

AKPF Communication Sept. 2006

Toils lead to success!

“No Diesel engine without particle filter (DPF)” is the demand of the eminent expert in combustion engine exhaust, John J. Mooney, and mean-while, even politicians as for instance the Secretary General of the Austrian equivalent of AAA jump on the band wagon.

In the past, DPF's were not always the public darling, even today resistance may be observed here and there. However, understanding of the necessity is about to become common knowledge and AKPF, the task force on particle filters may rightfully claim some merits.

Of course, our mentor, Andreas Mayer deserves credit for most of it; he is an out-standing almost lonely peak among experts. However, even the best solo violin and master artist requires an orchestra; at least in part, AKPF has taken over this task. Research projects have brought us ahead, far ahead, despite grumbling when funding.

Just a few corner marks to be mentioned for memory:

- 2002 some university professor claimed in a ranking refereed journal, DPF's are generating poisonous Nitro-PAH's. AKPF took initiative and costs, the professor should verify his experiments in the Swiss EMPA, a government laboratory of renown – the professor failed.
- Right now comparison of HDV engines >EURO3 with and without DPF< versus >EURO4< and >EURO5< is about to be published (in November). In anticipation I can remark: **>EURO3 plus DPF< is superior to both, EURO4 and EURO5!**
- 10 years ago, a Conference on Nanoparticles was brought to life by our mentor A. Mayer and the eminent physicist, professor H. Siegmann at the renowned Swiss Federal Polytechnic Institute. After professor Siegmann being emeritus, the Conference continued with Prof. K. Boulochos, Head of Dept. for Internal Combustion Engines. Since AKPF has been formed we have supported this conference.
- Apart from scientific gains there are other results to report, among them a retrofit project for busses in Santiago de Chile based on an international program of cooperation between Swiss and Chilean governments.
- This year, a spin off of the ETH Conference came into being in Los Angeles. On that basis John J. Mooney, a yearly guest at the ETH Conference, consultant to the US-EPA and others grasped the momentum to develop the showcase-projects, one in California and one in NY/NJ, expecting 1000 retrofits each, just for demonstration. Thanks to John's guidance these projects have a real chance to get off the ground in a way beneficial for both sides just at a place where competitors of means have failed.

Hence, the ETH Conference did not remain an ivory tower event, the conference brought engineering results.

Just due to this effect of influencing engineering practice and life we ought to consider:

Should AKPF ask our mentor A. Mayer for alternating the Conference location between ETH Zurich and the parallel Institution in Lausanne.

Presumably, the idea of the necessity of DPF's would be experiencing a remarkable push not only in French speaking parts of Switzerland, even in France too.

There is still plenty to do for the task force AKPF, however, success is already visible.