Publications of MD. ZIAUR RAHMAN, Ph.D.

Journal Papers-11

1. **Rahman, Md. Ziaur**, Ohba, H., Yamamoto, T. and Yoshioka, T. (2007), “Evaluation of Acoustic Emission sources during incipient damage detection monitoring in rolling contact fatigue,” Tribology Online (submitted).
2. **Rahman, Md. Ziaur**, Ohba, H., Yamamoto, T. and Yoshioka, T. (2007), “Incipient damage detection and its propagation monitoring of rolling contact fatigue by Acoustic Emission,” NDT & E (submitted).
3. **Rahman, Md. Ziaur**, Ohba, H., Yamamoto, T. and Yoshioka, T. (2007), “A study on incipient damage monitoring in rolling contact fatigue process using acoustic emission,” *Trib. Trans.* (in press).
4. **Rahman, Md. Ziaur**, Sone, M., Eguchi, M., Ikeda, K., Miyata, S. and Yamamoto, T. (2007), "Hardness and Young's modulus of nano-structured nickel coatings produced from emulsion with Sc-CO2 by nanoindentation", *Materials Science and Engineering A* (submitted).
5. **Rahman, Md. Ziaur**, Sone, M., Eguchi, M., Ikeda, K., Miyata, S. and Yamamoto, T. (2006), “Wear Properties of Nickel Coating Film Plated from Emulsion with Dense Carbon Dioxide,” *Surface and Coatings Technology*, 201 (3-4), pp 606-611.
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7. Ohno, Nobuyoshi, **Rahman, Md. Ziaur** and Kakuda, Kouichi (2005), “Bulk Modulus of Lubricating Oils as Predominant Factor Affecting Tractional Behavior in High-Pressure Elastohydrodynamic Contacts,” *Trib. Trans.*, 48 (2), pp 165-170.
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10. **Rahman, Md. Ziaur**, Ohno, Nobuyoshi and Tsutsumi, Hiroshi (2003), “Effect of Lubricating Oils on Cage Failure of Ball Bearings,” *Trib. Trans.*, 46 (4), pp 499-505.

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11. Ohno, N., Mukai, R., **Rahman, Md. Ziaur** and Shibata K., (2003), “Bulk Modulus and Poisson’s Ratio of Traction Fluids at High Pressure,” *Automobile Transmission Lubrication*, Edited by Bartz, W. J., expert verlag, Germany, pp 80-85.

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1. **Rahman, Md. Ziaur**, Ohba, H., Yamamoto, T. and Yoshioka, T. (2007), “Early damage detection of rolling contact fatigue by Acoustic Emission,” in *Proc. of the Malaysia Japan Intr. Symp. on Advanced Technology*, Kuala Lumpur, Malaysia, CD ROM format (MJISAT-78).
2. **Rahman, Md. Ziaur**, Ohba, H., Yamamoto, T. and Yoshioka, T. (2007), “Evaluation of Acoustic Emission sources during monitoring of incipient damage detection for rolling contact fatigue,” in *Proc. JAST*, Saga, Japan, pp 373-374.
3. **Rahman, Md. Ziaur**, Ohba, H., Yamamoto, T. and Yoshioka, T. (2007), “Incipient damage detection and its propagation monitoring of rolling contact fatigue by Acoustic Emission,” in *Proc. of the Intr. Conf. on Mfg., M/C Design and Trib. (ICMDT2007)*, Sapporo, Japan, CD ROM format.
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*JSME- Japanese Society of Mechanical Engineers
JAST- Japanese Society of Tribologist

Report

1. **Rahman, Md. Ziaur** (2004) “Lubricating Oils Performance of Locomotives and Test Facilities in Bangladesh Railway,”
Bangladesh Railway, Bangladesh.

Patents

1. Contributors: Rahman, Md. Ziaur, Ohba, Hiroaki, Yamamoto, Takashi, Yoshioka, Takeo
   Title: "Incipient damage detection by Acoustic Emission technique"
   Patent no: Pending
   Area: Incipient failure detection and location identification
   Date applied and Country: 8/2007, Japan
2. Contributors: Sone, Masato, Yamamoto, Takashi, Rahman, Md. Ziaur, Ikeda, Koji
   Title: "Electrochemical Reaction Method"
   Patent no: JP2005-133106
   Area: Coatings and surface texturing
   Date and Country: 7/2005, Japan