

Graz University of Technology Institute of Electrical Measurement and Sensor Systems



Master's thesis (30 ECTS)

Working title: Proof-of-Concept for NOx tailpipe measurements

In cooperation with: AVL DITEST GmbH

For a cleaner environment it is necessary to continuously monitor the emissions of motor vehicles. These emissions will be limited by a new European legislation, which requires suitable sensors and measurement technologies for the relevant pollutants.

The aim of this master thesis is to get deeper knowledge in sensor technologies for NOx measurement during periodic technical vehicle inspections (PTI). The master thesis is in cooperation with AVL DiTEST GmbH, an established research partner of the EMS in various successful projects that ensured the forefront position of the company as a leading provider of emission measurement equipment and software for garage testing.

Goals and tasks:

- Investigation of various sensing technologies for NOx tailpipe measurements
- Characterisation of a suitable sensing strategy
- Proof-of-Concept regarding the application on vehicles

Organizational matters:

- Requirements: Education in Electrical Engineering, Information and Computer
- Engineering or Physics
- Duration: 6 months
- Workplace: EMS, Inffeldgasse 33/I, 8010 Graz
- Payment: yes

Contact:

Alexander Bergmann Phone: +43 (0) 316 873 30570 E-Mail: <u>alexander.bergmann@tugraz.at</u>

Dr. Mario Schriefl Phone: +43 (0) 664 88 63 13 50 E-Mail: <u>mario.schriefl@tugraz.at</u>

