

## Publications : : 1998

192. G.E. Totten, N.A. Clinton and P.L. Matlock, "Poly(Ethylene Glycol) and Derivatives as Phase Transfer Catalysts", *J.M.S. - Rev. Macromol. Chem. Phys.*, **1998**, C38 (1), p. 77-142.
193. G.E. Totten, R.J. Bishop and G.M. Webster, "Water-Glycol Hydraulic Fluids: Technological Advancements and Limitations", 11th International Colloquium, Industrial and Automotive Lubrication Vol. III, Ed. W.J. Bartz, Technische Akademie Esslingen, 13-15 January, 1998, p. 1803-1809.
194. L.D. Wedeven, K. Ludema and G.E. Totten, "Bench Test Modeling of Antiwear Properties of Hydraulic Fluids: A Proposal", 11th International Colloquium, Industrial and Automotive Lubrication Vol. III, Ed. W.J. Bartz, Technische Akademie Esslingen, 13-15 January, 1998, p. 1817-1824..
195. G.E. Totten, G.M. Webster, R.R. Blackwood, L.M. Jarvis and T. Narumi, "Chute Quench Designs", *Jinshu Rechuli - Heat Treatment of Metals*, **1998**, 1, p. 31-34.
196. D. Hanna, G.E. Totten and G.M. Webster, "Water-Glycol Hydraulic Fluids: A New Look", *Proceed. of the 4th Annual Fuels & Lubes Asia Conference*, January 14-16, 1998, Singapore, p. 14 - 14-21.
197. G.E. Totten, Y.H. Sun, G.M. Webster, C.E. Bates and L.M. Jarvis, "Computerized Steel Hardness Predictions Based on Cooling Curve Analysis", *SME Technical Paper*, Paper Number CM98-203, 1998.
198. G.E. Totten, Y.H. Sun, B. Liscic, N.I. Kobasko and S.W. Han, "Polymer Quenching Technology: An Overview", 11<sup>th</sup> Congress of the International Federation of Heat Treatment and Surface Engineering – 4<sup>th</sup> ASM Heat Treatment and Surface Engineering Conference in Europe *Proceedings Vol. 1*, 19-21 October, 1998, Florence Italy, p. 141-150.
199. G.E. Totten, Y.H. Sun, H.M. Tensi and B. Liscic, "Development of Cooling Curve Analysis Standards With Agitation: A Status Report", 11<sup>th</sup> Congress of the International Federation of Heat Treatment and Surface Engineering – 4<sup>th</sup> ASM Heat Treatment and Surface Engineering Conference in Europe *Proceedings Vol. 1*, 19-21 October, 1998, Florence Italy, p. 171-180.
200. G.E. Totten, R.J. Bishop Jr. Y.H. Sun and L. Xie, "Hydraulic System Wear By Cavitation: A Review", *SAE Technical Paper Series*, Paper Number 982036, 1998.
201. G.M. Gent, R.J. Bishop Jr. and G.E. Totten, "Review of ASTM D-2882 Hardware Problems and Suggested Solutions", *SAE Technical Paper Series*, Paper Number 982021, 1998.
202. H.M. Melief, G.E. Totten and R.J. Bishop, "Overview of the Proposed Rexroth High-Pressure Piston Pump Testing Procedure for Hydraulic Fluid Qualification", *SAE Technical Paper Series*, Paper Number 982022, 1998.
203. B. Liscic and G.E. Totten, "From GM Quenchometer via Cooling Curve Analysis to Temperature Gradient Method", in 18th Heat Treating Society Conference *Proceedings*, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 601-609.
204. G.E. Totten, Y. Sun, G.M. Webster, L.M. Jarvis and C.E. Bates, "Quenchant Selection", in 18th Heat Treating Society Conference *Proceedings*, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 183-191.
205. X. Chen, L. Meekisho and G.E. Totten, "Computer-Aided Analysis of the Quenching Probe Test", in

18th Heat Treating Society Conference Proceedings, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 545-551.

206. N.I. Kobasko, G.E. Totten, G.M. Webster and C.E. Bates, "Comparison of Cooling Capacity of Poly(Alkylene Glycol) Quenchants with Water and Oil", in 18th Heat Treating Society Conference Proceedings, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 559-567.
207. K. Lainer, H.M. Tensi and G.E. Totten, "Comparative Cooling Curve Performance of Two Vegetable Oils and a Mineral Oil", in 18th Heat Treating Society Conference Proceedings, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 568-574.
207. R.R. Blackwood, L.M. Jarvis, D.G. Hoffman and G.E. Totten, and "Conditions Leading to Quench Cracking Other than Severity of Quench", in 18th Heat Treating Society Conference Proceedings, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 575-585.
208. M. Tiryakioglu and G.E. Totten, "Quenching Aluminum Components in Water: Problems and Alternatives", in 18th Heat Treating Society Conference Proceedings, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 156-165.
209. N.I. Kobasko, M.A. Aronov, G.E. Totten and A. Sverdlin, "Methods and Equipment for Implementation of Intensive Quenching" in 18th Heat Treating Society Conference Proceedings, Eds., H. Walton and R. Wallis, ASM International, Materials Park, OH, 1998, p. 616-621.
210. G.E. Totten, G.M. Webster and R.J. Bishop Jr., "Biodegradability and Toxicity of a High-Performance Water-Glycol Hydraulic Fluid", AISE 1998 Annual Convention Proceedings, September 21-23, 1998, Pittsburgh, PA.
211. G.E. Totten, "Present Accomplishments and Future Challenges of Quenching Technology", Seminario Internacional de Tratamiento Termico, Associacao Brasileira de Metalurgia e Materiais (ABM), 21 September 1998, Sao Paulo, Brazil, p. 1-16.
212. L.M. Jarvis, G.E. Totten and G.M. Webster, "Use and Maintenance of Poly(Alkylene Glycol) Quenchants for Optimal Distortion Reduction in Induction Heat Treat Practices", in 8<sup>th</sup> International Induction Heat Treating Seminar, Kissimmee, FL, November 3-6, 1998.
213. G.E. Totten, G.M. Webster and C.E. Bates, "An Overview of Aluminum Quenching with Polymer Quenchants", Industrial Heating, **1998**, November, p. 61-64.
214. G.E. Totten, N.I. Kobasko, B. Liscic and S.W. Han, "Advances in Polymer Quenching Technology", The 1<sup>st</sup> International Automotive Heat Treating Conference, Eds. R. Colas, K. Funatani and C.A. Stickels, ASM International, Materials Park, OH, 1998, p. 37-44.
215. G.E. Totten, N.I. Kobasko and M.A. Aronov, "Intensive Quenching Practices for Automotive Part Production – An Overview", The 1<sup>st</sup> International Automotive Heat Treating Conference, Eds. R. Colas, K. Funatani and C.A. Stickels, ASM International, Materials Park, OH, 1998, p. 99-105.
216. G.E. Totten, R.R. Blackwood and L.M. Jarvis, "Importance of Quench Bath Maintenance", The 1<sup>st</sup> International Automotive Heat Treating Conference, Eds. R. Colas, K. Funatani and C.A. Stickels, ASM International, Materials Park, OH, 1998, p. 116-122.
217. G.E. Totten, G.M. Webster, S.W. Han and S.H. Kang, "Immersion Time Quenching Technology to Facilitate Replacement of Quench Oils with Polymer Quenchants for Production of Automotive Parts", The 1<sup>st</sup> International Automotive Heat Treating Conference, Eds. R. Colas, K. Funatani and C.A. Stickels, ASM International, Materials Park, OH, 1998, p. 449-455.
218. G.E. Totten and Y.H. Sun, "The Using and Maintenance of Water-Glycol Hydraulic Fluid", Chinese

Hydraulics & Pneumatics, 1998, No. 4, p. 16-20.

219. G.E. Totten, G.M. Webster and C.E. Bates, "Cooling Curve and Quench Factor Characterization of 2024 and 7075 Aluminum Bar Stock Quenched in Type I Polymer Quenchants", Heat Transfer Research, 1998, Vol. 29, No. 1, p. 163-175.