



Diesel efficiency improvement with Particulates and emission Reduction

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- 2 - REN - Renault SAS - FR
- 3 - IFP – Energies nouvelles – IFPEN – FR
- 4 - CMT - Universitat Politecnica de Valencia – ES
- 5 - JM - Johnson Matthey Plc - UK
- 6 – CONTI – Continental Automotive France SAS – FR
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- 8 - CNR - Consiglio Nazionale delle Ricerche – IT**
- 9 – FMF - FPT Motorenforschung AG – CH
- 10 – IVECO – IVECO S.p.A. - IT
- 11 - RCD - Ricardo Plc – UK
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- 13 – SIE - SIEMENS INDUSTEY SOFTWARE SAS – FR
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Publishable Executive Summary

Dieper develops advanced diesel engine technologies for passenger cars and Light Commercial Vehicles (LCV). The WP4 of this project focuses on new combustion concepts for passenger cars. This work is strongly linked with the development of new exhaust aftertreatment systems carried out in WP2. Thus, the specialists of WP2 proposed suitable catalyst formulations for the specific application and provided the relevant conversion characteristics. The aftertreatment system configuration and the specification of the individual components have been carried out in WP4. The layout and specification defined a matrix of system configurations and test cycles which were simulated. The following strategy was pursued:

- Optimization of close coupled configuration (E-Heater/ LNT/ PNA/ DOC)
- Optimization of Diesel particulate filter and NOx conversion (SCR/ SDPF/ cDPF)
- Specification of underfloor SCR catalyst and Ammonia slip catalyst
- Characteristics of optimum total exhaust aftertreatment system

7 Acknowledgment

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