

## Publikationen

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### 2020

Costa-Surós, M., Sourdeval, O., Acquistapace, C., Baars, H., Henken, C. C., Genz, C., Heseman, J., Jimenez, C., König, M., Kretzschmar, J., Madenach, N., Meyer, C. I., Schrödner, R., Seifert, P., Senf, F., Brueck, M., Cioni, G., Engels, J. F., Fieg, K., Gorges, K., Heinze, R., Siligam, P. K., Burkhardt, U., Crewell, S., Hoose, C., Seifert, A., Tegen, I., Quaas, J.

Detection and attribution of aerosol-cloud interactions in large-domain large-eddy simulations with the ICONSahedral Non-hydrostatic model

Atmos. Chem. Phys., **20**, 5657-5678 p.

doi:10.5194/acp-20-5657-2020

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Genz, C., Schrödner, R., Heinold, B., Henning, S., Baars, H., Spindler, G., Tegen, I.

Estimation of cloud condensation nuclei number concentrations and comparison to in situ and lidar observations during the HOPE experiments

Atmos. Chem. Phys., **20**, 8787-8806 p.

doi:10.5194/acp-20-8787-2020

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Hoffmann, E. H., Schrödner, R., Tilgner, A., Wolke, R., Herrmann, H.

CAPRAM reduction towards an operational multiphase halogen and dimethyl sulfide chemistry treatment in the chemistry transport model COSMO-MUSCAT(5.04e)

Geosci. Model Dev., **13**, 2587-2609 p.

doi:10.5194/gmd-13-2587-2020

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### 2019

Wolke, R., Schrödner, R., Faust, M.

Identification of odour sources in the Ore Mountains by COSMO-MUSCAT simulations

19th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (HARMO19), 3-6 June 2019, Bruges, Belgium

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### 2018

Schrödner, R., Wolke, R.

Modellierung von Luftströmung im Erzgebirge während ausgewählter Zeiträume (Abschlussbericht)

Report, Sächsischen Landesamtes für Umwelt, Landwirtschaft und Geologie (LfULG) Dresden, 29 p.

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Schrödner, R., Wolke, R., Tilgner, A., van Pinxteren, D., Herrmann, H.

Modelling multiphase aerosol-cloud processing with the 3-D CTM COSMO-MUSCAT: Application for cloud events during HCCT-2010

Mensink, C., Kallos, G. (Ed.), In: *Air pollution modeling and its application XXV : Proceedings of the 35th International Technical Meeting on Air Pollution Modelling and Its Application (Chania, Crete, Greece, 3-7 October 2016)*, Springer International Publishing, Cham, Switzerland, p. 587-592 (Chapter 91), (Springer Proceedings in Complexity) , ISBN: ISBN 978-3-319-57644-2 (Print), ISBN 978-3-319-57645-9 (Online)

doi:10.1007/978-3-319-57645-9

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### 2016

Hoffmann, E. H., Tilgner, A., Schrödner, R., Bräuer, P., Wolke, R., Herrmann, H.

An advanced modeling study on the impacts and atmospheric implications of multiphase dimethyl sulfide chemistry

Proc. Nat. Acad. Sci. (PNAS), **113**, 11776–11781 p.

Schrödner, R.

Modeling the tropospheric multiphase aerosol-cloud processing using the 3-D chemistry transport model COSMO-MUSCAT

Ph. D., University of Leipzig, Faculty of Physics and Earth Sciences, viii, 178 pp.

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Wolke, R., Tilgner, A., Schrödner, R., Nielsen, C., Herrmann, H.

Regional scale dispersion modelling of amines from industrial CCS processes with COSMO-MUSCAT

Steyn, D. G., Chaumerliac, N. (Ed.), In: *Air pollution modeling and its application XXIV : Proceedings of the 34th International Technical Meeting on Air Pollution Modelling and Its Application (Montpellier, France, 4-8 May 2015)*, Springer International Publishing, Cham, Switzerland, p. 259-263 (Chapter 42), (Springer Proceedings in Complexity) , ISBN: ISBN 978-3-319-24476-1 (Print), ISBN 978-3-319-24478-5 (Online)

doi:10.1007/978-3-319-24478-5

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## 2015

Wolke, R., Tilgner, A., Schrödner, R., Nielsen, C., Herrmann, H.

Regional scale dispersion modelling of amines from industrial CCS processes with COSMO-MUSCAT

34th International Technical Meeting on Air Pollution Modelling and its Application, Montpellier, France, 4-8 May 2015, 259-263 (Chapter 42)

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## 2014

Herrmann, H., Hinneburg, D., Tilgner, A., Schrödner, R., Wolke, R., Nielsen, C.

Regional scale amine chemistry dispersion modelling with COSMO-MUSCAT : Final report

Report, CO2 Technology Centre Mongstad (TCM), 169 p.

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Schrödner, R., Tilgner, A., Wolke, R., Herrmann, H.

Modeling the multiphase processing of an urban and a rural air mass with COSMO-MUSCAT

Urban Climate, **10**, 720-731 p.

doi:10.1016/j.uclim.2014.02.001

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Tilgner, A., Schöne, L., Bräuer, P., van Pinxteren, D., Hoffmann, E., Spindler, G., Styler, S. A., Mertes, S., Birmili, W., Otto, R., Merkel, M., Weinhold, K., Wiedensohler, A., Deneke, H., Schrödner, R., Wolke, R., Schneider, J., Haunold, W., Engel, A., Weber, A., Herrmann, H.

Comprehensive assessment of meteorological conditions and airflow connectivity during HCCT-2010

Atmos. Chem. Phys., **14**, 9105-9128 p.

doi:10.5194/acp-14-9105-2014

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## 2013

Wolke, R., Schrödner, R., Tilgner, A., Herrmann, H.

The influence of cloud chemical processes on the formation of secondary particulate matter

33rd NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application (ITM 2013), Miami, Florida, USA, 26-30 August 2013

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## 2012

Wolke, R., Schröder, W., Schrödner, R., Renner, E.

Influence of grid resolution and biomass burning emissions on air quality simulations: A sensitivity study with the modelling system COSMO-MUSCAT

32nd NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application (ITM 2012), Utrecht, The Netherlands, 7-11 May 2012, 559-563 (Chapter 94)

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Wolke, R., Schröder, W., Schrödner, R., Renner, E.

Influence of grid resolution and meteorological forcing on simulated European air quality: A sensitivity study with the modeling system COSMO-

MUSCAT

Atmos. Environ., **53**, 110-130 p.

doi:10.1016/j.atmosenv.2012.02.085

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## 2011

Wolke, R., Stoll, J., Smalla, A., Schrödner, R., Knoth, O., Renner, E.

The impact of meteorological uncertainties on the prediction of PM in urban areas

Steyn, D. G., Trini Castelli, S. (Ed.), In: *Air pollution modeling and its application XXI : Proceedings of the 31th NATO/SPS International Technical Meeting on Air Pollution Modelling and Its Application (Torino, Italy, 27 September - 1 October 2010)*, Springer, Dordrecht, p. 473-477, (NATO Science for Peace and Security Series - C : Environmental Security) , ISBN: ISBN 978-94-007-1358-1

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## 2010

Wolke, R., Stoll, J., Smalla, A., Schrödner, R., Knoth, O., Renner, E.

The impact of meteorological uncertainties on the prediction of PM in urban areas

31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application (ITM 2010), Torino, Italy, 27 September - 1 October 2010

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## 2009

Deguillaume, L., Tilgner, A., Schrödner, R., Wolke, R., Chaumerliac, N., Herrmann, H.

Towards an operational aqueous phase chemistry mechanism for regional chemistry-transport models: CAPRAM-RED and its application to the COSMO-MUSCAT model

J. Atmos. Chem., **64**, 1-35 p.

doi:10.1007/s10874-010-9168-8

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Schrödner, R.

Modellierung von wolkenchemischen Prozessen mit dem Chemietransportmodell MUSCAT

Diploma, Universität Leipzig, xxix, 65 pp.

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### Hinweis zur Suche nach einem Autor:

Bitte wählen Sie in der Autorenliste einen Eintrag ohne akademischen Titel aus.

### Hinweis zur Suche nach Abteilungen:

Aerosol & Wolken: 2011 -

Fernerkundung: 2011 -

Physik: - 2010

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