

Project consortium SmartAQnet – Aerosol Akademie

Newsletter SmartAQnet

March 2018





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Smart Air Quality Network

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Aerosol AkademieWP 3: Data aggregation and analyses

Participated the workshop of the task force Data Provisioning on 06th February 2018 in Augsburg.

WP 5: Data oriented dissemination and application

- Partner Aerosol Akademie is working on amendments / improvements of the homepage. The improvements will be implemented continuously. A relaunch of the homepage will follow.

GRIMMWP 2: Data collection / Devices

Working on draft proposal for 'SOPs and Meta Data for Aerosol Measurements' (Task Force, LEAD: M. Hank)

WP 5: Data oriented dissemination and application

Regular exchange of Volker Ziegler and Stefan Hinterreiter for organization of external workshop.

Helmholtz – CMA**Helmholtz – EPI II****KIT/IMK-IFU**WP 1: Data mining / Campaigns

Contribution to the F2F meeting of the Task Force Network Planning / F2F Task Force SOPs and Meta Data on 01st February 2018 in Augsburg. Presentation of the SmartAQnet Network Phase 1 proposal including a Central Activity Zone (CAZ) in the city centre including an Intensive Observation Month in September/October 2018, a calibration procedures and a timeline.

WP 3: Data aggregation and analyses

- Leading the workshop of the task force Data Provisioning on 06th February 2018 in Augsburg to find solutions that all partners can continue in their working plans on the basis of the data of the Tiefbauamt and Geodatenamt Augsburg (protocol available).
- F2F meeting with Ulrich Uhrner from Technische Universität Graz on 05th February in Garmisch-Partenkirchen for preparation of his sub-contract to develop an emission inventory for CTM.
- Continuous cooperation with Aristotle University Thessaloniki for small-scale chemistry-transport modelling in Augsburg: meteorological data in completion to emission and ambient air data.

WP 5: Data oriented dissemination and application

Discussion of cooperation with Katharina Predehl und Alexander Reiterer from Fraunhofer Institute for Physical Measurement Techniques (IPM), Laser Scanning Group in Freiburg about development and application of small wind-lidar-systems in SAQN: development of a joint concept for project funding.

KIT-TECOWP 5: Data oriented dissemination and application

Two abstracts that were submitted by TECO to the International Conference on Atmospheric Dust ([DUST 2018](#)) were accepted. Matthias Budde will present the project SmartAQnet through a poster and give a talk on the capabilities and limitations of low-cost laser scattering dust sensors in May

Uni AugsburgWP 1: Data mining/Campaigns

- The WIFI has been set up at the mobile Alphasense OPC-N2 particle counters so that the measured data can be transmitted directly online in the future. Furthermore, the control software has been improved for safe data recording and a signal LED has been attached.
- The measurements by bike have been started on 1st March 2018. Here, PM1, PM2.5 and PM10 are measured with an Alphasense OPC-N2 and temperature, humidity and pressure with an Almemo FHAD46-C2 (Ahlborn). Measurements are made at the beginning on four different routes through the city of Augsburg, as well as the surrounding area. The bicycle routes are the routes of employees from home to work. In the near future the network will be extended by additional routes.
- Operational measuring flights by unmanned aerial systems have also been started on 1st March 2018. The measurements are planned for each working day place at 7:00 a.m. on the

sports grounds of the University of Augsburg. Until the UAVs are equipped with the particulate matter sensor, only the temperature, humidity and wind are measured.

- The SODAR-RASS at the University of Augsburg has now been replaced by approx. 5 meters, so that trees no longer affect the measurements. The work lasted one whole day for six persons.

WP 3: Data collection/Devices

- First analysis of the comparative measurements at the aerosol measuring station at Augsburg University of Applied Sciences were made.
- Traffic data and basic geodata sets have been prepared for use as input data of the statistical and simulation models, which will be used to estimate the aerosol distribution in Augsburg.