



# EUCEMAN

European Center for  
Micro- and Nanoreliability

Berlin, Germany

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## The European Center on MicroNanoReliability

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## Intentions which initiated the process of EUCEMAN's establishment:

1. Foundation of ***Eurolabs***
2. Create a ***European Network of Eurolabs***  
Executive Board, Scientific Advisory Board,  
Industrial Board, Board of Directors etc.
3. **Awards, Expert Opinions**
4. **National Contact Points** for Reliability
5. Vision, Concepts, **Initiation and Coordination of Projects**,  
nationally and internationally
  1. EU: IP, CRAFT, COST...
  2. International (e.g. USA-Germany....)
  3. National
  4. Regional



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## Scientific fields of EUCEMAN activities for Micro-and Nanoreliability

**Reliability of  
Automotive Electronics**

**Reliability in Micro-  
and Nanoelectronics**

**Physics of Failure**

**Reliability,  
Safety and Security**

**Design for Reliability**

**Testing and Reliability**



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## Current Activities (I): European EUCEMAN Nodal Points.

1. Germany: Berlin, Dresden, Chemnitz, Munich, Darmstadt etc.
2. France: Paris, Grenoble
3. UK: London, Edinburgh, Oxford
4. Belgium: Leuven
5. Austria: Vienna
6. Switzerland: Zurich, Duebendorf, Lausanne, Neuchatel
7. Poland: Warsaw, Wroclaw
8. Czech Republic: Prague
9. Spain: Barcelona
10. The Netherlands: Eindhoven, Delft, Almelo
11. Estonia: Tallinn
12. Finland: Helsinki, Espoo, Tampere
13. Sweden: Stockholm, Gothenburg
14. Russia: St. Petersburg
15. Hungary: Miskolc, Budapest
16. Italy: Torino





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## Current Activities (VI): Organisation of Conferences

- ***MicroMaterials*** conference series, *Berlin*
- First World Conference in the field of reliability of high tech applications  
***MicroNanoReliability***
- ***MicroCar*** conference series on micro materials, nano materials for automotive applications held in Leipzig;
- Annual “Micro & Nano Reliability” symposium at the  
***Microtech/Nanotech*** conference and expo series, *USA*



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## Current Activities (VII): Co-organisation or sponsoring

Annual conference **EuroSimeE** –

*Paris, Delft, Berlin, Bordeaux, Linz, Lissabon, ...*

Annual conference **Smart System Integration**,

*Barcelona, Brüssel, Como, Dresden, ...*

**Safety and Security Systems**, *Potsdam*

**Polytronics**, *Garmisch-Partenkirchen, ...*

Annual conference **THERMINIC**,

*Leuven, Barcelona, Paris, Budapest, ...*

**Micro-Nano-Integration**

**Materials Science and Engineering (MSE)**

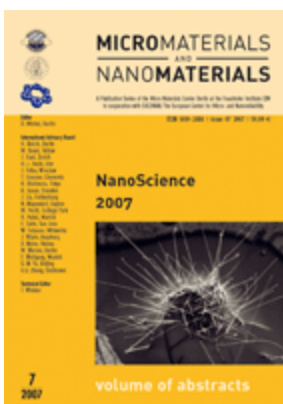
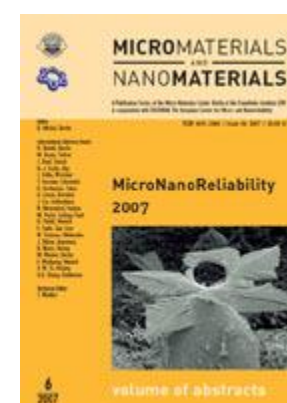
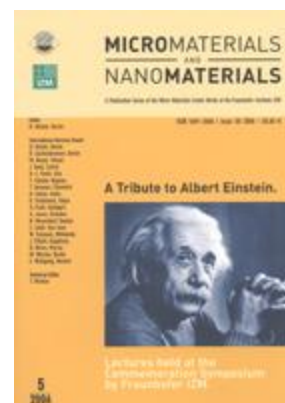
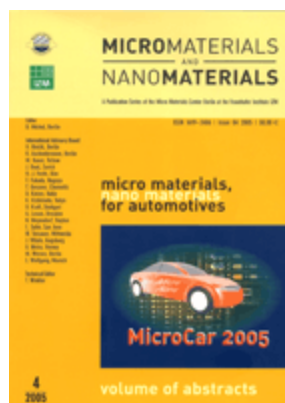
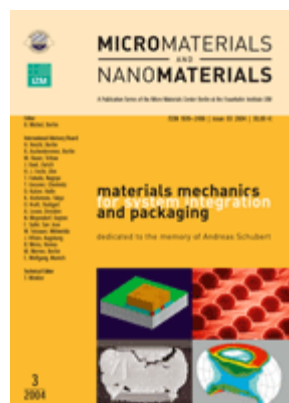


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## Co-editorship of the international publication series “*Micromaterials and Nanomaterials*“ (distributed to libraries all over the world – 13 issues since 2002)





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## EUCEMAN Award

- The award is given for merits on research in micro- and nanoreliability
- 2007: During MicroNanoReliability congress :
  - *Kouchi Zhang (NXP Eindhoven, The Netherlands)*
  - *Herbert Reichl (Fraunhofer IZM, Berlin, Germany)*
  - *Michael Pecht (University of Maryland, USA)*
- 2009 to *Bernd Michel* on the occasion of his 60<sup>th</sup> birthday





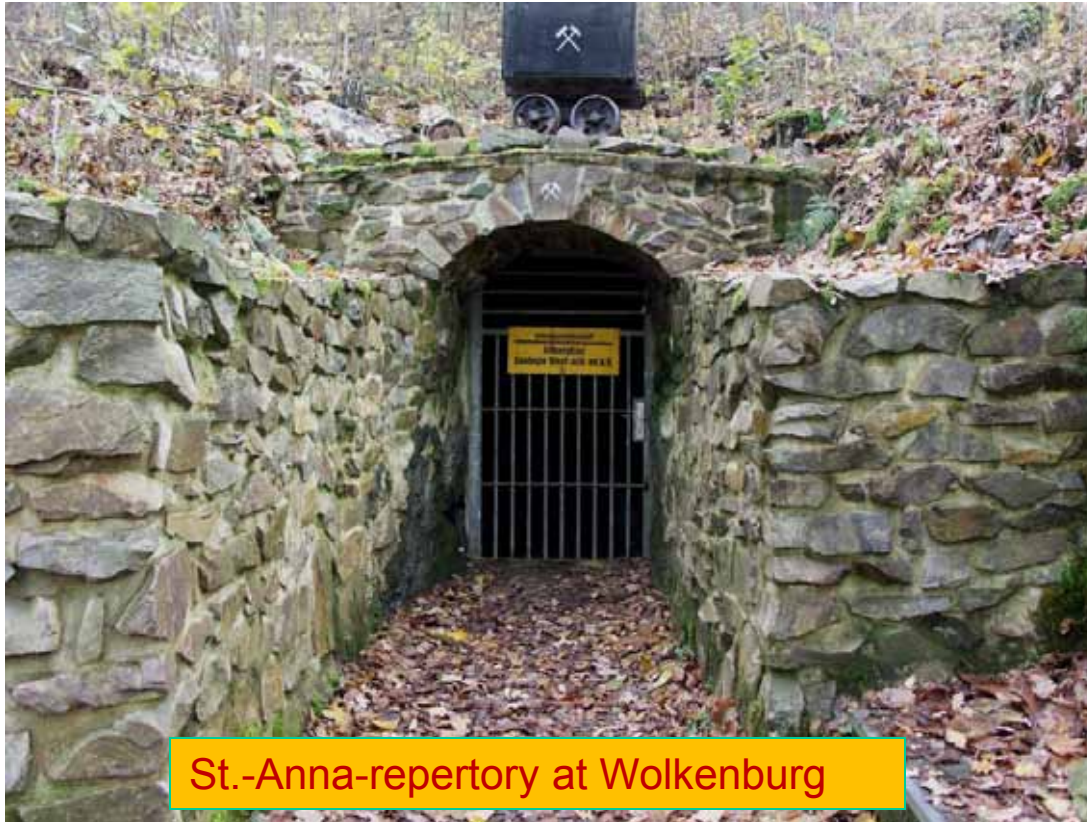


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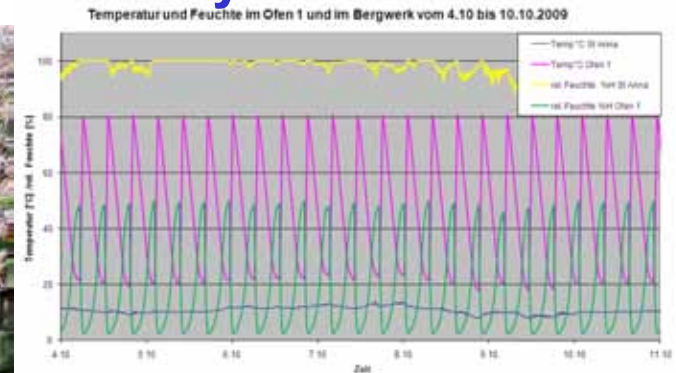
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## Mine Lab – Energy Saving Long-term Reliability Lab



St.-Anna-repository at Wolkenburg

Utilization of the stable ambient conditions in the mine  
(8 °C, 98% rel. humidity)  
for energy saving long time cycle test  
in the temperature range from RT up to 95°C



2 humidity chambers **UT 6200** with online data acquisition and data transmission mine-office



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## *Conference announcement*

# *MicroCar 2013*

5th conference

**Micro materials, nano materials  
for automotive application**

*Congress Center Leipzig,*



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**<http://www.euceman.com>**