-78.
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42. Rasty, J. "Application of the Sach's Boring-out and Finite Element Techniques to the Measurement of Residual Stresses In Oxygen-free High Conductivity Copper Tubes," First International Conference on Processing Materials for Properties, November 7-10, 1993, Honolulu, Hawaii.

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