

Project consortium SmartAQnet – Aerosol Akademie

Newsletter SmartAQnet

April 2018





Newsletter April 18

Smart Air Quality Network

Table of contents (alphabetically sorted by partner name)

Aerosol Akademie	2
WP 5: Data oriented dissemination and application.....	2
GRIMM	2
Helmholtz – CMA and EPI.....	2
KIT/IMK-IFU	3
WP 1: Data mining / Campaigns.....	3
WP 5: Data oriented dissemination and application.....	3
KIT-TECO	4
WP 5: Data oriented dissemination and application.....	4
Uni Augsburg	4
WP 1: Data mining/Campaigns.....	4
WP 5: Data oriented dissemination and application.....	4

Aerosol Akademie

WP 5: Data oriented dissemination and application

- Partner Aerosol Akademie is delighted to announce the relaunch of the homepage. The “new” website will be relaunched on 29th March 2018.
- In addition, the English version of the website is online from 29th March on. It is available under www.smartaqnet.com and www.smartaqnet.eu
- The AA – together with Klaus Schäfer, Volker Ziegler, Marcus Hank and Thomas Gratza – is planning two workshops for internal and external partners dealing with SmartAQnet relevant topics and/or similar projects.
 - Internal workshop:
A preliminary invitation was sent to relevant attendants, including a doodle survey for the best possible event date. Furthermore, all project partner received the invitation mail as well. A second invitation mail will follow with the final date and the organised venue.
Further details will follow within the next weeks.
 - The external workshop shall take place probably within week number 24. A preliminary invitation, agenda and leaflet is in process.
- The submitted paper for “AGIT Symposium und Expo” (4th – 6th July 2018; Salzburg, Austria) was accepted:
Hinterreiter, S., Schäfer, K., Cyrus J., Emeis, S., Young, D., Gratza, T., Beigl, M., Budde, M., Riedel T., Riesterer, J., Ziegler, V., Hank, M., Petersen, E., Philipp, A., Redelstein, J., Schnelle-Kreis, J.: SmartAQnet – smarter Weg zur räumlichen Erfassung von Feinstaub, AGIT – Journal für Angewandte Geoinformatik. More information will follow according the amendment phase and the publication in the proceedings and “Journal für Angewandte Geoinformatik” (Wichmann Verlag).
- Furthermore, an oral presentation (with the same title; see bullet above) will be held at the “AGIT Symposium und Expo” (preliminary session: Friday, 06th July 2018)

GRIMM

Helmholtz – CMA and EPI

KIT/IMK-IFUWP 1: Data mining / Campaigns

A second ceilometer CL31, which will be installed finally at the network station Bourgesplatz, is operated in comparison with the first ceilometer CL31 in the aerosol station at Hochschule Augsburg since 09 March 2018.

WP 5: Data oriented dissemination and application

- Katharina Predehl und Alexander Reiterer from Fraunhofer Institute for Physical Measurement Techniques (IPM), Laser Scanning Group in Freiburg started the development of a joint concept for project funding of development and application of small wind-lidar-systems in SAQN.
- Further presentations about the project:
 - Budde, M., Riedel, T., Beigl, M., Riesterer, J., Schäfer, K., Emeis, S., Young, D., Cyrus, J., Schnelle-Kreis, J., Philipp, A., Petersen, E., Redelstein, J., Ziegler, V., Hank, M., Grimm, H., Hinterreiter, S., Gratza, T.: SmartAQnet – high-resolution monitoring of urban air quality. In: Proceedings of Abstract 11th International Conference on Air Quality, 172, Stick Air Quality Conference; 11th International Conference on Air Quality - Science and Application, 12-16 March 2018, Barcelona, Spain; oral presentation.
 - Budde, M., Schäfer, K., Cyrus, J., Emeis, S., Gratza, T., Grimm, H., Hank, M., Hinterreiter, S., Petersen, E., Philipp, A., Redelstein, J., Riedel, T., Riesterer, J., Schnelle-Kreis, J., Young, D., Ziegler, V., Beigl, M.: SmartAQnet – raum/zeitlich hochaufgelöste Erfassung der Luftqualität mit neuen Datenprodukten. In: Umwelteinflüsse erfassen, simulieren und bewerten, 47. Jahrestagung der GUS 2018, Herausgeber Karl-Friedrich Ziegahn, Gesellschaft für Umweltsimulationen e.V., Pfinztal, Germany, 241-256; ISBN 978-9818507-2-7; 47. Jahrestagung der GUS, 21. - 23 March 2018, Stutensee-Blankenloch; oral presentation.
- Presentation of the continuous cooperation with Aristotle University Thessaloniki for small-scale chemistry-transport modelling in Augsburg:
 - Moussiopoulos, N., Barmpas, Ph., Tsegas, G., Fragkou, E., Schäfer, K.: Combining air quality modelling data and sensor measurements in an internet of things methodology to mitigate air pollution in the Balkan region. In: Proceedings of Abstract 11th International Conference on Air Quality, 133, Stick Air Quality Conference; 11th International Conference on Air Quality - Science and Application, 12-16 March 2018, Barcelona, Spain; oral presentation.
 - Moussiopoulos, N., Chourdakis, E., Tsegas, G., Schäfer, K.: A method for the efficient assessment of air quality in urban areas. In: Umwelteinflüsse erfassen, simulieren und bewerten, 47. Jahrestagung der GUS 2018, Herausgeber Karl-Friedrich Ziegahn, Gesellschaft für Umweltsimulationen e.V., Pfinztal, Germany, 257-268; ISBN 978-9818507-2-7; 47. Jahrestagung der GUS, 21-23 March 2018, Stutensee-Blankenloch; oral presentation.
 - Preparation of a workshop in Thessaloniki on 09 and 10 July 2018 for development of joint research and education strategies between Karlsruhe Institute of Technology and Aristotle University of Thessaloniki which will be joined by Till Riedel and Klaus Schäfer.

KIT-TECOWP 5: Data oriented dissemination and application

KIT TECO created a fine dust map for Berlin: Based on the data from <https://luftdaten.info/> and motion profiles of mobile phones at radio mast cells. Telefonica (<https://www.telefonica.de/>) officially provided the phone data for the DataRun. TECO also made a short video about the particulate matter model: https://www.dropbox.com/s/gugd9yc266ojg3p/feinstaub_berlin_1.mp4?dl=0 (Please note, that this video is not finalized yet).

Uni AugsburgWP 1: Data mining/Campaigns

- The beginning of the bicycle measurements and operational measurement flights started well. First data are already post-processed.
- Additional measurement flights with a Copter and the Alphasense OPC-N2 were made in the week of 19.03-23.03.2018. The Copter was launched from the roof of the university near the meteorological gauges and a ceilometer.
- A portable aerosol spectrometer (11-C, Grimm) was installed in the weather shelter on the roof station of the University of Augsburg. As well as one of the LOAC (Meteomodem) devices. The measurements should be used for comparison with the ceilometer, which is in the immediate proximity.

WP 5: Data oriented dissemination and application

On the EGU general assembly 2018 (09.04 – 13.04.2018 in Vienna), we will present two posters concerning the SmartAQnet project. The poster titles are:

- “Comparison of low and mid cost aerosol samplers with high quality sensors in the urban area of Augsburg” by Erik Petersen et al. and
- “Aerosol estimation by a Ceilometer for comparison with data achieved by unmanned aerial vehicles.” by Johanna Redelstein et al.

Both posters will be presented in the session AS3.29 “Urban air quality” (Convener: Michiel van der Molen).