LIST OF PUBLICATIONS: Dr Har Prashad (Prashad H.)

- 1-Prashad H., "New Generation Rolling Element Bearings An Investigation", to appear in IE (I), Vol 85 April, 2004. Pp 26-33
- 2- Prashad H., "Theoretical Analysis to Evaluate Performance Characteristic of Double-Decker High Precision Bearings Vis A Vis conventional Bearing", to appear in BHEL journal Vol 25, No. 1 November, 2004.
- 3- Prashad H., "A theoretical Approach to Evaluating the performance characteristics of Double Decker High-Precision Bearings', to appear in Tribo Test, March, 2004.
- 4-Prashad H., "Determination of Stiffness of Roller Bearing An Alternative Approach" IE(E), Vol 84, January 2004, pp 186-192.
- 5- Prashad H., "Alternative Approaches to Determination of Stiffness of Ball Bearings", BHEL journal, issue 24, No.3, December 2003, pp 59-70.
- 6- Prashad H, "Energy Efficient Bearings ----An Investigation, "Lubrication Engineering, STLE, Vol.59, No.6, June 2003,pp 17-22
- 7- Prashad H., "Pattern of Cyclic Stresses on the Outer Race of Conventional Bearings Vis-A-Vis Double Decker High-Precision Bearings", BHEL journal, Vol.24, No.2, June 2003, pp 38-47.
- 8- Prashad H., "Experimental Evaluation of the Stress Distribution on the outer race of the Outer Race of Conventional and Double Decker High Precision Bearings", Tribo Test Journal, 9-3, March 2003, pp 249-260.
- 9 Prashad H." Evaluation of stiffness Coefficients of Cylindrical Journal Bearings by A Non-Conventional Approach", BHEL Journal, Vol.24, No.1 January 2003, pp 34-45.
- 10 Prashad H, "New Generation Rolling- Element Bearings An Investigation", BHEL Journal, Vol.23, No.2, October 2002, pp 43-56.
- 11- Prashad H., "Diagnosis of Rolling-Element Bearings Failure by Localized Electrical Current between Track Surfaces of Races and Rolling-Elements", ASME, Journal of Tribology, Vol.124, July 2002, pp 468-473.
- 12- Prashad H., "Relative Comparison of Stiffness, and Damping Properties of Double Decker High Precision and Conventional Rolling-Element Bearings", Tribology International, Vol. 35, Issue 4, May 2002, pp 265-269.

- 13- Prashad H., Venugopal, K., "Formation of Craters on the Track Surfaces of Rolling-Element Bearings due to Spark Erosion", BHEL journal, Vol.23, No. 1, Feb.2002, pp 34 47.
- 14- Prashad H.," Evaluation of Damping Coefficients of Cylindrical Journal Bearings", by Electrical Analogy- A Non-conventional Approach", Journal of Institution of Engineers IE(I), Vol. 83, July 2002, pp 72-77 (paper awarded certificate of merit for 2002-2003)
- 15- Prashad H., "A State- of- Art Review Analysis of Bearings and Lubricants in Electrical Environment", International Journal of COMADEM (Condition Monitoring and Diagnostic Engineering Management), 4(3), 2001,pp 5-12
- 16- Prashad H., "Tribology in Electrical Environments-', International Journal of Lubrication Science, France, 13-4, August 2001, pp 359-369.
- 17- Prashad H., "A New Generation Double Decker High-Precision Rolling- Element Bearings -- Concept, Development and Investigations", Tribology Transaction, Vol.44, Number 2, April 2001, pp 203-208.
- 18-Prashad H., "Appearance of Craters on Track surface of Rolling-Element Bearings by Spark Erosion", Tribology International, Vol. 34/I (2001), pp 37-47.
- 19- Prashad H., "Evaluation of Damping Coefficients of Cylindrical Journal Bearings by Electrical Analogy --- A Non-Conventional Approach", BHEL Journal, Vol. 22, issue I, 2001, pp 51-60.
- 20- Prashad H., " Analysis of Lubricants Exposed to Electrical Current An Approach", Petrotech 2001, Jan.9-12, New Delhi.
- 21- Prashad H. "A Study of Electrical Pitting of Journal Bearing with water Contaminated Lubricant", Tribotest Journal, 7-2 (December 2000), Leaf Coppin (France), pp 115-124.
- 22- Jack Schofield, Prashad H.," Conference Report --- Tribology in 2000 and Beyond Hyderabad, India, December 1-4, 1999", Tribology International, 33 (2000), pp 521-522.
- 23- Prashad H.,"Evaluation of Stiffness Coefficients of Cylindrical Journal Bearings by Electrical Analogy---A Non-Conventional Approach", Journal of Institution of Mechanical Engineers IE (1), Vol. 81, September 2000, pp 55-6I.
- 24- Prashad H., "Determination of Capacitance, Resistance and Dynamic Coefficients of Four-Lobe Journal Bearings through Electrical Analogy", Journal of Institution of Mechanical Engineers IE (I), Vol.81, May 2000, pp 30-36(awarded certificate of merit for the year 2000-2001).
- 25- Prashad H.," Determination of Magnetic Flux Density on the Surfaces of Rolling-Element Bearings -- An Investigation", BHEL Journal, Vol.21, No.2, August 2000 pp 49-67.
- 26- Prashad, H., "Determination of Magnetic Flux Density on the Surfaces Rolling- Element Bearings as an indication of the current that has passed through them --- An Investigation", Tribology International, 32 (1999), pp 455-467.

- 27- Prashad H. "Tribology in Electrical Environment", Proceedings of the 2nd International Conference on Industrial Tribology, Hyderabad (India) Dec.1-4, 1999, pp 34-39.
- 28-Prashad H., "Diagnosis and Cause Analysis of Rolling-Element Bearings Failure in Electrical Power Equipments Due to Current Passage", Journal of Lubrication Engineering, STLE, Vol 55 No. 5 May 1999, pp 30-35.
- 29- Prashad H., "Role of Tribology for Energy Efficient Technology", TSI Newsletter, Vol.3.1, January-March, 1999.
- 30- Prashad H., Investigations and Diagnosis of Failures of Rolling-Element Bearings Due to Unforeseen Causes -A Case Study", BHEL Journal, Vol.20, No.1, March 1999, pp 59-67.
- 31- Biswas S.K., Prashad H.," ICIT'97- International Conference on Advances in Industrial Tribology, Calcutta, December 1997", Tribology International, Vol.31, number 12, 1998, pp 787.
- 32- Prashad H., "Polymer Tribology -- A General Review", TSI Newsletter, Vol. 3.4, October-December 1998.
- 33- Prashad H., "Variation and Recovery of Resistivity of Greases --- An Experimental Investigation", Journal of Lubrication Science 11-1, France, November 1998 (11) pp 73-103.
- 34- Prashad H., "Turbine Lubrication -- An User View", TSI Newsletter, Vol. 3.3, July-Sept. 1998.
- 35- Prashad H., Murthy, T.S.R., "Deterioration of Lithium Greases under the Influence of Electrical Current -- An Investigation", Journal of Lubrication Science (France), 10-4, August 1998 (10), pp 323-342.
- 36- Prashad H., "Tribology--lts Unforeseen and Unrecognized Significance", TSI Newsletter, Vol.2.2, April-June 1998.
- 37- Prashad H., Determination of Time Span for Appearance of Flutes on Track Surface of Rolling-Element Bearings under the Influence of Electric Current", Tribology Transactions, Vol.41, issue 1,1998, pp 103-109.
- 38- Prashad H.,"Analysis of Pivoted Pad Thrust Bearings on Repeated Start and Stop of a Machine Operating under the Influence of Shaft Voltages", Journal of Institution of Mechanical Engineers IE (I), (Awarded Merit Certificate by institution on this Paper for the year 1998-1999) Vol.79, 1998, pp 42-47.
- 39- Prashad H., "Review and Analysis of Advances in Industrial Tribology---ICIT' 97 Scenario", TSI Newsletter, Jan-March 1998.
- 40- Prashad H., "Challenges in Tribology", TSI Newsletter, August-September 1997.

- 41- Prashad H., "Variation and Recouping of Resistivity of Industrial Greases--An Experimental Investigation", Proceedings of International Symposium on Fuels and Lubricants, pp 153-156, December 8-10, 1997, New Delhi.
- 42- Prashad H., "Assessment of Electrical Parameters of Three Lobe Journal Bearings -- An Approach", Mechanical Engineering Journal of institution of Engineers (I), Volume 78, August 1997, pp 53-56. (Paper was awarded The Corps of Engineers Medal for 1997-98, on 25th April 1999 at 13th Indian National Engineering Congress held at Chandigarh)
- 43- Prashad H., "Assessment of Dynamic Coefficients of Three-Lobe Journal Bearings through Evaluation of Electrical Parameters A new Approach", BHEL Journal, Vol.18, 1997, pp 40-48.
- 44- Prashad H., "Diagnosis of Failure of Rolling-Element Bearings of Alternators A Study", Wear, Vol.198, pp 46-51, October 1996.
- 45- Prashad H., "Theoretical Evaluation of Electrical Parameters of Two-Lobe Journal Bearings", IE (I) Journal -Mc, Vol.77, pp 47-51, May 1996.
- 46- Prashad H., "Magnetic Flux Density Distribution on the Track s urface of Rolling-Element Bearings" -- An Experimental and Theoretical Investigations", Tribology Transactions, Vol.39, Issue 2, pp 386-391, April 1996.
- 47- Prashad H., "Evaluation of Dynamic Coefficients of a Two-Lobe Journal Bearing Using an Electrical Analogy Approach", ASME Journal of Tribology, Vol. 118, pp 657-662, July, 1996.
- 48- Prashad H., "Diagnosis of Bearing Problem of Synchronous Condenser -- An Experimental and Theoretical Investigation", Wear, 188, pp 97-101, 1995.
- 49- Prashad H., "A Theoretical Model to Determine the Minimum Number of Shaft Revolutions/Cycles for Appearance of Craters of Various Sizes on the Liner Surface of a Hydrodynamic Journal Bearing Operating under the Influence of Shaft Voltages of Different Levels", BHEL Journal, Vol.16, No.2, pp 27-33, Dec. 1995.
- 50- Prashad H., "Functional Performance of Roller Bearings for Acceptance in Routine Applications", IE (I) Journal Mc, Vol.70, pp 105-113, August 1995.
- 51- Prashad H., "Investigations of Damaged Rolling-Element Bearings and Deterioration of Lubricants under the influence of Electric Fields", Wear, 176, pp 151-161 (1994).
- 52- Prashad H., Rao, K. N., "Analysis of Capacitive Effect and Life Estimation of Hydrodynamic Journal Bearings on Repeated Start and Stop of OMachine Operating under the Influence of Shaft Voltages", Tribology Transaction, Vol. 37, Issue 3, pp 641-645 (1994).
- 53- Prashad H., "Theoretical Model to Analyze the Minimum Cycles before Formation of Craters due to Leakage of Charge Energy on the liner surfaces of Tilting-Pads of a Thrust Bearing", Institution of Engineers (India), Vol.75, pp 82-86, August, 1994.
- 54- Prashad H., "Analysis of Inductive Effect of Bearings under the Influence of Shaft Voltages", BHEL Journal, Vol. 15, Issue 1 (1994).

- 55- Prashad H., "Magnetic Flux Density on the Track surface of Rolling-Element Bearings An investigation" With NCIT-95, January 22-25, New Delhi.
- 56-Prashad H., "Theoretical Determination of Impedance, Resistance, Capacitive Reactance and Capacitance of Ball Bearings", BHEL Journal, Vol.14, Issue 2, pp 40-48 (1993).
- 57- Prashad H., "Theoretical Analysis of the Capacitive Effect of Roller Bearings on Repeated starts and stops of a machine operating under the Influence of Shaft voltages" Transactions of ASME, Journal of Tribology, Vol.114, pp 818-222, October (1992).
- 58- Prashad H., "Analysis of the Effects of Shaft Voltages on Life Span of Pivoted Pad Thrust Bearings", BHEL Journal Vol.13, Issue 2, pp 1-12 (1992).
- 59- Prashad H., "An Approach to Evaluate Capacitance, Capacitive Reactance and Resistance of Tilted Pads of a Thrust Bearing" STLE, Tribology Transactions, Vol.35, 3, pp 435-440, 1992.
- 60- Prashad H., Rai, L.N., "Analysis of Time Bound Increase in Vibrations of Large Synchronous Electric Motor --- An Investigation" BHEL Journal, Vol.13, pp 54-61 (1992).
- 61- Prashad H., "Theoretical Evaluation of Reduction in Life of Hydro dynamical Journal Bearings Operating Under the Influence of Different Levels of Shaft Voltages", STLE Transactions, Vol. 34, 4, pp 623-627, 1991.
- 62- Prashad H., "Theoretical Evaluation of Capacitance, Capacitive Reactance and their Effects on Performance of Hydrodynamic Journal Bearings", ASME Transaction, Journal of Tribology, Vol. 113, pp 762-767, October 1991.
- 63- Prashad H., "Theoretical and Experimental Investigations on the Pitch and Width of Corrugations on the Surfaces of Ball Bearings". Journal of Wear, Vol.143, pp 1-14, 1991.
- 64- Prashad H., "Recent Investigations on Response and Performance of Roller Bearings under the Influence of Shaft Voltages", Journal of Institution of Engineer (India), UDC 621.822.8, pp 26-34,1991.
- 65-Prashad H., "Theoretical Analysis of the Effects of instantaneous Charge leakage on Roller Tracks of Roller Bearings Lubricated with High Resistivity Lubricants", ASME Transaction, Journal of Tribology, Vol.112, pp 37-43, January, 1990.
- 66-Prashad H., "Analysis of the Effects of Electrical Current on Contact Temperature, Residual Stresses leading to slip Bands and initiation and formation of Corrugation Pattern on Ball Tracks of Ball Bearings", BHEL Journal Volume 11, No.1, 1990, pp 39-47.
- 67- Prashad H., "Diagnosis of Deterioration of Lithium Greases used in Rolling- Element Bearings by X-Ray Diffractrometry", STLE Transactions, Volume 32, 2, 1989, pp 205-214.
- 68- Prashad H., "Analysis of the Effects of Electrical Current on Contact Temperature, Contact Stresses and Slip Bands Initiation on Roller Tracks of Roller Bearings", Wear, 131 (1989), ppl 14.
- 69- Prashad H., "Condition Monitoring of Anti-Friction Bearings", Journal of Institution of Mechanical Engineers (India), Vol. 69, UDC 621.822 (1989), pp 65 74 (Won award for Corp. of Electrical and Mechanical Engineers for the 1988- 89).

- 70- Prashad H., "A Simplified Procedure to Study the Effects of Oils Grades and Clearance Ratios on the Reliability Performance of Cylindrical Hydro dynamical Bearings", BHEL Journal, Vol.10, No.2, pp 39-56, October, 1989.
- 71- Prashad H.,"A Simplified Design Methodology for Determination of Optimum Values of Design Parameters of Spherical Seating of Hydro dynamical Journal Bearings", BHEL Journal, Vo 10, No. 1, 1989, pp 45-50.
- 72- Prashad H., "Theoretical Evaluation of Impedance, Capacitance and Charge Accumulation on Roller Bearings Operated under Electrical Fields", Wear, 125 (1988), pp 223-239.
- 73- Prashad, H., "Investigations of Corrugated Pattern on the Surfaces of Roller Bearings Operated Under the Influence of Electrical Fields", Lubrication Engineering, Vol.44, Issue 8, August 1988, pp 710-718.
- 74- Prashad H., "The Effects of Current Leakage on Electro-adhesion Forces in Rolling Friction and Magnetic Flux Density Distribution on the Surfaces of Rolling Element Bearings", Transactions of the ASME, Journal of Tribology, Vol.110, pp 448-455, July 1988.
- 75- Prashad H., "The Effects of Viscosity and Clearance on the Performance of Hydrodynamic Journal Bearings", SILE Transactions, Vol.31, No.1 pp 113-119, 1988.
- 76- Prashad H., Murthy, T.S.R., "Behaviour of Greases in Statically-Bounded Conditions and When Used in Non-insulated Anti-friction Bearings under the Influence of Electrical Fields", Lubrication Engineering, Vol.44, No.3, pp 239-246, 1988.
- 77- Prashad H., "Theoretical Determination of impedance, Capacitance and Charge Accumulation on Roller Bearings Operated under Electrical Field", BHEL Journal, Vo 9 No.2, pp 20-30, 1988.
- 78- Prashad H., "Effect of Operating Parameters on the Threshold Voltages and Impedance Response of Non-Insulated Rolling Element Bearings under the Action of Electrical Currents", Wear, 117, 1987, pp 223-240.
- 79- Prashad H., "The Effect of Cage and Roller Slip on the Measured Defect frequency Response of Rolling-Element Bearings", ASLE Transactions, Vol.30, No.3, July 1987, pp 360-367.
- 80- Prashad, H., "Effects of Operating Parameters and Lubricant Characteristics on Threshold Voltages and Impedance of Non-insulated Roller Bearings Under the Influence of Electric Currents", BHEL Journal, Vol.8, No.2, pp 36-48, 1987.
- 81- Prashad H., Chauhan, R.B.S. and Panwalkar, AS., "A System Approach to the Investigations on Noise at the Top Bearings of Vertical Pump-Motor Sets -- An Experience", BHEL Feed Back Journal, June 1987, pp 19-24.
- 82- Prashad H., "Experimental Study on Influence of Electrical Fields on Behaviour of Greases in Statically-Bounded Conditions and When used in Non-Insulated Bearings", BHEL Journal, Vol.7, *No.3*, 1986, pp 18-34.

- 83- Prashad H. Gupta, R.P., "Bearings and Design Modification for Trouble Free and Reliable Operation of Horizontal-Axis Wind Mills used for Pumping Water", BHEL Journal, Vol.7, No.1, 1986, pp 14-20.
- 84- Prashad H. and et.el. "Reliability Analysis of Anti-friction Bearings by High Frequency Resonance Technique", BHEL Journal, Vol.6, No.1, 1986.
- 85- Prashad H., Ghosh, M., and Biswas, S., "Diagnostic Monitoring of Rolling- Element Bearings by High-Frequency Resonance Technique", ASLE Transactions, Vol.28, No.4, 1985, pp 439-448.
- 86- Prashad H., "International Activities in the Field of Tribology --- A Review and Analysis", BHEL Journal, Vol.6, No.3, 1985, pp 42-50.
- 87- Bhargava S.C., Prashad H., "Magnetic Suspension Bearings for A.C. Energy Meters", BHEL Journal, Vol.6, No.2, pp 12-21, 1985.
- 88- Prashad H., Ghosh, M. and Biswas, S. "Reliability Analysis of Roller Bearings by High Frequency Resonance Technique", Zagadniena Eksploatacji Maszyn, Zeszyt 4 (56), 1983, Krakow, Poland, pp 531-549.
- 89- Prashad H. and et. al, "Investigations on Noise Problem of Vertical Pump-Motor Bearing", International Conference on Optimum Resources Utilization through Tribo-Terotechnology and Maintenance Management, IIT, New Delhi, Dec-6, 1981,pp H3-1 to H3-13.
- 90- Prashad H., "An Analysis of Axial Deflection of Double Decker High Precision Bearings Vis-a-vis conventional Ball Bearings", submitted to Tribotest for publication. Lubrication Sscience 2006; 18:119-128
- 91- Dr. Har Prashad: "Centrifugal Forces double decker high precision and conventional ball bearing" Vol 86, July 2005 pp 109-114

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Note:

Dr. Har Prasad is an Honorary Member of TSI. He has published several research
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