



IWS Nanofair-Workshop, 13th March 2008

09.00 am – ca. 15.50 pm

Seminar on

Coating and plasma processes for energy efficiency and photovoltaics

The continuously increasing consumption of energy and the increasingly strong demand especially of the emerging markets are the main reasons for the anthropogenic climate change. Efficient renewable energy sources such as photovoltaics are one answer to this problem. In addition new engines with an improved fuel economy can markedly contribute to a reduction of carbon emissions.

Atmospheric pressure plasma processes can substantially help to simplify the production of photovoltaic devices thus leading to a significant reduction in the production costs. Nanostructured coatings based on amorphous carbon have shown their superior properties with respect to friction reduction and wear resistance. Therefore their use in automotive engines and in general on moving parts can help to increase fuel efficiency and to reduce fuel consumption.

Details of these technologies will be presented as well as latest applications.

The seminar will cover the following topics:

Nanotechnology at IWS

Atmospheric pressure plasma processes for photovoltaics

Nanostructured carbon coatings for wear resistance and friction reduction

High precision nanoscaled coatings for optics

Dr. A. Leson

Dr. I. Dani

Dr. V. Weihnacht

Dr. S. Braun

Additionally the workshop will include a lab-tour to the facilities. In-depth discussions on the topics as well as individual talks are scheduled and are highly welcome.

Possible visitors:

Automotive industry, automotive suppliers, photovoltaic manufacturer, equipment manufacturer