

BRIEF

Detoxification of combustion engine (CE) exhausts with combined particle filter- and deNOx-technologies is a necessity to operate CEs in low emission zones. The 10th VERT Forum is a good occasion to learn more on latest trends.

MOTIVATION

The worldwide production of combustion engine vehicles approaches 100 million per year with an in use fleet exceeding 1 billion vehicles. Increasingly, these vehicles are operated in urbanized areas where the majority of the world's population lives. These trends affect air quality in cities and with it influence health conditions of billions of people.

It is obvious that combustion engines can not be operated safely in densely populated areas without efficient filter- and deNOx-technologies both, for diesel- and gasoline vehicles. The revival of periodic technical inspection (New-PTI) is the tool to guarantee quality and good on-road performance of CE vehicles.

The 10th edition of the VERT Forum is also dedicated to four-way-catalyst technologies. On one hand, particle filters have to be integrated into gasoline vehicles which are already equipped with three-way-catalysts. On the other hand, diesel engines equipped with oxidation catalysts and filters need an up-grade with deNOx-technologies that are affective on roads too. And it is not vehicles only: we also need emission control of the marine sector and of the non-road sector.

If you want to learn more on latest trends on these issues attend the VERT Forum which, at its 10th edition, will end with a typical Swiss "apéro riche".

PARTICIPANTS

Cordially invited are representatives of industry, government, academia, current and future members of the VERT Association, and those, curious to learn more on state-of-the-art filter- and deNOx-technologies.

GENERAL INFORMATION

The conference will be free of charge.

All participants are invited by VERT to a Swiss apéro riche to celebrate edition 10.0.

Please refer to the Empa VERT Forum to obtain reduced accommodation rates in certain local hotels.

Registration

By e-mail via VERT Association: ttm.a.mayer@bluewin.ch

Further information

VERT Association

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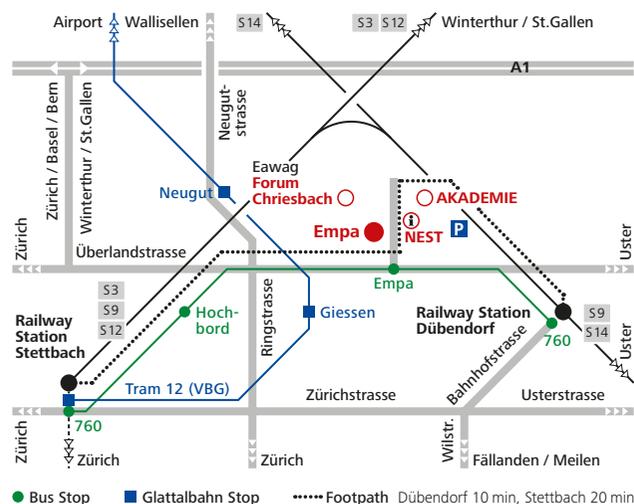
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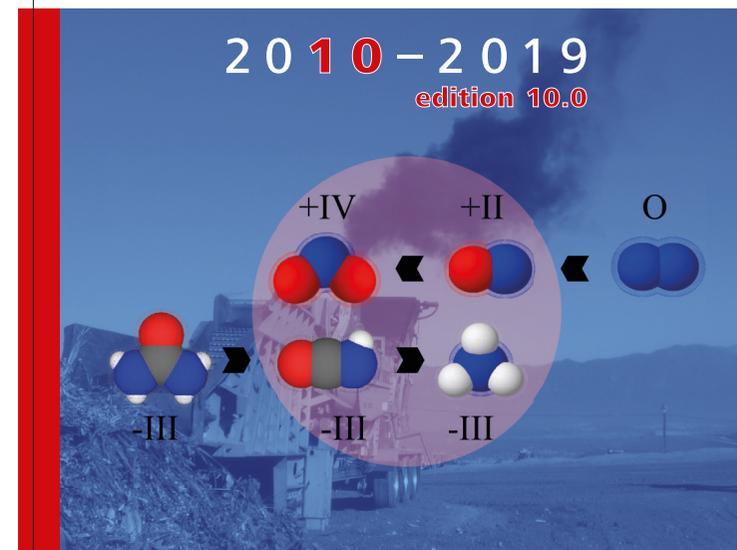
www.empa-akademie.ch/vert



10th VERT FORUM

Best available emission control technology for in-use and OE-engines

10 years VERT Forum – A moment to celebrate



Empa, Überlandstrasse 129, Dübendorf
Thursday, March 14, 2019, from 9:00 to 18:00

Registration by e-mail: ttm.a.mayer@bluewin.ch

PROGRAM

WELCOME

- 9:00 **Welcome**
N. Heeb, Empa
L.C. Larsen, VERT

RESEARCH AND DEVELOPEMENT

- 9:10 **The genotoxic potential of MPI engines in comparison to other combustion engines**
N. Heeb, Empa
- 9:30 **NOx-Emissions of LDT in real world compared to chassis dyno tests**
T. Büttler, Empa
- 9:50 **Effective measures for clean fleets of agricultural machinery**
D. Engelmann, AFHB
- 10:10 **Membrane filters – a new approach for marine applications**
T. Lutz, VERT
- 10:30 **Coffee break**
- 11:00 **Retrofitting diesel particulate filters on a ferry – practical experiences and measurement results**
T.D. Pedersen, DTI
- 11:15 **Sustainability and recovery of precious metals from scrapped DPF**
S.M. Andersen, SDU

NPTI – REQUIREMENTS, SOLUTIONS AND LARGE NEW MARKETS FOR HIGH-TECH PN INSTRUMENTS

- 11:30 **Too many DPF failures and manipulations in the Euro-5 and Euro-6 fleet,**
P. Buekenhoud, GOCA
- 11:45 **DPF failure statistics and conclusions for pass/fail criteria**
H. Burtischer, FHNW
- 12:00 **CPC Technology and its application in vehicle emissions testing**
J. Spielvogel, TSI
- 12:15 **DC instruments for PN at idle PTI in workshops and roadside**
M. Fierz, naneos
- 12:30 **Lunch and Coffee**
- 13:45 **Phased introduction of a particulates counter test for DPFs in the Netherlands**
L. Zuidgeest, NL
- ### SCR-TECHNOLOGY FOR RETROFIT, UPGRADE, FIRST-FIT
- 14:00 **Transient NOx emissions from in-service UK-buses**
M. Peckham, Cambustion
- 14:15 **German government supports SCR-retrofits for public transport and more**
V. Schlickum, Senat Berlin
- 14:30 **Retrofit of HDV and/or LDV – different aspects to be respected**
K. Mathies, TÜV Süd
- 14:45 **NO₂ exceedances in German cities and consequences for PTI**
A. Friedrich, DUH

VERT PROJECTS IN EMERGING MARKETS

- 15:00 **Clean air for four Latin American megacities – the CALAC+ project**
B. Lang, SwissContact
- 15:15 **Mexico City: first PN-control in 60 PTI stations**
M. Demski, Testo
- 15:30 **Korea: a second clean air plan after successful first 2004-14**
B. Lee, Katech
- 15:45 **Coffee break**
- 16:25 **China: practice and understanding of diesel vehicle emission control**
Li Jun, SWARC
- 16:40 **Combinded DPF- and DeNOx system for retrofit and China NS6**
F. Qian, Beijing-CATS
- 16:55 **DPF-retrofit for HD-vehicles in Israel**
R. Fleischman, MEP Israel

LEGISLATION AND QUALITY ASPECTS

- 17:10 **VERT suggestions for post Euro-6**
A. Mayer, VERT
- 17:25 **New approach for handheld 2-stroke engines**
F. Greil, AK
- 17:40 **Harmonization VERT/Korea and VERT/China**
V. Hensel, VERT
- 17:55 **Closing remarks**
V. Hensel, VERT
- 18:00 **Swiss apéro riche**