

Berlin, May 2017

Project

Titel: **Deposits in Common Rail Injectors –
Fuel and Technology based Prevention Strategies
(Fuel Modifications III)**

Project Number: **550_2015_1**

Project Time: 1 January 2015 – 1 June 2017

Project Status: Project in progress

Contact: AGQM Office, Berlin

Project Supervisor: University of Rostock

Project funded by: Research Association for Combustion Engines e.V. (FVV)

Outline: The preceding project “Fuel Modifications II” focused on the determination of essential influencing factors and mechanisms causing deposits in injectors. Based on those results remedial suggestions were made for the fields of fuel composition and fuel additivation; fuel logistics; fuel systems of engines; technical properties of the injectors and engine operation. Subject of this project is the ranking of the aforementioned measures regarding their efficiency and the determination of optimum combinations of measures.

Among other things, the influence of critical fuel components will be determined for this purpose by laboratory tests with regard to deposit forming. Possible limits will then be derived from those test results for the specifications of various Diesel fuels and Biodiesel and/or various Biofuel blends.

Objective of this research project is the quantitative assessment of fuel based influencing factors causing deposits inside Common Rail injectors as well as the validation of systematic and fuel based measures under engine-related conditions.

The project shall lead to detailed findings on how future Diesel fuels should be composed and which constructive measures can be implemented in order to prevent or reduce deposits inside Common Rail injectors (IDID).