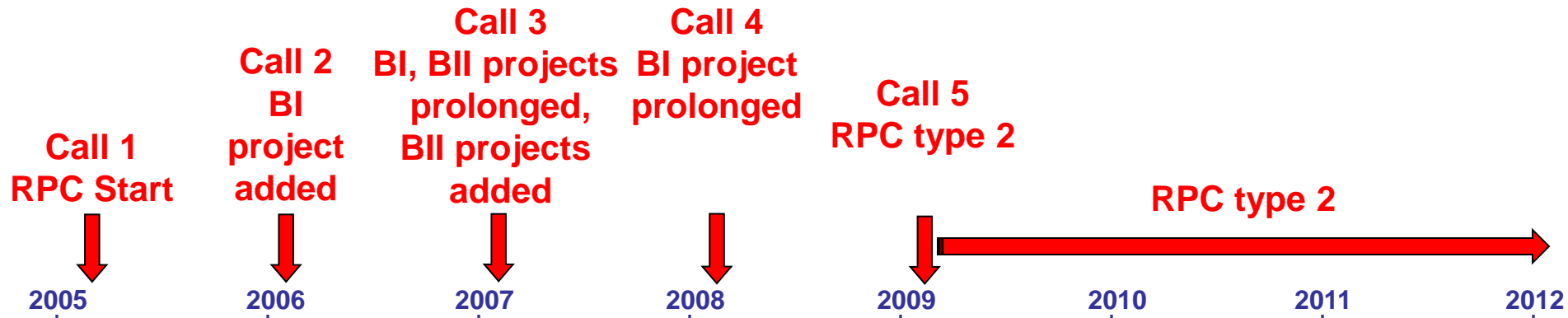


RPC NANOCOAT

Development of Nanostructured Coatings
for the
Design of Multifunctional Surfaces



Vision

Internationally leading position in the fields of

- knowledge-based design
- fabrication and
- characterisation

of *nanostructured* multifunctional coatings and surfaces
for

structural parts



tools



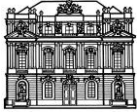
functional components





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Dr. Roland Kullmer**



IonBond Austria GmbH

Ing. Johann Kiefer



Böhler Edelstahl GmbH

Dr. Devrim Caliskanoglu

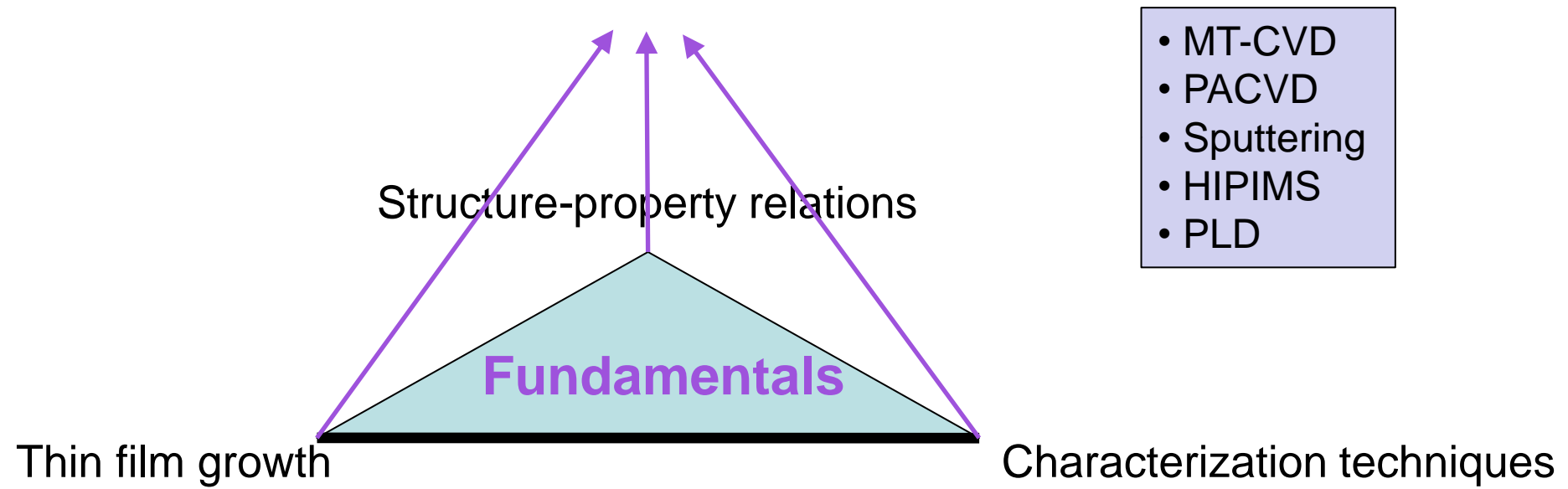


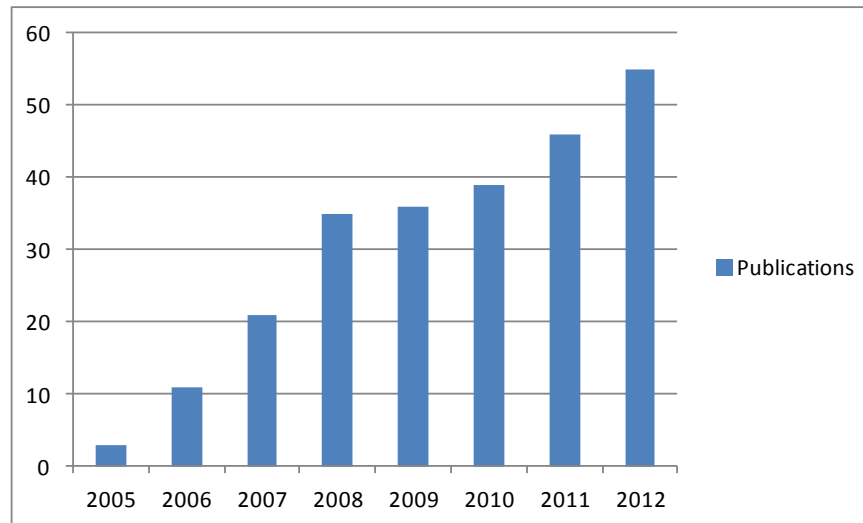
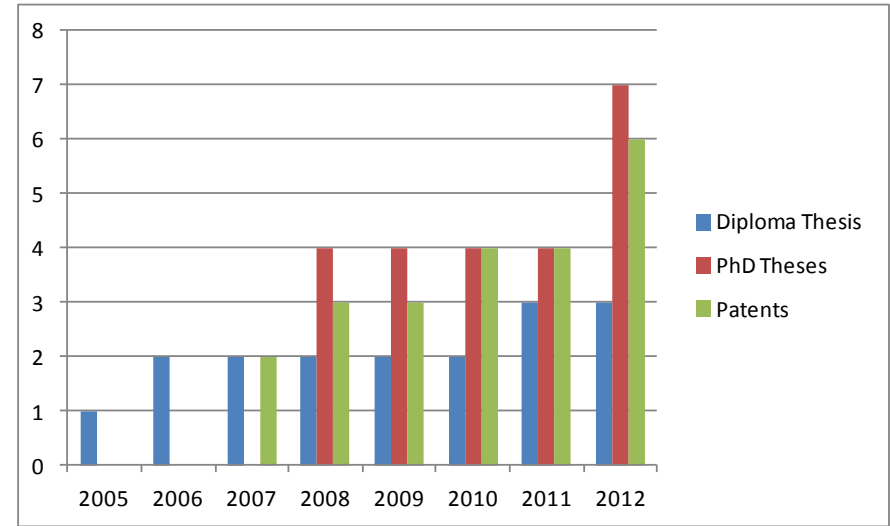
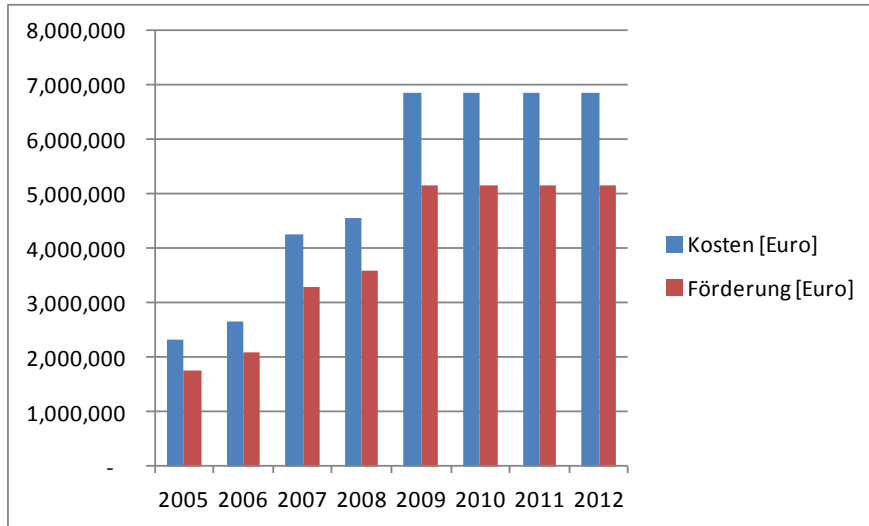
SECAR Technologie GmbH

Ing. Karl-Heinz Semlitsch

Utilization of developed fundamentals for new processes, facilities and coatings

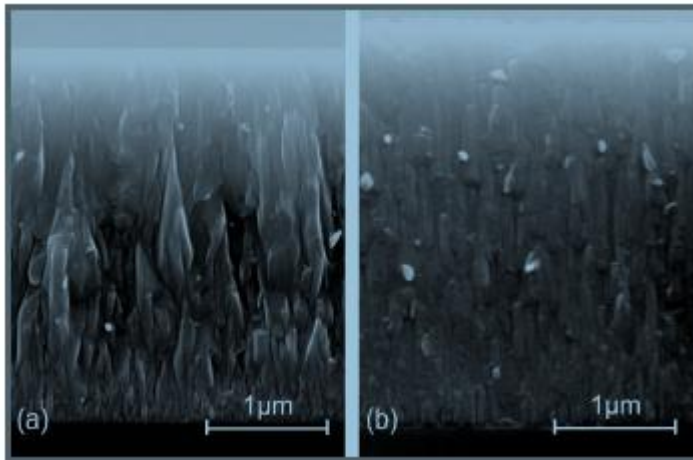
- Innovative processes
- New deposition technologies
- Tailored design of nanostructured coatings







High Power Impulse Magnetron Sputtering (HiPIMS) Technology

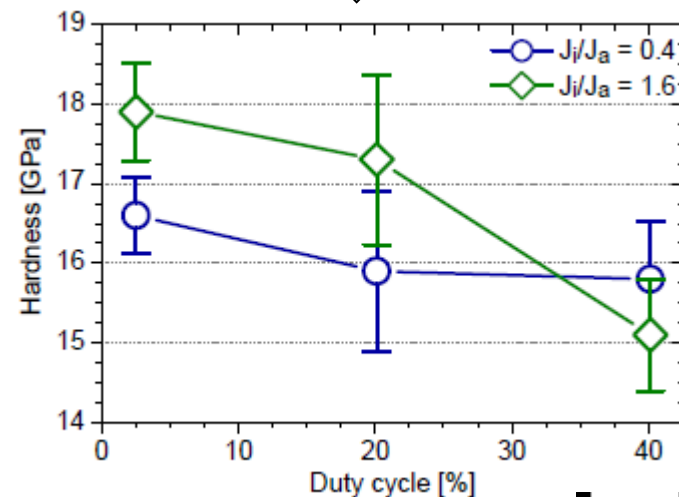
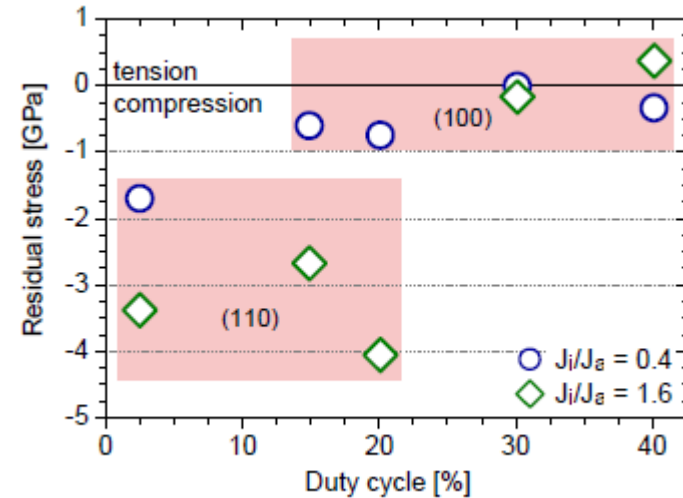


2.5 % Duty cycle 40 %

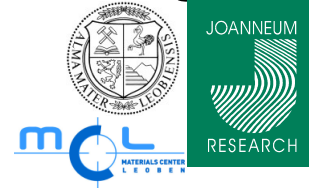
Tailored:

- Density
- Hardness
- Friction Coefficient
- deep black color

➔ **Application in Automotive
(decorative and protection)**



Hybrid Laser-PVD coupled with PA-CVD for Medical Applications



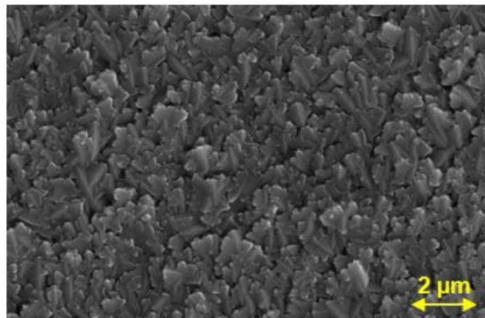
Problem: How to coat Ceramics?



PLD: good but expensive



PA-CVD: bad but cheap



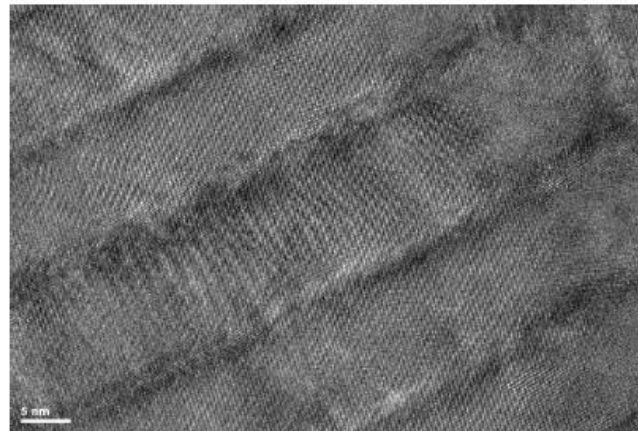
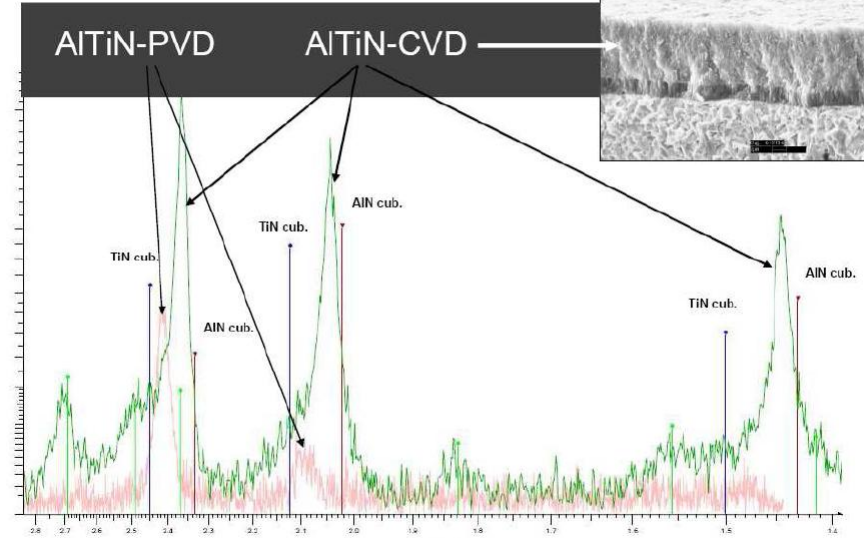
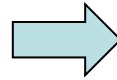
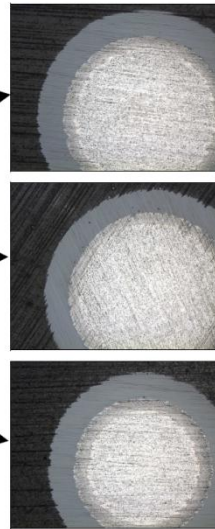
+ Porous coating
+ perfect adhesion
+ one process



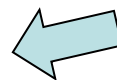
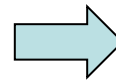
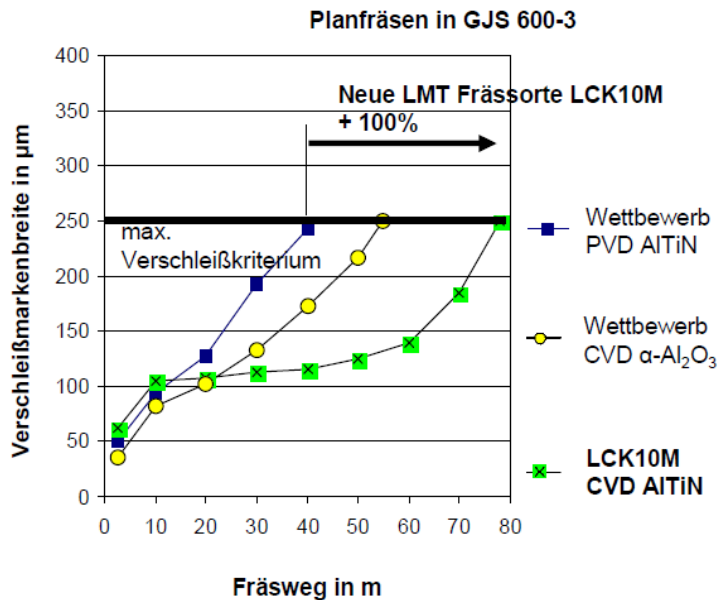
➔ **Completely new deposition system**
➔ **New Markets for RÜBIG**

Chemical Vapour Deposition AlTiN

Problem: How to growth cubic AlTiN at 700°C with 90% Al content?



Does this make sense?



- ➔ Technologieführerschaft
- ➔ Neue Märkte
- ➔ Umsatzsteigerung





BOEHLERIT

Danke für Ihre Aufmerksamkeit!

IonBond

