

COMET K2

<h1>XTribology</h1> <h2>Excellence Centre of Tribology</h2>	
Main location	Wiener Neustadt (Niederösterreich), Research and Technology Centre
Other locations	-
Research programme	Tribology; Lubricants and Surface Interactions, Wear Processes, Integrated Tribodiagnostics and -design, Multiscale Computational Tribology
Planned realisation and outcomes <p>The centre will carry out an ambitious research programme with high international visibility. Major achievements will be</p> <ul style="list-style-type: none"> • advanced lubricant formulation (e.g., ionic liquids/additives) and sensors for condition monitoring, • functional characterization and design of tribo-active surface structures, • design concepts (material/component design) avoiding abrasive wear, • techniques for in-situ nano wear volume measuring, • customized friction models for powertrain design, • multiscale modelling of tribosystems covering material physics (ab initio) to structural dynamics. 	
History of establishment	AC ² T research GmbH, in collaboration with the Vienna University of Technology, has successfully developed the <i>Kplus</i> Center of Competence for Tribology during 7 years. The COMET K2 centre is the logical content-oriented upgrading of this achievement. Furthermore, the convergent topic of the <i>Kind</i> Center of Competence V-Research will be integrated in the intended research programme.
Selected company partners (selection of approx. 50) <ol style="list-style-type: none"> 1. OMV Refining & Marketing GmbH (A) 2. voestalpine Stahl GmbH (A) 3. Berndorf Band GmbH (A) 4. Hoffmann Elektrokohle AG (A) 5. MAGNA Powertrain AG & Co KG (A) 6. AVL List GmbH (A) 7. Castolin Gesellschaft m.b.H. (A) 8. Schoeller Bleckmann Oilfield Technology GesmbH (A) 9. Collini Wien GmbH (A) 10. Doppelmayr Seilbahnen GmbH (A) 11. Sandvik Mining and Construction G.m.b.H. (A) 	Selected scientific partners (selection of approx. 40) <ol style="list-style-type: none"> 1. Technische Universität Wien (A) 2. Johannes Kepler Universität Linz (A) 3. Luleå University of Technology (S) 4. Cardiff University (UK) 5 Institut National des Sciences Appliquées Lyon (F) Selected international partners¹ (selection of approx. 30) <ol style="list-style-type: none"> 1. Robert Bosch GmbH (D) 2. Liebherr Maschinen Bullen SA (CH) 3. GKN Sinter Metals SPA (It) 4. VAT Vakuumventile AG (CH) 5. Shell Global Solution Deutschland GmbH (D)
Start of the Centre	01/04/2010
Planned number of personnel	150 FTE (of this ~130 researcher)
Total costs²	EUR 58.9 Mio. (for the first 5 year funding period)
Management	AC ² T research GmbH, Dr. PAUSCHITZ Andreas, Prof. Dr. Friedrich FRANEK
Contact	Dr. PAUSCHITZ Andreas Viktor-Kaplan-Straße 2, 2700 Wiener Neustadt +43 (0)2622 81600 170, pauschitz@ac2t.at, www.ac2t.at

¹ Company partners with headquarters outside Austria

² Approved total budget for the first funding period (5 years)