

*“How can hydrodynamic bearings be used in low-speed applications?”*

<i>Thursday October 12</i>	
8h00 – 8h45	<i>Registration</i>
8h45 – 9h00	<i>General Introduction: CETIM, Pprime, University of Poitiers</i>
9h00 – 9h45	<b>Keynote session</b>
9h45 – 10h00	<p><b>A) <u>Large Size Bearing Systems – Rolling Contact vs. Parallel Sliding: which are the Options for the Future?</u></b>  <b>Gerhard POLL</b>  <i>Institute for Machine Design and Tribology, Leibniz University Hannover</i></p> <p><b>Questions</b></p> <p style="text-align: right;"><b>Chairman: J. Bouyer</b></p>
10h00 – 10h30	<i>Coffee Break - Discussions</i>
10h30 – 11h00	<b>Technical Session 1</b>
11h00 – 11h30	<p><b>B) <u>Calculation and Validation of Sliding Planet Gear Bearings for a Three-Stage Wind Turbine Gearbox</u></b>  <b>Ding H<sup>a</sup>, Mermertas Ü<sup>b</sup>, Hagemann T<sup>a</sup>, and Schwarze H<sup>a</sup></b>  <i><sup>a</sup> Institute of Tribology and Energy Conversion Machinery, Clausthal University of Technology, Germany</i>  <i><sup>b</sup> Envision Energy CoE GmbH, Dortmund, Germany</i></p> <p><b>C) <u>Polymer Self-lubrication composites and coatings for sliding bearings of wind turbine generators</u></b>  <b>Zhang Y<sup>a</sup>, Li G<sup>b</sup> and Zhang G<sup>b</sup></b>  <i><sup>a</sup> Hunan SUND Technological Corporation, Xiangtan, Hunan Province, China</i>  <i><sup>b</sup> Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, China</i></p> <p><b>D) <u>A review of thrust bearings used in rotary air pre-heaters</u></b>  <b>Fabijonas BR<sup>a</sup></b>  <i><sup>a</sup> Kingsbury, Inc, Philadelphia, PA, USA</i></p> <p style="text-align: right;"><b>Chairman: M. Arghir</b></p>
12h00 – 14h00	<i>Lunch</i>
14h00 – 14h30	<b>Technical Session 2</b>
14h30 – 15h00	<p><b>E) <u>Nonlinear dynamic behavior of multi-groove offset journal bearing considering journal misalignment</u></b>  <b>Zhenni Xu<sup>a,b</sup>, Changlin Li<sup>a,b</sup> and Jianjun Du<sup>a,b</sup></b>  <i><sup>a</sup> School of Mechanical Engineering and Automation, Harbin Institute of Technology, Shenzhen, China</i>  <i><sup>b</sup> Shenzhen Key Laboratory of Flexible Printed Electronics Technology, Shenzhen, China</i></p> <p><b>F) <u>Comparison between experimental tests and numerical simulations for high loaded misaligned water lubricated journal bearing</u></b>  <b>Habert B.<sup>b</sup>, Bou-Saïd B.<sup>a</sup> and Fargere R.<sup>b</sup></b>  <i><sup>a</sup> Univ Lyon, INSA-Lyon, CNRS UMR5259, LaMCoS, France</i>  <i><sup>b</sup> Naval Group Research/CESMAN, Technocampus Ocean, France</i></p> <p><b>G) <u>Monitoring and Failure of Hydrodynamic Plain Bearings with Sub-Millimeter PEEK Coatings</u></b>  <b>Weißbacher C<sup>a</sup>, Prase B<sup>b</sup>; Hasse A<sup>b</sup></b>  <i><sup>a</sup> Gleitlagertechnik Weißbacher GmbH, Germany</i>  <i><sup>b</sup> Institute of Design Engineering and Drive Technology, Chemnitz, Germany</i></p> <p><b>H) <u>Investigations of journal bearing system lubricated with MR fluid</u></b>  <b>van der Meer G.<sup>b</sup>, Wodtke M.<sup>a</sup>, Litwin W.<sup>a</sup>, van Ostayen R.<sup>b</sup>, Quinci F.<sup>c</sup></b>  <i><sup>a</sup> Faculty of Mechanical Engineering and Ship Technology, Gdansk University of Technology, Poland</i>  <i><sup>b</sup> Faculty of Mechanical, Maritime, and Materials Engineering, Department of Precision and Microsystems Engineering, Delft University of Technology, The Netherlands</i>  <i><sup>c</sup> Aegir-Marine, Molenvliet 34, 3961 MV Wijk bij Duurstede, The Netherlands</i></p> <p style="text-align: right;"><b>Chairman: L. Amar</b></p>
16h30	<i><u>Departure for the Futuroscope park from IFMI building</u></i>
16h45-18h45	<i><u>Enjoy the Futuroscope attractions!</u></i>
18h45-20h	<i><u>Cocktail</u></i>
20h-20h30	<i><u>Futuroscope show</u></i>
20h30-23h30	<i><u>Gala diner</u></i>

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<i>Friday October 13, 2023</i>	
8h30 – 9h00	<i>Registration</i>
9h00 – 9h45	<b>Invited talk</b>
9h45 – 10h00	<p><b>I) <u>Machine learning for the predictive maintenance of hydrodynamic bearings – Potential Applications and Case Studies</u></b>  <i>Florian König, Georg Jacobs, Ankit Singh, Florian Wirsing</i>  <i>Institute for Machine Elements and Systems Engineering, RWTH Aachen University</i></p> <p><b>Questions</b></p> <p style="text-align: right;"><b>Chairman: M. Fillon</b></p>
10h00 – 10h30	<i>Coffee Break</i>
<b>Technical Session 4</b>	
10h30 – 11h00	<p><b>J) <u>Journal bearing lubrication status identification with acoustic emission measurements and data clustering</u></b>  <i>Tervo J, Junttila J, Ronkainen H</i>  <i>VTT Technical Research Centre of Finland</i></p>
11h00 – 11h30	<p><b>K) <u>Design optimisation of a multi-recess compliant hydrostatic thrust bearing</u></b>  <i>Marinescu A<sup>a,b</sup>, Fatu A<sup>a</sup> and Cicone T<sup>b</sup></i>  <i><sup>a</sup> Institut PPRIME, CNRS – Université de Poitiers – ENSMA, France</i>  <i><sup>b</sup> Machine Elements and Tribology Department - University “Politehnica” of Bucharest, Romania</i></p>
11h30 – 12h00	<p><b>L) <u>Characterization of soaked soft porous materials under cyclic compression</u></b>  <i>Couderc B<sup>a</sup>, Lupu GC<sup>b</sup>, Henry Y<sup>a</sup>, Fatu A<sup>a</sup>, Bouyer J<sup>a</sup>.</i>  <i><sup>a</sup> Institut PPRIME, CNRS – Université de Poitiers – ENSMA, France</i>  <i><sup>b</sup> Machine Elements and Tribology Department - University “Politehnica” of Bucharest, Romania</i></p> <p style="text-align: right;"><b>Chairman: A. Fatu</b></p>
12h00 – 12h15	<i>Prix Michel Fillon (best paper) ; Closure</i>
12h30 – 14h30	<i>Lunch</i>
14h30 – 17h00	<i><u>Visit of Pprime Institute tribology test facilities</u></i>