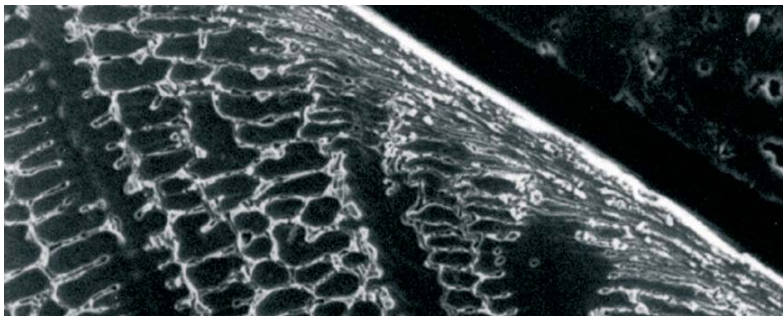


International Symposium on

# Friction, Wear and Wear Protection

Basics - Materials - Tools - Parts - Coatings - Processes

9 - 11 Apr 2008, Aachen, Germany



Taper Section of a CoCrMoC Hardfacing Alloy after High Temperature Sliding Wear

It is certainly one of the major challenges of material scientists and mechanical engineers to cope with the demands for long lasting and reliable systems in all markets and for all applications. The loss of energy by friction and the limits of endurance by wear should be countered by well selected materials and surfaces.

The economical and ecological significance of this is undisputable and can sum up to 1 to 4 % of the gross national product of industrial countries. Although the basic understanding of the mechanisms of friction and wear has remarkably increased during the last five decades, many technical solutions are still carried out following "trial and error".

But any well-aimed selection of the best material and the optimal topography in combination with sufficient physical and chemical properties require a systematic approach and a deep understanding of the acting mechanisms. Thus friction, wear, and wear protection are truly interdisciplinary fields that integrate scientists from engineering, natural, biological and medical sciences.

In order to demonstrate nowadays' state-of-the-art, the working group "Materials aspects of tribology and machining" of the German Materials Society DGM will sponsor this international symposium on Friction, Wear and Wear Protection. It will incorporate all kind of materials e.g. metals, ceramics and polymers as well as their composites. All these materials cannot be separated from appropriate production processes. Thus the 2008 symposium should also provide a broad view on modern production technologies for wear protection and low friction surfaces.



The 8th century Aachen was the residence of the emperor Charlemagne who is considered the early forefather of today's Europe.

The Programme Committee invites members from all disciplines who are working in basic and applied research, development, and the application of tribology

materials to take part and to discuss the latest findings on the basic understanding of friction and wear and share possible solutions in wear protection.

The conference venue will be Aachen, a truly European place at the German border with Belgium and the Netherlands.

We are looking forward to seeing you there!

Alfons Fischer, Professor at  
University Duisburg-Essen, Germany  
Kirsten Bobzin, Professor at  
RWTH Aachen University, Germany

Conference Chairs

### Keydates and Deadlines

Call for Papers: Feb 2007  
Deadline for Paper Submission:  
20 Sept 2007  
Notice to Authors: Nov 2007  
2nd Announcement: Dec 2007  
Submission for Manuscripts: Apr 2008  
Preliminary Programme online: Jan 2008  
Programme to Print: Mar 2008

### Conference Office

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## Historical and Natural Landmarks

### Conference Location

Aachen is situated at the border with Belgium and the Netherlands. It is Germany's most westerly city, with a population of nearly 260,000. Automobile technology, research in laser technology, in medicine as well as in the design and manufacturing of microchips have transformed the former mining region into a high-technology centre. Nearly 40,000 students attend Aachen's universities and colleges of which the most prominent is the RWTH Aachen University. Charlemagne has left his mark throughout the city.



The cathedral - the first monument in Germany to be included in the UNESCO Cultural Heritage list - and the

gothic City Hall in which 32 German kings celebrated their coronations still form the heart of Aachen's old city centre. Charlemagne has lent his name to a prize awarded by Aachen's citizens to personalities who have rendered outstanding services to European unity: the International Charlemagne Prize of Aachen. This award has been presented on Ascension Day every year since 1950.

### The Old Town

Aachen's historic Old Town is perfect for the city's visitors to stroll around. You will be lead through narrow lanes and historic squares and be inspired by Aachen's nearly 2000 years of history.



and numerous stories and anecdotes to the Cathedral und Town Hall.

Get to know the various facets of Aachen: the modern city, beautiful old town houses, many old and new fountains,

### Aachen Cathedral

The Aachen Cathedral - even after 1200 years - lost nothing of its historical splendour. Its admission into the UNESCO World Cultural Heritage as first German ensemble of building and art



history in 1978 gives proof of that. Discover one of the most important European examples of architecture and get captivated by the charm of the Old Town and its winding alleyways.

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### Taking a Cure

Those who say "A" like "Aachen" must also say "B" like "Bad Aachen" (Aachen spa). Aachen is a city of water. It has the hottest springs north of the Alps. The history of Aachen is closely connected with that of its "Thermen" (Baths).



Not only have the baths given Aachen its name - "Aachen" stems from the Germanic word for water

"ahha" - but since people have discovered the healing powers of the Aachen water, many people have found alleviation and healing of their illnesses here.

### Ludwig Forum Aachen

In the early 1970s, Aachen became one of the relevant debut places for contemporary art. As a pioneer Peter Ludwig personally travelled to New York to see Duane Hanson in his studio. As a consequence - clearly before the American "Hyperrealism" conquered Europe - Ludwig managed to incorporate some of Hanson's important figures in his "Ludwig Forum of International Art" among them the "Supermarket Lady".



### Eifel tour

The holiday region "Eifel" - a manifold landscape of low mountains with isolated forests, volcanoes that have become extinct, extensive hill countries and picturesque valleys - stretches from the rivers Rhine in the East and Mosel in the South all the way through to the Luxembourg border.



### Automobile Research

The Ford Research Center in Aachen is the only Ford research location outside of Detroit, USA. Following Ford's mission of reconciling a maximum of individual mobility with environmental and sustainability requirements, research is focusing very diverse areas of optimisation that frequently include advanced materials development.

