

TUESDAY 24th June 2014		
18.00-20.00	LUBMAT 2014 PRE-CONFERENCE REGISTRATION Hilton Deansgate Hotel - Ground floor Foyer	
WEDNESDAY 25th June 2014		
7:30-9:15	REGISTRATION Conference Foyer 1st Floor	
9.00-9.15	Introduction and Welcome Room: Deansgate 3 Professor Ian Sherrington – Conference Chair and Director: Jost Institute for Tribotechnology Professor Gerry Kelleher - Vice-Chancellor, University of Central Lancashire (UCLan), UK Rob Wallace – Dean, School of Computing, Engineering and Physical Sciences, UCLan, UK Dr. Amaya Igartua Head of Tribology Unit, IK4 Tekniker, Spain	
9.15-9.45	Plenary 1: From Tribal to Tribology: Achieving Precision Lubrication on the Plant Floor – Paper No.L141083P Room: Deansgate 3 Drew Troyer	
9.45-10.30	Plenary 2: Lubricants for Improved Energy Efficiency – Paper No. L143039P Room: Deansgate 3 Taylor, R. I., Morgan, N. & Mainwaring, R.	
10.30-11.00	MORNING BREAK Refreshments & Exhibition Room: Deansgate 1	
SESSION	Lubrication Management 1 Room: Deansgate 2 Chairperson: Lisa Williams, MRG Labs, USA.	Lubricants & Additives 1 Room: Deansgate 3 Chairperson: Erik Kuhn, Hamburg University of Applied Sciences, GERMANY.
11.00-11.20	Missing Knowledge in Lubrication – Compensation by Certified Education Programs – Paper No. L141045 Krethe, R. & Heine, C.	A Heavy Naphthenic Base Oils as an Alternative in the Formulation of Industrial Lubricant - Paper No. L143021 Bastardo-Zambrano, L.
11.20-11.40	Use of Innovative Fluid Technology to Prevent Varnish Agglomeration and Deposition in Turbine Applications –Paper No. L141022 Barber, A., Butke, B. J., Cooney, F., Facchian, D. & Profilet, R. D.	Development and scale up of processes for new formulation lubricants – Paper No. L143067 Özcan-Taşkın, G., Garcia, I., Sgroi, M., Pagliarulo, F., Aguirre, P., Dessenoy, F., Fenouil, B., Margolin, A., Ciambelli, P., Fino, D., Csillag, S & Luther, R.
11.40-12.00	Intelligent lubrication management software –Paper No. L141027 Chemaou, M & Guelzim, A.	A Novel Lubricant Both Useful for Dry Rubbing Pair and Matching Oil Over A Wide Temperature Range – Paper No. L143050 Liu, Y., Wang, J., Liu, L & Li, S.
12.00-12.20	Lubrication Varnishing and Varnish Mitigation Strategies –Paper No.L141082 Hobbs.M.G., Evans.J, Dufresne Jr.P.T. & Hoeg.A.	

12.20-13.40	LUNCH BREAK Lunch: Conference Foyer Exhibition: Deansgate 1
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	Lubrication Management 2 Room: Deansgate 2 Chairperson: CHAIRPERSON	Lubricants & Additives 2 Room: Deansgate 3 Chairperson: Luis Bastardo-Zambrano, NYNAS AB, SWEDEN.
13.40-14.00	<p><i>Advanced methods for sampling and analysis of post-tensioned concrete tendon greases – Paper No. L14NUC034</i></p> <p style="text-align: center;">Williams, L & R, Wurzbach</p>	<p><i>A study on rheological and tribochemical behaviour of bio greases based on renewable resources Part 2: bio grease based on biochar from rice straw and waste cooking oil – Paper No. L143049</i></p> <p style="text-align: center;">El-Adly, R.A., Refaat, E, M. Adel Yossef, Enas A. Ismail, Modather, F. Hussein, Dalia M. Abbas</p>
14.00-14.20	<p><i>Grease Lubricant Analysis for Failure Diagnostics: Railway Axle Bearings – Paper No. L141023</i></p> <p style="text-align: center;">Prendergast, P., Bowkett, M & O'Dwyer, J.</p>	<p><i>The Energetic Situation of the Structural Degradation of Lubricating Greases – Paper No. L143015</i></p> <p style="text-align: center;">Kuhn, E.</p>
14.20-14.40	<p><i>Development of machine health alarm limits for filtered abnormal wear debris using filter particle quantification and X ray fluorescence spectroscopy (FPQ-XRF) – Paper No. L141069</i></p> <p style="text-align: center;">Walsh, D., Barraclough, T & Price, R.</p>	<p><i>Preparation of surface modified TiO₂ Nanoparticles and its Tribological synergism with sulfurized olefin – Paper No. L144006</i></p> <p style="text-align: center;">Li, J & Li, Z.</p>
14.40-15.00	EXHIBITION VIEWING Room: Deansgate 1	
15.00-15.30	AFTERNOON BREAK Refreshments & Exhibition Room: Deansgate 1	
	Lubrication Management for Renewable Energy Systems Room: Deansgate 2 Chairperson: Daniel Walsh, Spectro Inc. USA.	Lubricants & Additives 3 Room: Deansgate 3 Chairperson: Robert I. Taylor, Shell Global Solutions, UK.
15.30-15.50	<p><i>Improvement of solar heat transfer fluids thermal properties by dispersion of Ionic Liquids – Paper No. L14REN018</i></p> <p style="text-align: center;">Hernaiz, M., Uranga, N., Villar, A & Marcaide, A.</p>	<p><i>Development of a Graphene/Natural Rubber Composite for a Novel Power Take-Off System – Paper No. L143017</i></p> <p style="text-align: center;">Gong, L., Ho, E., Chanvrier, T., Utomo, A., Thind, U., Taskin, G. O. & Hart, I.</p>
15.50-16.10	<p><i>Potential errors in FTIR measurement for quantifying the intensity of oxidation products in in-service gear oils in wind turbine – Paper No. L14REN061</i></p> <p style="text-align: center;">Gomez, Y., Terradillos, J., Ciria, J. I & Alarcon, J.</p>	<p><i>New formulation of sunflower based bio-lubricants with high oleic acid content - VOSOLUB Project – Poster No. L143057</i></p> <p style="text-align: center;">Leao, J. D., Bouillon, V., Muntada, L., Johnson, C., Wilkinson, M., Vergnes, O., Dano, C & Igartua, A.</p>

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16.10-16.30	<p><i>Analysis of Grease in Wind Turbine bearings – a tool for condition monitoring. Part 2 – Paper No. L14REN064</i></p> <p>Moller, H.</p>	<p><i>Semisolid deposit cause by Oil degradation at Lower Temperatures below 200C°– Paper No. L143002</i></p> <p>Yokohama, F., Otsuka, Y & Iwama, Y.</p>
16.30-16.50	<p><i>Sensor integration for a proper condition based maintenance in Wind Turbines – Paper No. L14REN071</i></p> <p>Gorritxategi, E., Etxaniz, P & Terradillos, J. J.</p>	<p><i>PFPE Lubricant Degradation – A New Method for its Assessment through Spiral Orbit Tribometry – Paper No. L143029</i></p> <p>Buttery, M., Roberts, E., W & Sherrington. I.</p>
16.50-17.10	<p><i>Particle counting in wind turbine gear oils. Clarifying methods and techniques – Paper No. L14REN062</i></p> <p>Terradillos, J., Ciria, J., Gómez, Y & Alarcon. J.</p>	<p><i>Development of alternatives for effective (high tempearture) lubrication in SST push bench mandrels using Nano technology based approaches – Paper No. L144004</i></p> <p>Sriharsha, T & Kaliappan, R.</p>
<p>Social Event Manchester Town Hall Drinks from 19.00</p>		

THURSDAY 26th June 2014			
8.30 – 9.15	REGISTRATION Conference Foyer 1st Floor		
9.15	Welcome Room: Deansgate3 Chair: Dr Nathalie Renevier (<i>Conference Co-Chair</i>)		
9.15-9.45	Plenary 1: Damage and failure in rubbing contacts –Paper No. L141079. Room: Deansgate 3 Kadiric, A. Imperial College London, UK		
9.45-10.30	Plenary 2: Some aspects of ionic liquid lubrication technology – Paper No L143080. Room: Deansgate 3 Glavatskih, S. KTH, SWEDEN		
10.30-11.00	MORNING BREAK Refreshments & Exhibition: <i>Deansgate 1</i>		
	Tribology 1 Room: Deansgate 2 Chairperson: Dennis De Pellegrin, Queensland University of Technology, AUSTRALIA	Special Fluids 1 Room: Deansgate 3 Chairperson: Sergei Glavatskih, KTH, SWEDEN	IC Engine Lubrication 1 Room: Meeting rooms 2,3,4 Chairperson: Mitsuhiro Soejima, Kyushu Sangyo University, JAPAN
11.00-11.20	Combined Experimental and Numerical Study of PTFE Faced Thrust Bearings Considering Effect of Creep on Bearing Lifespan – Paper No. L144051 Rothwell, B., Hewson, R.W., Neville, A., Morina, A & Barton, D.C.	Comparative Evaluation of Conventional and Vegetable Oil-based Dielectric Fluids on the Performance of Electrical Discharge Machining Process – Paper No. L146030 Arantes, L. J & Silva, M. B.	Analysis of Lubricating Oil Evaporation from Cylinder Liner Wall on Oil Consumption in Internal Combustion Engine – Paper No. L14ICE060 Harigaya, Y., Suzuki, K., Hamatake, T & Soejima, M.
11.20-11.40	Tribological Properties of Self-Mated Carbon-Chromium Coatings Under High Contact Pressures – Paper No. L144081 Volety, B. S., Arnell, R. D., Li, H., Sherrington, I., Hirst, T.	Tribological characterization of an hybrid ionic liquid –Paper No. L146064 Pagano, F., Hernaiz, M., Villar, A., Uranga, N & Igartua, A.	A Numerical Analysis of Surface Texturing the Piston Ring Cylinder Liner Conjunction – Paper No. L14ICE068 Morris, N., Rahmani, R., De La Cruz, M., Leighton, M & Rahnejat, H.
11.40-12.00	Two-Scale EHL and Optimisation of Topography – Paper No. L144047 De Boer, G., Hewson, R. W., Thompson, H. M., Gao, L & Toropov, V. V.	Ionic Liquids and ionic liquid-mediated dispersions of nanomaterial's as high performance additives for lubricants Paper No. L146031 Ahrens, M., Stiemke, F. M., Wimberg, J & Schubert, T. J. S.	Recent developments in measuring piston-ring lubricating film thickness – Paper No. L14ICE040 Smith, E. H., Garcia-Atance, G & Sherrington, I.
12.00-12.20	Erosion behaviour of HVOF sprayed WC-Co-Cr coatings – Paper No. L144053	Heat transfer fluids Thermal conductivity improvement in HVAC (Heat, Ventilation, Air Condition) system – Paper No.L146020	

	Duan, D., Li, Y., Hou, S. H., Liu, Y & Li, S	Uranga, N., Hernaiz, M., Aranzabe, E., Marcaide, A.	
12.20-12.40	<p>How to monitor Industrial Compressor Lubricants- the important role of selecting the correct oil analysis practices. – Paper No. L141003</p> <p>Bots, S & Ameye, J</p>		
12.40-13.40	<p>LUNCH BREAK Lunch: Conference Foyer Exhibition: Deansgate 1</p>		
	<p>Tribology 2 Room: Deansgate 2 Chairperson: Jo Ameye, Fluitec, BELGIUM</p>	<p>Special Fluids 2 Room: Deansgate 3 Chairperson: dxca</p>	<p>IC Engine Lubrication 2 Room: Meeting rooms 2,3,4 Chairperson: Ted Smith, UCLan, UK</p>
13.40-14.00	<p>The effect of surface topography on the Tribological performances of mechanical face seals of industrial mixers – Paper No. L144074</p> <p>Rahnejat, H., Davies, M., Rahmani, R., Johnson, M & Owen, J.</p>	<p>Application of Nanofluids to improve tool life in machining processes– Paper No. L146058</p> <p>Pena-Paras, L., Vazquez, K.D., Araiz, F., Cantu, D.S., Segura, A.F., Maldonado, D.</p>	<p>Modelling of Ring-/Piston- Liner Contact using Tribological Test Rigs results – Paper No. L14ICE048</p> <p>Igartua, A., Zabala, B., Fernández, X., Priestner, C., Ofner, H., Abramczuk, M & Tribotte, P.</p>
14.00-14.20	<p>Benefits and risks of large hydrostatic recesses in hydroelectric turbine thrust bearings- Paper No. L144075</p> <p>De Pellegrin, D.</p>	<p>New thiazolium ionic liquids in steel-ceramic lubrication – Paper No. L146032</p> <p>Espinosa, T., Mendoza, A., Mann, E., Bermudez, M.D.</p>	<p>Studies on Tribotechnology for Elements and Lubricants in Internal Combustion Engines – Paper No. L14ICE008</p> <p>Soejima, M & Hamatake, T.</p>
14.20-14.40	<p>Influence in wear performance of non-homogeneous distribution of carbides in NiCrBSi-WC laser cladding coatings – Paper No. L144028</p> <p>Garcia, A., Cadenas, M., González, R & Fernández, M. R.</p>	<p>Phosphonium based ionic liquids as lubricant additives to a steel/steel contact – Paper No. L146043</p> <p>Otero, I., López. E. R., Reichelt, M & Fernández, J.</p>	<p>Mixed Lubrication Analysis on the Twin-Land Type of Oil Control Ring in Internal Combustion Engines – Paper No. L14ICE009</p> <p>Hamatake, T & Soejima, M.</p>
14.40-15.00	<p>Thin layer activation technology as on-line wear measurement in the tribology lab – Paper No. L144001</p> <p>Drees, D., Achanta, S., Van Hest, H., Delvigne, T., Courtois, O & Guerouane, L.</p>	<p>Identification of marker substances for the efficient online monitoring of metal working fluids – Paper No. L146011</p> <p>Palmowski, B., Brinksmeier, E., Huesmann-Cordes, A. G., Meyer, D & Weinhold, M.</p>	
15.00-15.30			

AFTERNOON BREAK Refreshments & Exhibition Room: Deansgate 1			
	Tribology 3 Room: Deansgate 2 Chairperson: Nathalie Renevier, UCLan, UK	Special Fluids 3 Room: Deansgate 3 Chairperson: Amaya Igartua, IK4 Tekniker, SPAIN	IC Engine Lubrication 3 Room: Meeting rooms 2,3,4 Chairperson: Toshiro Hamatake, Oita University, JAPAN
15.30-15.50	<p><i>Effect of the rotor speed on the variation of the pressure distribution in the hydroinertia gas bearings – Paper No. L144042</i></p> <p>Tomohiko, I., Nakano, S., Endo, Y., Asami, T., Kimura, F., Yamaguchi, Y & Honda. I.</p>	<p><i>Comparison of FAP- and NTf₂-anion based ionic liquids as neat lubricant in steel-steel pairs –Paper No. L146076</i></p> <p>Hernandez-Battez, A., García, A., González, R., Monge, R., Viesca, J. L., Fernández-González, A & Hadfield, M.</p>	<p><i>Tribochemical Behaviour of Mo-containing Lubricants on the Wear Performance of DLC Coatings in the IC Engine Valvetrain Application – Paper No. L14ICE033</i></p> <p>Yang, L., Neville, A., Brown, A., Ransom, P & Morina, A.</p>
15.50-16.10	<p><i>The effect of Micro Dimple on Mechanical Properties of the Textured Surface – Paper No. L144007</i></p> <p>Choudhury, D., Mamat, A. B., Cizek, J., Hartl, M & Krupka, I.</p>	<p><i>Evaluation of the Performance of Contaminated Cutting Fluids when Turning AISI 304 Austenitic Stainless Steel - Evaluation of the Performance of Contaminated Cutting Fluids when Turning AISI 304 Austenitic Stainless Steel –Paper No. L146036</i></p> <p>Grub, A., Finzi, M. B. A., Ribas, R. M & Machado, A. R.</p>	<p><i>Optical Investigation of Cylinder Oil Sprays in Slow-Speed Marine Diesel Engines – Paper No. L14ICE016</i></p> <p>De Sercey, G., Gardhouse, T., Edwards, S., Thompson, C & Crua, C.</p>
16.10-16.30	<p><i>Development and application of bearing chamber thermal analysis software – Paper No. L144019</i></p> <p>Yaguo, L., Zhenxia, L., Wenjun, G & Jing, L.</p>	<p><i>Emulsifying properties of microorganisms for the application in metal working fluids – Paper No. L146010</i></p> <p>Palmowski, B., Brinksmeier, E., Rabenstein, A. M., Redetzky, M & Meyer, D.</p>	
16.30-16.50		<p><i>Improving tribological behaviour of Wind Turbine Gearbox oil using Ionic Liquids as additives –Paper No. L14REN077</i></p> <p>Hernandez-Battez, A., González, R., García, A., Viesca, J. L., Fernández-González, A., Monge, R & Hadfield, M.</p>	
<p>Conference Dinner Museum of Science and Industry 18.30 Pre Dinner drinks (Power Room) 19.30 Conference Dinner (Ground Floor - Main Building)</p>			

Friday 27th June, 2014	
8.30 – 9.15	REGISTRATION Conference Foyer 1st Floor
9.15	Welcome

	Room: Deansgate 3 Chair: Prof E.H. Smith (<i>Jost Institute for Tribotechnology</i>)	
9.15-9.45	Plenary 1: Developments in sensors and portable instruments for oil condition monitoring – Paper No. L142073P Room: Deansgate 3 Lunt, S. <i>Parker Hannifin Corporation, UK</i>	
9.45-10.30	Plenary 2: Future Trends in Tribology and Lubrication Engineering – Paper No. L141013 Room: Deansgate 3 Gresham, R. M. <i>Society of Tribologists and Lubrication Engineers</i> USA	
10.30-11.00	MORNING BREAK Refreshments & Exhibition: <i>Deansgate 1</i>	
	Efficient Maintenance Room: <i>Deansgate 2</i> Chairperson: <i>Michael Buttery, ESR Technology, UK</i>	Reliability and Sustainability Room: <i>Deansgate 3</i> Chairperson: <i>Gonzalo Garcia-Atance, UCLan, UK</i>
11.00-11.20	<i>The Importance of Selecting the Right Lubricant Testing Laboratory as a Maintenance Decision</i> – Paper No. L142005 Simmonds, G & Honeycutt, F. E.	<i>Lubrication challenges of operating a spark ignition UAV engine on low volatility fuel</i> – Paper No. L14ICE063 Hooper, P.
11.20-11.40	Collection, Representation and Retrieval of Expert Knowledge Related to Wear Debris Mode Classification – Paper No. L142055 Leavers, V.	Building the Business Case for precision Lubrication – Paper No. L145038 Barnes, M.
11.40-12.00	Oil can talk - Using Oil analysis for failure investigation and specific questions – Paper No. L142046 Krethe, R & Heine, C.	A new approach to the checking of the tightness of bolted connections – Paper No. L144056 Eccles, B.
12.00-12.20	Automated Intelligent Agents as Superior Delivery Systems for In-Service Fluid Analysis (ISFA), a.k.a. "Oil Analysis" – Paper No. L142033 Poley, J.	Scuffing Resistance and Starved Lubrication Behaviour in Helicopter Gear Steels: Dependence on Material and Surface Finish – Paper No. L144012 Berkebile, S & Dykas, B.
12.20-12.40	Innovative sensor for the detection of early stage of degradation of gas engines – Paper No. L142070 Gorritategi, E., Etxaniz, P & Terradillos, J. J.	
12.40-13.00	Closing Ceremony Room: Deansgate3 Professor Ian Sherrington (<i>Conference Chair</i>) Dr. Amaya Igartua (<i>IK4 Tekniker</i>)	
13.00-14.00	LUNCH BREAK Lunch: <i>Conference Foyer</i>	

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	Exhibition: <i>Deansgate 1</i>
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