

# **Curriculum Vitae**

## **Sasho Gligorovski**

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### **Brief CV**

**Sasho Gligorovski** is a Full Professor at Guangzhou Institute of Geochemistry (GIG), Chinese Academy of Science (CAS), China. Dr. Gligorovski obtained his Ph.D. at TROPOS (Germany) in 2005, followed by one-year postdoc at IRCELYON (France). From 2006 to 2017, he served as an Assistant Professor and later an Associate Professor at Aix Marseille University, France. His research interest aims to elucidate the kinetics, mechanisms, and photochemistry of multiphase and heterogeneous reactions occurring at environmental surfaces (e.g., aerosol, urban grime, ocean), and on indoor surfaces.

The ultimate goal of his research is to provide quantitative information that can be used in photochemical models (regional and global scale) to better understand the air quality and climate change issues. He has published more than 95 SCI papers, which have received more than 4000 citations with an h-index of 32 (Google Scholar). He is corresponding author of some landmark papers in prestigious journals such as *Science*, *PNAS*, *Science Advances*, *JACS*, *Chemical Reviews*, *Environmental Science and Technology (17 papers)*, and *Applied Catalysis B: Environmental (2 papers)*, among the others. He has also published more than 15 conference proceedings and he has presented over 80 conference presentations including 11 as invited speaker and one as keynote speaker at the top geophysical and geochemistry conferences. He has received prestigious fellowships and awards including National Natural Science Foundation of China International Excellent Senior Scientists Fellowship in 2022, Excellent Graduate Tutor of Chinese Academy of Sciences in 2021, Best Project Award nominated by the Ministry of Ecology, Sustainable Development and Energy, France in 2012, three times recipient of the visiting fellowship from the European

Commission (EC) and recipient of the highly-prestigious Visiting Fellowship from the Cooperative Institute for Research in Environmental Sciences (CIRES) to join the thriving community of researchers at the University of Colorado Boulder.

Prof Gligorovski has built a strong international research profile as evidenced by his role as conference session organizer at nine conferences, five sabbatical stays at various research institutions across Europe, and was nominated as a member of International Scientific Committee at Healthy Buildings 2019 Asia, an international conference of indoor air with over 1500 participants.

## **Education and Scientific Employment**

<u>02.2017-present</u>	Research Professor at State Key Laboratory of Organic Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou, China
<u>04.2012-02.2017</u>	Associate Professor at the “Laboratoire Chimie Environnement” (LCE) «Aix Marseille University» (Marseille, France).
<u>2012</u>	Habilitation thesis at Aix Marseille University
<u>09.2006-04. 2012</u>	Assistant Professor at the “Laboratoire de Chimie de Provence” (LCP) «University of Provence» (Marseille, France).
<u>07.2005-08.2006</u>	Post-Doc researcher at IRCELYON (the group of Dr. Christian George), Lyon, France.
<u>2005</u>	Dr. rer. nat. at Faculty of Physics and Earth Sciences, University of Leipzig, Germany
<u>01.2002-07.2005</u>	Ph.D Student at the Leibniz-Institute for Tropospheric Research, Leipzig, Germany, under supervision of Prof. Dr. Hartmut Herrmann.
<u>1994</u>	MSc. in Applied Physics at the Faculty of Physics of the University, “Sst. Cyril and Methodius“- Skopje, Macedonia
<u>1988-1993</u>	Undergraduate student at the Faculty of Physics of the University, “Sst. Cyril and Methodius “- Skopje, Macedonia.

## **Peer-reviewed scientific articles (2003-2023)**

- 1) P. Li, R. Gemayel, X. Li, J. Liu, M. Tang, X. Wang, Y. Yang, H. A. Al-Abadleh, **S. Gligorovski\***, Formation of nitrogen-containing gas phase products from the heterogeneous (photo)reaction of NO<sub>2</sub> with gallic acid: Role of nitrate and iron, *Commun. Chem.*, **2023**, under review.
- 2) Y. Wang, J. Zeng, B. Wu, H. Deng, P. Li, B. He, J. Xu, H. Pang, W. Song, W. H, J. Liu, Y. Yang, X. Wang, Z. Yu, S. Gligorovski, Shedding Light on the Production of VOCs by Ozone Oxidation Chemistry at the Sea Surface Microlayer, *ACS Earth Space Chem.*, **2023**, major revision.
- 3) J. Liu, B. Li, H. Deng, Y. Yang, W. Song, X. Wang, Y. Luo, J. S. Francisco, L. Li, **S. Gligorovski\***, Resolving the Formation Mechanism of HONO via Ammonia-

Promoted Photosensitized Conversion of Monomeric NO<sub>2</sub> on Urban Glass Surfaces, *J. Am. Chem. Soc.*, **2023**, 145, 21, 11488–11493.

- 4) J. Liu, H. Su, Y. Hu, C. Gong, J. Lu, D. He, W. Zhu, D. Chen, X. Cao, J. Li, **S. Gligorovski**, Y. Luo, Highly Efficient Degradation of Sulfur-Containing Volatile Organic Compounds by Amorphous MnO<sub>2</sub> at Room Temperature: Implications for Controlling Odor Pollutants, *Appl. Catal. B: Environ.*, **2023**, 334, 122877.
- 5) Y. Cai, C. Ye, W. Chen, W. Hu, W. Song, Y. Peng, S. Huang, J. Qi, S. Wang, C. Wang, C. Wu, Z. Wang, B. Wang, X. Huang, L. He, **S. Gligorovski**, B. Yuan, M. Shao, X. Wang, The Important Contribution of Secondary Formation and Biomass Burning to Organic Nitrates in a Polluted Urban Area: Insights from In Situ Measurements of FIGAERO-CIMS, *Atmos. Chem. Phys. Discuss.*, **2023**, doi.org/10.5194/acp-2023-8.
- 6) X. Xu, H. Deng, K. Wang, **S. Gligorovski\***, X. L, Application of real-time on-line mass spectrometry in indoor chemistry, *Environmental Chemistry*, **2023**, 42(2), 416-424. (in Chinese)
- 7) L. Carena, Y. Wang, **S. Gligorovski\***, S. Berto, S. Mounier, D. Vione, Photoinduced production of substances with humic-like fluorescence, upon irradiation of water samples from Alpine lakes, *Chemosphere*, **2023**, 319, 137972.
- 8) J. Xu, H. Deng, Y. Wang, P. Li, J. Zeng, H. Pang, X. Xu, X. Li, Y. Yang, **S. Gligorovski\***, Heterogeneous Chemistry of Ozone with Floor Cleaning Agent: An Impact on Secondary VOCs in the Indoor Environment, *Sci. Total Environ.*, **2023**, 862, 160867.
- 9) X. Xu, H. Pang, C. Liu, K. Wang, G. Loisel, L. Lei, **S. Gligorovski\***, Xue Li, Real-time measurements of product compounds formed through the reaction of ozone with breath exhaled VOCs, *Environ. Sci.: Processes Impacts*, **2022**, 24, 2237-2248.
- 10) Y. Liu, Y. Wang, **S. Gligorovski**, D. Vione, S. Gao, B. Jiang, Y. Zhang, G. Zhang, B. Jin, Day-Night Alternation and Effect of Sulfate Ions on Photodegradation of Triclosan in Water, *App. Geochem.*, **2022**, 147, 105502.
- 11) H. Deng, P. S. J. Lakey, Y. Wang, P. Li, J. Xu, H. Pang, J. Liu, X. Xu, X. Li, X. Wang, Y. Zhang, M. Shiraiwa, **S. Gligorovski\***, Daytime SO<sub>2</sub> Chemistry on Ubiquitous Urban Surfaces as a Source of Organic Sulfur Compounds in Ambient Air, *Sci. Adv.*, **2022**, 8, eabq6830.
- 12) H. Deng, X. Xu, K. Wang, J. Xu, G. Loisel, Y. Wang, H. Pang, P. Li, Z. Mai, S. Yan, X. Li, **S. Gligorovski\***, The effect of human occupancy on indoor air quality through real-time measurements of key pollutants, *Environ. Sci. Technol.*, **2022**, 56, 22, 15377–15388.
- 13) Y. Wang, H. Deng, P. Li, J. Xu, B. Jiang, H. Pang, **S. Gligorovski\***, Molecular Characterization of the Product Compounds Formed upon Heterogeneous Chemistry of Ozone with Riverine Surface Microlayer, *J. Geophys. Res: Atmosphere*, **2022**, 127, e2022JD037182.
- 14) Y. Wang, H. Deng, P. Li, J. Xu, G. Loisel, H. Pang, X. Xu, X. Li, **S. Gligorovski\***, Interfacial Ozone Oxidation Chemistry at Riverine Surface Microlayer as a Source of Nitrogen Organic Compounds, *Environ. Sci. Technol. Lett.*, **2022**, 9, 6, 493–500.
- 15) J. Liu, H. Deng, R. Zhang, X. Li, Y. Luo, X. Wang, **S. Gligorovski\***, Physical and Chemical Characterization of Urban Grime during Wet and Dry Season: An Impact on the NO<sub>2</sub> Uptake Coefficients and Product Compounds, *Sci. Total Environ.*, **2022**, 838, 155973.
- 16) H. Pang, Y. Wang, Y. Wu, J. He, H. Deng, P. Li, J. Xu, Z. Yu, **S. Gligorovski\***, Unveiling the pH-dependent yields of H<sub>2</sub>O<sub>2</sub> and OH by aqueous phase ozonolysis of m-cresol in the atmosphere, *Environ. Sci. Technol.*, **2022**, 56, 12, 7618–7628.

- 17) P. Li, H. Pang, Y. Wang, H. Deng, J. Liu, G. Loisel, B. Jin, X. Li, D. Vione, S. Gligorovski\*, Inorganic ions enhance the number of product compounds through heterogeneous processing of gaseous NO<sub>2</sub> on aqueous layer of acetosyringone, *Environ. Sci. Technol.*, **2022**, 56, 9, 5398-5408.
- 18) H. Jiang, Y. He, Y. Wang, S. Li, B. Jiang, L. Carena, X. Li, L. Yang, T. Luan, D. Vione, S. Gligorovski\*, Formation of Organic Sulfur Compounds through SO<sub>2</sub> Initiated Photochemistry of PAHs and DMSO at the Air-Water Interface, *Atmos. Chem. Phys.*, **2022**, 22, 4237-4252.
- 19) S. Li, W. Song, H. Zhan, Y. Zhang, X. Zhang, W. Li, S. Tong, C. Pei, Y. Wang, Y. Chen, Z. Huang, R. Zhang, M. Zhu, H. Fang, Z. Wu, J. Wang, S. Luo, X. Fu, S. Xiao, X. Huang, J. Zeng, H. Zhang, D. Chen, S. Gligorovski, M. Ge, C. George, X. Wang, Contribution of Vehicles Emission and NO<sub>2</sub> Surface Conversion to Nitrous Acid (HONO) in Urban Environments: Implication from Tests in a Tunnel, *Environ. Sci. Technol.*, **2021**, 55, 23, 15616-15624.
- 20) H. Jiang, L. Carena, Y. He, Y. Wang, W. Zhou, L. Yang, T. Luan, X. Li, D. Vione, S. Gligorovski\*, Photosensitized degradation of DMSO initiated by PAHs at the air-water interface as an alternative source of organic sulfur compounds in the atmosphere, *J. Geophys. Res: Atmosphere*, **2021**, 126, e2021JD035346.
- 21) Y. Wang, M. Mekic, P. Li, H. Deng, S. Liu, B. Jiang, B. Jin, Davide Vione, S. Gligorovski\*, Correction to “Ionic Strength Effect Triggers Brown Carbon Formation through Heterogeneous Ozone Processing of Ortho-Vanillin, *Environ. Sci. Technol.*, **2021**, 55, 14, 10186-10187.
- 22) H. Deng, J. Liu, Y. Wang, W. Song, X. Wang, X. Li, D. Vione, S. Gligorovski\*, The Effect of Inorganic Salts on N-Containing Organic Compounds Formed by Heterogeneous Reaction of NO<sub>2</sub> with Oleic Acid, *Environ. Sci. Technol.*, **2021**, 55, 12, 7831-7840.
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- 28) J. Zeng, M. Mekic, X. Xu, G. Loisel, Z. Zhou, S. Gligorovski\*, X. Li, A novel insight into the ozone-skin lipids oxidation products observed by secondary electrospray ionization high resolution mass spectrometry, *Environ. Sci. Technol.*, **2020**, 54, 21, 13478-13487.
- 29) M. Mekic, Y. Wang, G. Loisel, D. Vione, S. Gligorovski\*, Ionic strength effect alters the heterogeneous ozone oxidation of methoxyphenols in going from cloud droplets to aerosol deliquescent particles, *Environ. Sci. Technol.*, **2020**, 54, 20, 12898-12907.

- 30) M. Mekic, J. Zeng, W. Zhou, G. Loisel, B. Jin, X. Li, D. Vione, S. Gligorovski\*, Ionic Strength Effect on Photochemistry of Fluorene and Dimethylsulfoxide at the Air–Sea Interface: Alternative Formation Pathway of Organic Sulfur Compounds in a Marine Atmosphere, *ACS Earth Space Chem.*, **2020**, 4, 1029-1038.
- 31) J. Liu, H. Deng, S. Li, H. Jiang, M. Mekic, W. Zhou, Y. Wang, G. Loisel, X. Wang, S. Gligorovski\*, Light-induced heterogeneous conversion of NO<sub>2</sub> to HONO on simulated grime consisting of fluorene and fluorene/Na<sub>2</sub>SO<sub>4</sub>: An impact on urban and indoor atmosphere, *Environ. Sci. Technol.*, **2020**, 54, 18, 11079-11086.
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- 33) J. Morin, A. Gandolfo, B. Temime-Roussel, G. Brochard, V. Bergé, S. Gligorovski, H. Wortham, Key parameters influencing the uptake of m-xylene on photocatalytic paints, *Build. Environ.*, **2020**, 179, 106979.
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- 35) M. Mekic, J. Zeng, B. Jiang, X. Li, Y. G. Lazarou, M. Brigante, H. Herrmann, S. Gligorovski\*, Formation of toxic unsaturated multifunctional and organosulfur compounds from the photosensitized processing of fluorene and DMSO at the air-water interface, *J. Geophys. Res.: Atmosphere*, **2020**, 125 (6).
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- 37) A. Gandolfo, V. Bartolomei, D. Truffier-Boutry, B. Temime-Roussel, G. Brochard, V. Bergé, H. Wortham and S. Gligorovski\*, The impact of photocatalytic paint's porosity on indoor NO<sub>x</sub> and HONO levels, *Phys. Chem. Chem. Phys.*, **2020**, 22, 589-598.
- 38) M. Mekic, J. Liu, W. Zhou, G. Loisel, J. Cai, T. He, B. Jiang, Z. Yu, Y. G. Lazarou, X. Li, M. Brigante, D. Vione, S. Gligorovski\*, Formation of highly oxygenated multifunctional compounds from cross-reactions of carbonyl compounds in the atmospheric aqueous phase, *Atmos. Environ.*, **2019**, 219, 117046.
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- 40) J. Liu, S. Li, M. Mekic, H. Jiang, W. Zhou, G. Loisel, W. Song, X. Wang, S. Gligorovski\*, Photoenhanced uptake of NO<sub>2</sub> and HONO formation on real urban grime, *Environ. Sci. Technol. Lett.*, **2019**, 6, 413-417.
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- 42) D. Vione, A. Albinet, F. Barsotti, M. Mekic; B. Jiang, C. Minero, M. Brigante, S. Gligorovski, Formation of substances with humic-like fluorescence properties, upon photoinduced oligomerization of typical phenolic compounds emitted by biomass burning, *Atmos. Environ.*, **2019**, 206, 197-207.

- 43) W. Zhou, M. Mekic, J. Liu, G. Loisel, B. Jin, D. Vione, **S. Gligorovski\***, Ionic strength effects on the photochemical degradation of acetosyringone in atmospheric deliquescent aerosol particles, *Atmos. Environ.*, **2019**, 198, 83-88.
- 44) R. Du, Y-L. Zhang, J. Zeng, M. Fang, **S. Gligorovski**, Z. Zhou, X. Li, Influence of Ambient Gases on Detection of Exhaled Gas in Secondary Electrospray Source by Ultra-High Resolution Mass Spectrometry, *Chinese J. Anal. Chem.*, **2019**, 47, 916-924. (in Chinese)
- 45) X. Li, **S. Gligorovski\***, H. Herrmann, Underestimated contribution of HONO to indoor OH radicals: an emerging concern, *Sci. Bull.*, **2018**, 63, 1383-1384.
- 46) **S. Gligorovski\***, X. Li, H. Herrmann, Indoor (Photo)chemistry in China and Resulting Health Effects, *Environ. Sci. Technol.*, **2018**, 52, 10909-10910.
- 47) A. Gandolfo, S. Marque, B. Temime-Roussel, R. Gemayel, H. Wortham, D. Truffier-Boutry, V. Bartolomei, **S. Gligorovski\***, Unexpectedly high levels of organic compounds released by indoor photocatalytic paints, *Environ. Sci. Technol.*, **2018**, 52, 11328-11337.
- 48) M. Mekic, G. Loisel, W. Zhou, B. Jiang, D. Vione, **S. Gligorovski\***, Ionic strength effects on the reactive uptake of ozone on aqueous pyruvic acid: Implications for air-sea ozone deposition, *Environ. Sci. Technol.*, **2018**, 52, 12306-12315.
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- 2) S. Net, **S. Gligorovski**, E. Gomez Alvarez, Henri Wortham, Light induced heterogeneous ozone processing on organic coatings in the atmosphere, abstracts of papers of the american chemical society, Volume: 242 Meeting Abstract: 66-PHYS, **2011**.
- 3) N. Hayeck, P. Maillot, T. Vitrani, N. Pic, H. Wortham, **S. Gligorovski**, B. Temime-Roussel, A. Mizzi, I. Poulet, Metrology, Inspection, and Process Control for Microlithography XXVIII, edited by Jason P. Cain, Martha I. Sanchez, Proc. of SPIE Vol. 9050, 905021, SPIE · CCC code: 0277-786X/14/\$18 · doi: 10.1117/12.2045579, **2014**.

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- 6) J. Socorro, A. Durand, B. Temime-Roussel, S. Ravier, **S. Gligorovski**, H. Wortham, E. Quivet, Heterogeneous oxidation of pesticides on aerosol condensed phase, *Proceedings in 23rd International Conference on Modelling, Monitoring and Management of Air Pollution*, Valencia, Spain, doi: 10.2495/AIR150021, **2015**.
- 7) J. Socorro, A. Durand, B. Temime-Roussel, S. Ravier, **S. Gligorovski**, H. Wortham, E. Quivet, Heterogeneous reactivity and photodegradation of pesticides adsorbed on atmospheric particles under simulated laboratory conditions, *XV Symposium in Pesticide Chemistry*, September 2-5, **2015**, Piacenza, Italy.
- 8) J. Socorro, A. Durand, B. Temime-Roussel, S. Ravier, **S. Gligorovski**, H. Wortham, E. Quivet, Heterogeneous reactions of ozone and hydroxyl radicals with commonly used pesticides adsorbed on particles, *European Aerosol Conference*, September 6-11, **2015**, Milan, Italy.
- 9) A. Gandolfo, V. Bartolomei, E. Gomez Alvarez, S. Tlili, H. Wortham, J. Kleffmann, **S. Gligorovski**, Direct measurements of the spectrally resolved solar actinic flux within indoor environment, *Proceedings of Indoor Air 2016*, **2016**.
- 10) A. Gandolfo, V. Bartolomei, E. Gomez Alvarez, S. Tlili, H. Wortham, J. Kleffmann, **S. Gligorovski**, Impact of photocatalytic paints on oxidative capacity of indoor atmosphere, *Proceedings of Indoor Air 2016*, **2016**.
- 11) A. Gandolfo, B. Temime-Roussel, H. Wortham, **S. Gligorovski**, Photocatalytic nanomaterials as an indoor air remediation technology, *Proceedings of Indoor Air 2016*, **2016**.
- 12) A. Gandolfo, H. Wortham, **S. Gligorovski**, Reactive uptakes of NO<sub>2</sub> on photocatalytic paints as a function of temperature, *Proceedings of Indoor Air 2016*, **2016**.
- 13) A. Gandolfo, H. Chen, A. Kukui, A. Durand, B. Temime-Roussel, H. Wortham, **S. Gligorovski**, The fate of OH and RO<sub>2</sub> radicals in presence of TiO<sub>2</sub> nanoparticles embedded in paints, *Proceedings of Indoor Air 2018*, **2018**.
- 14) A. Gandolfo, H. Chen, A. Kukui, A. Durand, B. Temime-Roussel, J. Kleffmann, H. Wortham, **S. Gligorovski**, Impact of photocatalytic paints on indoor vocs in a full-scale study: focus on regulated and reactive compounds, *Proceedings of Indoor Air 2020*, **2020**.
- 15) Gandolfo, S. Tlili, H. Chen, A. Kukui, A. Durand, B. Temime-Roussel, J. Kleffmann, H. Wortham, **S. Gligorovski**, Measurements and modeling of the spectral properties of sunlight at the irradiated volume and surface of an indoor environment: the impact on the oxidation capacity, *Proceedings of Indoor Air 2020*, **2020**.

## **Invited Conferences**

- 1) **S. Gligorovski**, S. Net, L. Nieto-Gligorovski, B. Temime-Rousell, S. Barbat, and H. Wortham, Photosensitized Heterogeneous Ozone Processing on the Organic Coatings in the Atmosphere, Atmospheric Chemical Mechanisms-Conference, University of California, Davis, USA, 10-12, December, **2008**.
- 2) **S. Gligorovski**, Light induced multiphase and heterogeneous processes in the atmosphere, Workshop on Atmospheric Chemistry: kinetics and spectroscopy, 24-26 February **2010**, Bayreuth, Germany.
- 3) **S. Gligorovski**, E. Gómez Alvarez, M. Sörgel, V. Bartolomei, C. Zetzsch, D. Amedro, C. Schomaecker, J.-F. Doussin, C. Afif, H. Wortham, Light-induced NO<sub>2</sub> heterogeneous reactions: How they affect the balance of nitrous acid indoors, PhotoPAQ symposium, Porticcio, 14-17 May **2012**.
- 4) **S. Gligorovski**, Role of water in the light induced heterogeneous chemistry of environmental interfaces, *Interaction Between Indoor and Atmospheric Chemistry (IBIAC) Workshop*, Lille, France 15 May-16 May, **2015**.
- 5) **S. Gligorovski**, Indoor air photochemistry: A source of hydroxyl radicals (OH) in the ambient air, European Society for Photobiology (ESP) congres, Aveiro, Portugal, 31 August - 4 September, **2015**.
- 6) **S. Gligorovski**, Sunlight initiated photochemical reactions as a source of highly reactive hydroxyl radicals (OH) within indoor environments, 1st French-Italian Workshop on Nanoscience, Hyeres, France, 6-9 September, **2015**.
- 7) **S. Gligorovski**, Indoor Atmospheric Chemistry, *Indoor Chemistry and health impact*, Guangzhou, China, 23 November, **2018**.
- 8) **S. Gligorovski**, SETAC A/P focus meeting on environmental pollution and health in coastal zones along the 21<sup>st</sup> century Maritime Silk Road, Guangzhou, China 23-26 April, **2019**.
- 9) **S. Gligorovski**, keynote speaker at *Healthy Buildings 2019 Asia and Pacific Rim (HB2019 Asia)*, 22-25 October, Changsha, China, **2019**. Title: “Indoor Atmospheric Photochemistry: An Emerging Global Concern”.
- 10) **S. Gligorovski**, at A Healthy Intake: Environmental Pollutants in Air, Water, Food and their Removal” at the 2021 IUPAC/CCCE virtual conference, 13-20 August, Canada, **2021**. Title: “Ionic strength effect in multiphase chemistry: Clouds/fog versus aerosol particles”.
- 11) **S. Gligorovski**, Enhanced heterogeneous reactivity of ozone with methoxyphenols driven by sulfate and nitrate ions in aerosol particles, 2021 International Chemical Congress of Pacific Basin Societies which took place virtually (Pacifichem 2021), December 16-21, **2021**,

## **Invited Seminars**

- 1) **S. Gligorovski**, Reactive uptakes of ozone on particulate organic solid films, CEQUINOR (Centro de Quimica Inorganica), Facultad de Ciencias Exactas, University of La Plata, Argentina, 1-7 March, **2006**.
- 2) **S. Gligorovski**, L. Nieto-Gligorovski, C. Zetzsch and C. George. Photosensitized heterogeneous reactions of ozone with model aerosol surfaces, National Institute of Chemistry, Ljubljana, Slovenia, 7th July, **2007**.
- 3) **S. Gligorovski**, Light-induced heterogeneous chemistry in the atmosphere, National Institute of Chemistry, Ljubljana, Slovenia, 21 April, **2009**.
- 4) **S. Gligorovski**, Indoor HONO Sinks and Sources; Direct measurements of OH radicals indoors, University of California, Irvine, USA, 12 December, **2011**.

- 5) **S. Gligorovski**, Photochemical pollution: An emerging problem at our homes, Institute of Chemistry, Clermont-Fernand, France, 28 May, **2015**.
- 6) **S. Gligorovski**, Sunlight initiated photochemical reactions at our dwellings: A main source of hydroxyl radicals (OH), Aarhus University, Department of Engineering, Aarhus, Denmark, 30 July, **2015**.
- 7) **S. Gligorovski**, Atmospheric implications of hydroxyl radicals, Guangzhou Institute of Geochemistry, Guangzhou, China, 15 March **2016**.
- 8) **S. Gligorovski**, Indoor air (photo)chemistry: A world-wide concern, Department of Environmental Sciences, Peking University, China, 21 September, **2017**.
- 9) **S. Gligorovski**, Indoor air (photo)chemistry: A world-wide concern, Department of Chemistry & Biochemistry, University of Colorado; Boulder, US, 13 October, **2017**.
- 10) **S. Gligorovski**, Indoor Photochemistry, Department of Chemistry & Division of Environment, Hong Kong University of Science & Technology, 20 November, **2018**.
- 11) **S. Gligorovski**, Sunlight driven reactions in the atmosphere: From outdoors to indoors, Sun Yat Sen University, Guangzhou, China, 22 April, **2019**.
- 12) **S. Gligorovski**, Sunlight driven reactions in the atmosphere: From outdoors to indoors, Queensland University of Technology, Brisbane, Australia, 27 July, **2019**.
- 13) **S. Gligorovski**, Do salts alter the chemical processing at the atmospheric aerosols and at the sea surface? Fudan University, Shanghai, China, 22 July **2021**.
- 14) **S. Gligorovski**, Indoor Air Chemistry: An emerging global concern, Westlake University, 20 July, **2021**.
- 15) **S. Gligorovski**, Indoor air chemistry and human health, Duke Kunshan University, 17 January **2022**.
- 16) **S. Gligorovski**, How does the chemistry at environmental surfaces affect the air quality, National Institute of Chemistry, Ljubljana, Slovenia, 06 October **2022**.
- 17) **S. Gligorovski**, How does the chemistry at environmental surfaces affect the air quality, University of Torino, Torino, Italy, 10 October **2022**.
- 18) **S. Gligorovski**, How does the chemistry at environmental surfaces affect the air quality, Institute for Tropospheric Research (TROPOS), Leipzig, Germany, 22 November **2022**.
- 19) **S. Gligorovski**, How does the chemistry at environmental surfaces affect the air quality, Southern University of Science and Technology (SUSTech), Shenzhen, China, 17 March **2023**.

## **Talks and posters at international conferences**

- 1) **S. Gligorovski** and H. Herrmann, Multiphase chemistry of Oxygenated Species in the Troposphere (MOST-EU Framework). *1st Annual meeting*, Orléans, France, 7-8 November, 2002. **(oral)**
- 2) **S. Gligorovski** and H. Herrmann, Laser-based studies of OH with oxygenated organics in aqueous solutions. *(APP), EC / EUROTRAC-2 Joint Workshop "Shaping the Future of Atmospheric Chemistry Research in Europe"*, Paris, France, 9-11 September, 2002. **(poster)**
- 3) **S. Gligorovski** and H. Herrmann, Multiphase chemistry of Oxygenated Species in the Troposphere (MOST-EU Framework), *2nd Annual meeting*, Wuppertal, Germany, 3-4 November, 2003. **(oral)**

- 4) **S. Gligorovski** and H. Herrmann, Laser-based studies for OH reactions with oxygenated species in the troposphere, *Bunsentagung*, Kiel, Germany, 29-31 May, 2003. (poster)
- 5) **S. Gligorovski** and H. Herrmann, Multiphase chemistry of Oxygenated Species in the Troposphere (MOST-EU Framework), *3rd Annual meeting*, Marseille, France, 7-8 December, 2004. (oral)
- 6) **S. Gligorovski** and H. Herrmann, Aqueous phase degradation of selected oxygenated organics, *SETAC Europe 14th Annual Meeting, Prague*, Czech Republic, 18-22 April, 2004. (oral)
- 7) **S. Gligorovski** and H. Herrmann, Degradation of selected oxygenated organic compounds in the aqueous phase, *Bunsentagung 2004*, Dresden, Germany, 20-22 May, 2004. (oral)
- 8) **S. Gligorovski** and H. Herrmann, Aqueous phase reactions of OH radical with selected oxygenated organic compounds. *5th Informal Conference on Reaction Kinetics and Atmospheric Chemistry*, Helsingør, Denmark, 11-13 June, 2004. (poster)
- 9) D. Hoffmann, **S. Gligorovski**, P. Barzaghi and H. Herrmann, Laboratory studies of aqueous phase reactions of free radicals with organic compounds of relevance for atmospheric chemistry, *SETAC-GLB/GDCh-Tagung*, Aachen, Germany, 2004. (poster)
- 10) **S. Gligorovski** and H. Herrmann, Multiphase chemistry of Oxygenated Solvents in the Troposphere: from Laboratory studies to global impacts (MOLI), *Annual meeting, Heraklion*, Greece, 2-3 June, 2005. (oral)
- 11) **S. Gligorovski**, I. Morozov, P. Barzaghi and H. Herrmann, Hydroxyl radical reactions with halogenated ethanols in aqueous solution. *EGU 2005*, Vienna, Austria, 24-29 April, 2005. (poster)
- 12) P. Barzaghi, A. Tilgner, Z. Majdik, **S. Gligorovski**, L. Poulain, A. Monod and H. Herrmann, CAPRAM 3.0: A Mechanism with a more Detailed Description of Tropospheric Aqueous Phase Organic Chemistry. *EGU 2005*, Vienna, Austria, 24-29 April, 2005. (poster)
- 13) A. Tilgner, P. Barzaghi, Z. Majdik, **S. Gligorovski**, L. Poulain, A. Monod and H. Herrmann, An extended reaction mechanism for tropospheric multiphase modelling: CAPRAM 3.0. *European Aerosol Conference (EAC) 2005*, Ghent, Belgium, 28-2 August, 2005. (poster)
- 14) P. Barzaghi, **S. Gligorovski**, D. Hoffmann, K. Parajuli and H. Herrmann, Laser-based studies of aqueous phase radical reactions of relevance for tropospheric chemistry, *1st ACCENT Symposium*, Urbino, Italy, 12-16 September, 2005. (poster)
- 15) **S. Gligorovski** and Ch. George, Interactions between gas phase ozone and phenols in presence of photosensitizers, *EGU 2006*, Vienna, Austria, 2-7 April, 2006. (oral)
- 16) D. Hoffmann, **S. Gligorovski**, K. Parajuli, and Herrmann, H. Influence of the ionic strength on radical reactions in aqueous solution. *EGU 2006*, Vienna, Austria, 2-7 April, 2006. (poster)
- 17) A. Jammoul, **S. Gligorovski**, C. George and B. D'Anna, Photosensitized Heterogeneous Chemistry of Ozone on Organic Films, *Réunion annuelle du groupe français de cinétique et photochimie*, Marseille, France, 4-5 June, 2007. (oral)
- 18) I. Grgic, **S. Gligorovski** and J. T. Van Elteren, Particle size distribution of trace metals in atmospheric aerosols by using a laser ablation ICP-MS mapping approach, Thessaloniki, Greece, 24-29 August, 2008. (oral)
- 19) **S. Gligorovski**, J. T. Van Elteren, I. Grgic, Size-segregated elemental composition of aerosol particles: A laser ablation ICP-MS mapping approach, *EGU 2008*, Vienna, Austria, 13-18 April, 2008. (oral)
- 20) S. Net, **S. Gligorovski**, L. Nieto-Gligorovski, B. Temime-Roussell, S. Barbat, Y. Lazarou and H. Wortham, Photosensitized heterogeneous ozone processing on the organic

coatings in the atmosphere: GC-MS and PTR-MS study, *10th International IGAC conference*, Annecy, France, 7-12 September, 2008. (**poster**)

21) I. Grgić, L. Nieto-Gligorovski, **S. Gligorovski** and H. Wortham, Aqueous-phase reactions of oxalic acid with ozone in the presence of pyruvic acid as a photosensitizer, *10th International IGAC conference*, Annecy, France, 7-12 September, 2008. (**poster**)

22) L.I. Nieto-Gligorovski, S. Net, **S. Gligorovski**, H. Wortham and C. Zetzsch, In situ spectroscopic investigations on organic coated particles following the heterogeneous ozone processing in the presence of simulated sunlight, *10th International IGAC conference*, Annecy, France, 7-12 September, 2008. (**poster**)

23) J. T. van Elteren, **S. Gligorovski**, I. Grgić, Size-segregated elemental composition of aerosol particles: a laser ablation ICPMS mapping approach combined with image analysis, *9th European workshop on laser ablation in elemental and isotopic analysis*, Prague, Czech Republic, July 2008. (**poster**)

24) S. Net, **S. Gligorovski**, L. Nieto-Gligorovski, B. Temime-Roussel, H. Wortham, Réactivité hétérogène des composés organiques semi-volatils (COSV) avec l'ozone : Etude GC-MS et PTR-MS, *Conférence annuelle de cinétique et de photochimie*, Strasbourg, France, 9-10 June 2008. (**oral**)

25) S. Net, **S. Gligorovski**, L. Nieto-Gligorovski, B. Temime-Roussel, H. Wortham, Réactivité hétérogène de l'ozonolyse des composés organiques atmosphérique en présence d'un photosensibilisateur, *21<sup>ème</sup> journée de la chimie SFC PACA*, Aix-Marseille Université – Centre Saint Jérôme, 16 April 2009. (**oral**)

26) S. Net, **S. Gligorovski**, L. Nieto-Gligorovski, B. Temime-Roussel, H. Wortham, Réactivité hétérogène des composés organiques provenant de la combustion de la biomasse et de leurs produits de la réaction: Etude UV-VIS, GC-MS et PTR-MS, *24<sup>ème</sup> Congrès Français sur les Aérosols*, Paris, France, 14-15 January, 2009. (**oral**)

27) S. Net, **S. Gligorovski**, L. Nieto-Gligorovski, B. Temime-Roussel, H. Wortham, Réactivité hétérogène de l'ozonolyse de 4-Phénoxyphénol en présence d'un photosensibilisateur (4-Carboxybenzophénol), *16<sup>ème</sup> Congrès Annuel de l'Ecole Doctorale « Sciences de l'Environnement » (EDSE2009)*, Marseille, France, 2009. (**poster**)

28) N. Marchand, I. El Haddad, J. Dron, E. Abidi, Y. Liu, S. Net, B. Temime-Roussel, E. Quivet, **S. Gligorovski**, A. Monod, H. Wortham, Les particules atmosphériques : Impacts, sources et caractérisation chimique. *21<sup>ème</sup> journée de la chimie SCF PACA*, Marseille, France, 16 April, 2009. (**oral**)

29) I. Grgic, L. I. Nieto-Gligorovski, S. Net, B. Temime-Roussel, H. Wortham and **S. Gligorovski**, Light induced multiphase chemistry of gas-phase ozone on aqueous pyruvic and oxalic acids, *INTROP Final Conference - Tropospheric Chemistry*, Portoroz, Slovenia, 14-17 April, 2009. (**poster**)

30) L. I. Nieto-Gligorovski, S. Net, **S. Gligorovski**, H. Wortham and C. Zetzsch, In situ spectroscopic investigations on organic coatings after heterogeneous processing by ozone in the presence of simulated sunlight, *INTROP Final Conference - Tropospheric Chemistry*, Portoroz, Slovenia, 14-17 April, 2009. (**poster**)

31) Lucy Carpenter, Roland von Glasow, Laurens Ganzeveld, Rolf Sander, Steve Archer, Liz Coleman, Christian George, **S. Gligorovski**, Jeff Hare, Dwayne Heard, Manuela Martino, Johannes Ofner, John Plane, Xin Yang, *EU COST Action 735 workshop, Ozone in the remote marine boundary layer*, York, England, 11-12 May, 2009. (**poster**)

32) **S. Gligorovski**, I. Grgic, S. Net, O. Böge, Y. Iinuma, A. Kahnt, S. Scheinhardt, H. Herrmann, H. Wortham, Light-induced multiphase chemistry of gas phase ozone on aqueous pyruvic and oxalic acids: Aerosol chamber study, *AGU fall meeting*, San Francisco, California, USA, 13-17 December, 2010. (**oral**)

- 33) **S. Gligorovski**, S. Net, C. Zetzsch, H. Wortham, Heterogeneous reactions of gas-phase ozone with methoxyphenols, in the absence and presence of simulated sunlight, Atmospheric Chemical Mechanisms-Conference, University of California, Davis, USA, 10-12, December, 2010. (**poster**)
- 34) S. Tlili, **S. Gligorovski**, B. Temime-Roussel, H. Wortham, Adsorption and Desorption Behavior of Organic Molecules on Silicon Wafer Surface, *219<sup>th</sup> ElectroChemical Society Meeting*, Montréal, Canada, 1-6 Mai 2011. (**oral**)
- 35) **S. Gligorovski**, S. Net, E. Gomez Alvarez, C. Zetzsch, H. Wortham, Light induced heterogeneous ozone processing on organic coatings in the atmosphere, *American Chemical Society (ACS) Meeting*, Denver (CO, USA), 28 August - 1 September 2011. (**oral**)
- 36) E. Gómez Alvarez, M. Soergel, S. Bassil, C. Zetzsch, **S. Gligorovski**, H. Wortham. Light-induced heterogeneous reactions of NO<sub>2</sub> on indoor surfaces: How they affect the balance of nitrous acid. *AGU fall meeting*. San Francisco, (CA, USA), 5-9 December 2011. (**oral**)
- 37) V. Bartolomei, M. Sörgel, **S. Gligorovski**, E. Gómez Alvarez, C. Zetzsch, H. Wortham, Photoenhanced uptakes of NO<sub>2</sub> by indoor surfaces: A new HONO source. *AGU fall meeting*. San Francisco, (CA, USA), 3-7 December 2012. (**oral**)
- 38) V. Bartolomei, E. Gomez Alvarez, **S. Gligorovski**, H. Wortham, Light induced heterogeneous reactions of gas-phase NO<sub>2</sub> on lacquer and paint surfaces indoors. Congrès annuelle de cinétique et de photochimie en phase gazeuse, Bordeaux (France), 4-5 juin 2012. (**Oral**)
- 39) S. Zhang, R.S. Strekowski, A. Monod, **S. Gligorovski**, H. Wortham, L. Bosland, C. Zetzsch, Kinetic studies of the OH(X2Π) and O(3P) initiated reactions with selected short chain iodoalkanes. 22nd International Symposium on Gas Kinetics Boulder (Colorado, USA), 18-22 Jun 2012 (**Oral**)
- 40) N. Hayeck, H. Wortham, **S. Gligorovski**, I. Poulet, C. Galvez, Analytical method validation for standard wafer production. 15th Technical and Scientific Meeting of ARCSIS CMP Gardanne (France) November 2012. (**Poster**)
- 41) V. Bartolomei, E. Gomez Alvarez, Julian Wittmer, **S. Gligorovski**, Mirella Glor, Rafal Strekowski, Brice Temime Roussel, Andreas Held, C. Zetzsch, H. Wortham, Combustion processes indoors: A source of high OH radical concentrations through photolysis of HONO. *AGU fall meeting*. San Francisco, (CA, USA), 9-13 December 2013. (**poster**)
- 42) J. Socorro, M. Désert, E. Quivet, **S. Gligorovski**, H. Wortham, Light induced heterogeneous ozone processing on the pesticides adsorbed on silica particles. *AGU fall meeting*. San Francisco, (CA, USA), 9-13 December 2013. (**poster**)
- 43) E. Gómez Alvarez, D. Amedro, C. Afif, **S. Gligorovski**, C. Schoemacker, C. Fittschen, J-F. Doussin, Henri Wortham, Photolysis of nitrous acid as a primary source of OH radicals indoors. *AGU fall meeting*. San Francisco, (CA, USA), 9-13 December 2013. (**oral**)
- 44) V. Bartolomei, A. Gandolfo, E. Gomez Alvarez, **S. Gligorovski**, H. Wortham, Photocatalytic degradation of NO<sub>2</sub> on indoor paint: The influence of the size and quantity of TiO<sub>2</sub> nanoparticles, *PhotoPAQ symposium*, Lyon, 15-17 April, 2014. (**oral**)
- 45) E. Gomez Alvarez, V. Bartolomei, J. Wittmer, **S. Gligorovski**, R. Strekowski, M. Glor, A. Held, C. Zetzsch, E. Quivet, H. Wortham, Determination of hydroxyl radicals concentration levels in the indoor environment as a function of varying levels of expected photolysis frequencies, *PhotoPAQ symposium*, Lyon, 15-17 April, 2014. (**poster**)
- 46) **S. Gligorovski**, V. Bartolomei, E. Gomez Alvarez, J. Wittmer, R. Strekowski, M. Glor, A. Held, C. Zetzsch, E. Quivet, H. Wortham, Nitrous Acid (HONO) emitted by burning candle as a source of high levels of Hydroxyl Radical (OH), *The 13<sup>th</sup> international conference on indoor air quality and climate*. Hong Kong (SAR China), 7-12 July 2014. (**oral**)

- 47) **S. Gligorovski**, E. Gómez Alvarez, D. Amedro, C. Afif, C. Schoemacker, C. Fittschen, J-F. Doussin, H. Wortham, Light-induced breakdown of Nitrous Acid (HONO) as a source of unexpectedly high levels of Hydroxyl Radical (OH). *The 13<sup>th</sup> international conference on indoor air quality and climate*. Hong Kong (SAR China), 7-12 July 2014. (oral)
- 48) R. Gemayel, B. Temime-Roussel, S. Hellebust, H. Wortham, **S. Gligorovski**, Development of an analytical method for quantitative determination of atmospheric particles by LAAP-TOF instrument, *AGU fall meeting*. San Francisco, (CA, USA), 15-19 December 2014. (poster)
- 49) J. Socorro, A. Durand, **S. Gligorovski**, H. Wortham, E. Quivet, Light-induced degradation of eight commonly used pesticides adsorbed on atmospheric particles: Kinetic and Product study, *AGU fall meeting*. San Francisco, (CA, USA), 15-19 December 2014. (poster)
- 50) **S. Gligorovski**, V. Bartolomei, A. Gandolfo, E. Gomez Alvarez, J. Kleffmann, H. Wortham, Heterogeneous reactivity of NO<sub>2</sub> with photocatalytic paints: A possible source of nitrous acid (HONO) in the indoor environment, *AGU fall meeting*. San Francisco, (CA, USA), 15-19 December 2014. (poster)
- 51) J. Socorro, A. Durand, B. Temime-Roussel, S. Ravier, **S. Gligorovski**, H. Wortham, E. Quivet, Heterogeneous reactivity and photodegradation of pesticides adsorbed on atmospheric particles under simulated laboratory conditions, *XV Symposium in Pesticide Chemistry*, Piacenza, Italy, September 2-5, 2015. (oral)
- 52) Socorro, A. Durand, B. Temime-Roussel, S. Ravier, **S. Gligorovski**, H. Wortham, E. Quivet, Heterogeneous reactions of ozone and hydroxyl radicals with commonly used pesticides adsorbed on particles, *European Aerosol Conference*, Milan, Italy, September 6-11, 2015. (oral)
- 53) **S. Gligorovski**, Role of water in the light induced heterogeneous chemistry of environmental interfaces, *Interaction Between Indoor and Atmospheric Chemistry (IBIAC) Workshop*, Lille, France 15 May-16 May, 2015. (oral)
- 54) **S. Gligorovski**, Indoor air photochemistry: A source of hydroxyl radicals (OH) in the ambient air, European Society for Photobiology (ESP) congres, Aveiro, Portugal, 31 August - 4 September, 2015. (oral)
- 55) **S. Gligorovski**, Sunlight initiated photochemical reactions as a source of highly reactive hydroxyl radicals (OH) within indoor environments, 1st French-Italian Workshop on Nanoscience, Hyeres, France, 6-9 September, 2015. (oral)
- 56) **S. Gligorovski**, A. Gandolfo, H. Wortham, Reactive uptakes of NO<sub>2</sub> on photocatalytic paints as a function of temperature, *The 14<sup>th</sup> international conference on indoor air quality and climate*. Ghent, Belgium 3-8 July 2016. (oral)
- 57) A. Gandolfo, V. Bartolomei, E. Gomez Alvarez, S. Tlili, H. Wortham, J. Kleffmann, **S. Gligorovski**, Direct measurements of the spectrally resolved solar actinic flux within indoor environment, *The 14<sup>th</sup> international conference on indoor air quality and climate*. Ghent, Belgium 3-8 July 2016. (poster)
- 58) A. Gandolfo, V. Bartolomei, E. Gomez Alvarez, S. Tlili, H. Wortham, J. Kleffmann, **S. Gligorovski**, Impact of photocatalytic paints on oxidative capacity of indoor atmosphere, *The 14<sup>th</sup> international conference on indoor air quality and climate*. Ghent, Belgium 3-8 July 2016. (oral)
- 59) A. Gandolfo, B. Temime-Roussel, H. Wortham, **S. Gligorovski**, Photocatalytic nanomaterials as an indoor air remediation technology, *The 14<sup>th</sup> international conference on indoor air quality and climate*. Ghent, Belgium 3-8 July 2016. (poster)
- 60) R. Gemayel, S. Hellebust, B. Temime-Roussel, J. T. Van Elteren, H. Wortham, **S. Gligorovski**, Development of a methodology for trace element characterization of atmospheric particles by laser ablation aerosol particle time-of-flight mass spectrometry

(LAAP-TOF-MS), The 2nd International Conference on Atmospheric Dust, DUST 2016, Castellaneta Marina, Italy 12-17 June, **2016. (oral)**

- 61) **S. Gligorovski**, Addressing the Complexity of Our Atmosphere through Integration across Scales, *Gordon Research Conference*, Grand Summit Hotel at Sunday River, Newry, 30 July-4 August, **2017**.
- 62) M. Mekic, W. Deng, W. Song, X. Wang, X. Ding, **S. Gligorovski**, Photosensitized processes as an alternative photochemical pathways in the atmospheric bulk aqueous phase, *36th AAAR Annual Conference*, Raleigh, North Carolina, USA, 16-20 October, **2017. (poster)**
- 63) A. Gandolfo, H. Chen, A. Kukui, A. Durand, B. Temime-Roussel, H. Wortham, **S. Gligorovski**, The fate of OH and RO<sub>2</sub> radicals in presence of TiO<sub>2</sub> nanoparticles embedded in paints, *The 15th international conference on indoor air quality and climate*. Philadelphia, PA, USA 22-27 July, **2018. (oral)**
- 64) S. Gligorovski, Indoor Photochemistry, *1st International High-Level Symposium on Toxicology and Health of Air Pollution (THAP)*, Beijing, China October 20-22, **2018 (oral)**
- 65) **S. Gligorovski**, Indoor Photochemistry, *Mini Symposium on Aerosols and Mass Spectrometry*, City University, Hong Kong, 21<sup>st</sup> November, **2018. (oral)**
- 66) **S. Gligorovski**, J. Zeng, S. Li, J. Liu, M. Mekic, G. Loisel, W. Zhou, C. Liu, A. Gandolfo, Z. Yu, X. Li, Assessing the oxidation capacity of an indoor environment in Guangzhou, China, *Asian Aerosol Conference (AAC)*, Hong Kong, 27-30 May, **2019. (oral)**
- 67) J. Liu, M. Mekic, W. Zhou, G. Loisel, **S. Gligorovski**, Photoenhanced uptake of NO<sub>2</sub> on simulated urban surface, *Asian Aerosol Conference (AAC)*, Hong Kong, 27-30 May, **2019. (poster)**
- 68) M. Mekic, J. Liu, G. Loisel, W. Zhou, **S. Gligorovski**, Formation of highly oxygenated multifunctional compounds from photosensitized transformation of glyoxal: An insight at a molecular level, *Asian Aerosol Conference (AAC)*, Hong Kong, 27-30 May, **2019. (poster)**
- 69) M. Mekic, J. Liu, Y. G. Lazarou, M. Brigante, D. Vione, **S. Gligorovski**, Oligomers formation from cross-reactions of carbonyl compounds in the atmosphere: an insight at a molecular level, *American Chemical Society meeting*, San Diego, USA, 25 – 29 August, **2019. (oral)**
- 70) **S. Gligorovski**, M. Mekic, M. Brigante, D. Vione, Ionic strength effects on the reactive uptake of ozone on organic compounds: implications for air-sea ozone deposition, *American Chemical Society meeting*, San Diego, USA, 25 – 29 August, **2019. (oral)**
- 71) B. Jin, Y. Liu, M. Mekic, L. Carena, D. Vione, **S. Gligorovski**, G. Zhang, Stable carbon isotope fractionation during photodegradation of tricosan in the aqueous phase, *GOLDSCHMIDT2019*, Barcelona, Spain, 18-23 August, **2019. (oral)**
- 72) **S. Gligorovski**, J. Liu, M. Mekic, S. Li, J. Zeng, Z. Yu, W. Zhou, G. Loisel, A. Gandolfo, W. Song, X. Wang, Z. Zhou, H. Herrmann, X. Li, *Healthy Buildings 2019 Asia and Pacific Rim (HB2019 Asia)*, 22-25 October, Changsha, China, **2019.**
- 73) M. Mekic, H. Jiang, J. Liu, G. Loisel, W. Zhou, J. Zeng, Z. Yu, Y. G. Lazarou, M. Brigante, X. Li, **Sasho Gligorovski**, Photosensitized processing of fluorene at the air-water interface as a source of unsaturated and multifunctional compounds in the earth atmosphere, *POPs Forum*, Guangzhou, China, 15-19 May, **2019. (oral)**
- 74) **S. Gligorovski**, M. Mekic, M. Brigante, D. Vione, Ionic strength effects on the reactive uptake of ozone on organic compounds: Implications for air-sea ozone deposition, *15th International Conference on Atmospheric Sciences and Applications to Air Quality*, Kuala Lumpur, Malesia, 28-30 October, **2019. (oral)**
- 75) M. Mekic, J. Liu, Y. G. Lazarou, M. Brigante, D. Vione, **S. Gligorovski**, Oligomers formation from cross-reactions of carbonyl compounds in the atmosphere: an insight at a molecular level, *15th International Conference on Atmospheric Sciences and Applications to Air Quality*, Kuala Lumpur, Malesia, 28-30 October, **2019. (oral)**

- 76) A. Gandolfo, H. Chen, A. Kukui, A. Durand, B. Temime-Roussel, J. Kleffmann, H. Wortham, **S. Gligorovski**, Impact of photocatalytic paints on indoor vocs in a full-scale study: focus on regulated and reactive compounds, 16th International Conference on Indoor Air Quality and Climate (INDOOR AIR 2020), **2020, (oral)**
- 77) A. Gandolfo, S. Tlili, H. Chen, A. Kukui, A. Durand, B. Temime-Roussel, J. Kleffmann, H. Wortham, **S. Gligorovski**, Measurements and modeling of the spectral properties of sunlight at the irradiated volume and surface of an indoor environment: the impact on the oxidation capacity, 16th International Conference on Indoor Air Quality and Climate (INDOOR AIR 2020), **2020, (poster) Award the best poster**
- 78) **S. Gligorovski**, Enhanced heterogeneous reactivity of ozone with methoxyphenols driven by sulfate and nitrate ions in aerosol particles, 2021 International Chemical Congress of Pacific Basin Societies which took place virtually (**Pacifichem 2021**), December 16-21, **2021, (invited oral)**
- 79) M. Mekic, H. Jiang, J. Zeng, X. Li, M. Brigante, D. Vione, H. Herrmann, **S. Gligorovski**, Alternative formation pathway of organosulfate compounds initiated by excited triplets of PAHs and DMSO at the air-water interface, 2021 International Chemical Congress of Pacific Basin Societies which took place virtually (**Pacifichem 2021**), December 16-21, **2021, (poster)**
- 80) **S. Gligorovski**, Indoor photochemistry: An emerging global concern, Shenzhen, China, **(invited oral)**
- 81) **S. Gligorovski**, Y. Wang, H. Deng, P. Li, J. Xu, H. Pang, Ionic Strength Effects on Multiphase Chemistry: Clouds/Fog versus Aerosol Particles, The 12<sup>th</sup> Asian Aerosol Conference, Taipei, 12-16 June, **2022. (oral)**
- 82) **S. Gligorovski**, H. Deng, J. Xu, G. Loisel, H. Pang, J. Zeng, X. Li, Unveiling the effect of human occupancy on indoor air quality through secondary reactions of OH and O<sub>3</sub> with the primary emitted pollutants, The 12<sup>th</sup> Asian Aerosol Conference, Taipei, 12-16 June, **2022. (oral)**
- 83) X. Xu, H. Pang, C. Liu, K. Wang, G. Loisel, Z. Zhou, **S. Gligorovski**, X. Li, Real-time measurements of product compounds formed through the reaction of ozone with breath exhaled VOCs, 24th HKSMS Annual General Meeting and HKSMS Symposium, 11 June, Hong Kong, **2022 (oral)**.
- 84) S. Gligorovski, How does the chemistry at environmental interfaces affect the air quality? 2022 International Outstanding Young Scholars Environment Forum, Beijing, China, 9-10 November, 2022 (keynote speech)

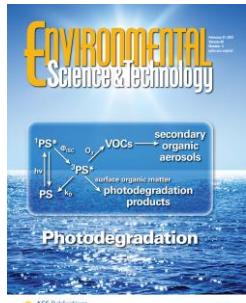
## **Honors and Awards**

**2006** Recipient of the sabbatical visit program fellowship by European Science Foundation (ESF) within “Interdisciplinary Tropospheric Research: from the Laboratory to Global Change” (INTROP)

**2007** Recipient of the sabbatical visit program fellowship by European Science Foundation (ESF) within “Interdisciplinary Tropospheric Research: from the Laboratory to Global Change” (INTROP)

**2010** Recipient of the sabbatical visit program fellowship by European Commission (EC)-funded transnational access

**2011** Invited feature article and cover page (Vol. 46) on peer-reviewed journal “Environmental Science and Technology”



**01/2012-01/2017** Nominated member of the national council of universities (section of meteorology and physical oceanography) which is the national authority in charge of recruiting academics and following up their careers.

**2012** Recipient of the sabbatical visit program fellowship by European Commission (EC)-funded transnational access

**2012**-Best project award nominated by the Ministry of Ecology, Sustainable Development and Energy. Title of the project: Indoor surfaces: A possible source of nitrous acid (HONO)

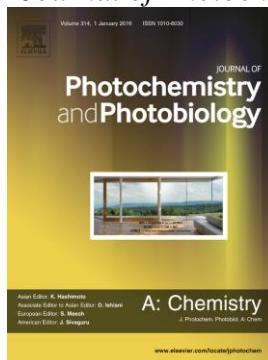
**2012-2016** National award of scientific excellence

**2013** Highlighted article in issue 33 of Volume 110 in the peer-reviewed journal “Proceedings of Nationally Academy of Sciences of United States of America”.



**2013** Recipient of the sabbatical visit program fellowship by European Commission (EC)-funded transnational access

**2016** Invited feature article and cover page in Vol. 314 (2016) on peer-reviewed journal “Journal of Photochemistry and Photobiology A: Chemistry”



**2016** Member of the scientific board of CNRS (The National Center for Scientific Research)

**2019** Member of International Scientific Committee at Healthy Buildings 2019 Asia, An International Conference of Indoor Air

**2020 HOT PCCP article** - The impact of photocatalytic paint's porosity on indoor NO<sub>x</sub> and HONO levels, *Phys. Chem. Chem. Phys.*, **2020**, 22, 589-598.

**2020** Research entitled “Sunlight Driven Multiphase Processes in the Atmosphere: From Outdoors to Indoors” was selected as annual representative research outcomes of Guangzhou Institute of Geochemistry



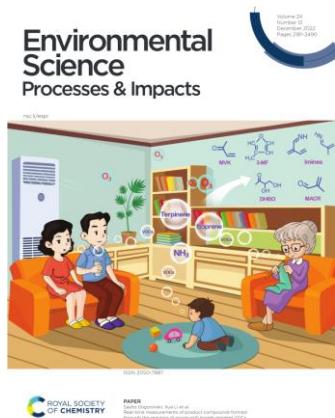
**2021** Excellent Graduate Tutor of Chinese Academy of Science, Guangzhou



**2021** Excellence in Review Awards of *Environmental Science and Technology Letters*



**2022** Cover page of the paper <https://doi.org/10.1039/D2EM00339B> on *Environmental Science: Processes and Impacts*



**January 2023-December 2024** Prestigious Research Fund of 1.6 million RMB for International Excellent Senior Scientists by National Natural Science Foundation, China

## Project management

- 1) **January 2010 - December 2013:** " Indoor surfaces: A possible source of nitrous acid (HONO)" SURFIN within PRIMEQUAL: Ministry of Ecology, Sustainable Development and Energy (130 000 €)
- 2) **September 2016 – August 2018** “Photosensitized reduction of nitrogen dioxide (NO<sub>2</sub>) on agricultural plants as a source of nitrous acid (HONO)”, Programme PRIMEQUAL, Ministry of Ecology, Sustainable Development and Energy. (154 000 €)
- 3) ) **January 2011 - December 2020:** National project of excellence, "NANO-ID" for on-line analysis of atmospheric nanoparticles by LAAP-TOF-MS funded by Ministry for Higher education and Research. (900 000 €)
- 4) **February 2014 - February 217:** National project of excellence, LABEX SERENADE (n° ANR-11-LABX-0064) funded by the « Investissements d'Avenir », French Government program of the French National Research Agency (ANR) through the A\*Midex project (No. ANR-11-IDEX-0001-02) (500 000 €)
- 5) **January 2012 - December 2014:** National Agency of Research (ANR) "Sources of marine aerosols in the Mediterranean atmosphere" (142 234 €)
- 6) **November 2010 - October 2013:** "Contamination Métallique et Performances des Composants" COMET (Programme FUI 2010). (158 000 €).
- 7) **December 2008 - November 2011:** National Agency of Research (ANR) "Health impact of the wood combustion products and their atmospheric degradation product" (INTOX). (123 000 €).
- 8) **January 2005 - October 2009:** "Contribution des composés organiques volatils à la contamination des composants électroniques en cours de fabrication" (CIM-CONTA).

Projet intégré au pôle de compétitivité mondial "Solutions communicantes sécurisées". Founded by: European social funds (227 000 €) and European Funds for Regional Development (320 000 €).

- 9) **February 2014 - January 2016:** "Atmospheric fate of pesticides in particulate phase: Photo-chemical heterogeneous reactivity and biological study" in the frame of University Foundation "Towards more excellence with Aix-Marseille University" A\*MIDEX". (101 550 €).
- 10) **January 2018-January 2021:** "Photochemical processes on urban surfaces as a source of nitrous acid (HONO). Project funded by National Natural Science Foundation, China (680 000 RMB)
- 11) **January 2019-January 2022:** "Light-induced heterogeneous chemistry of NO<sub>2</sub> on indoor surfaces as a source of HONO". Project funded by National Natural Science Foundation, China (650 000 RMB)
- 12) **January 2020-January 2023:** "Photochemical processes at the air-sea interface as a source of SOA precursors". Project funded by Chinese Academy of Science, International Cooperation Grant (1 130 000 RMB)
- 13) **January 2020-January 2023:** "Indoor Photochemistry as an important source of VOCs and SOA". Project funded by State Key Laboratory of Organic Geochemistry (400 000 RMB)
- 14) **January 2021-January 2024** "Photochemical processes at the air-sea interface: An impact on VOCs and SOA in the atmosphere" Project funded by National Natural Science Foundation, China (620 000 RMB)
- 15) **January 2023-December 2024** "Impact of Gas Phase and Heterogeneous Chemistry on Secondary VOCs in Indoor Environments" Project funded by National Natural Science Foundation, China (1 600 000 RMB)

## **Sabbatical Leave**

**1/07/2006-30/07/2006:** "Product studies for the reactions of ozone with the phenols in presence of photosensitizers" within EU program «INTROP », European scientific foundation (ESF). Host: Prof. Dr. Cornelius Zetzsch, University of Bayreuth, Germany.

**1/07/2007-30/07/2007:** "Size segregated chemical composition of atmospheric aerosol particles: Multi-elemental mapping of atmospheric aerosol particles by Laser Ablation-Inductively Coupled Mass Spectrometry" within EU program «INTROP », European scientific foundation (ESF). Host: Dr. Irena Grgic, National Institute of Chemistry, Laboratory for Analytical chemistry, Ljubljana, Slovenia.

**18/07/2010-14/08/2010:** "Light-induced multiphase reactions of ozone with dicarboxylic acids: Aerosol Chamber Studies" within EU program "Integration of European Simulation Chambers for Investigating Atmospheric Processes" (EUROCHAMP 2), EC 7th Framework Programme. Host: Prof. Dr. Hartmut Herrmann, Institute for Tropospheric Research, Leipzig, Germany.

**02/07/2012-31/07/2012:** “NO<sub>2</sub> heterogeneous reactions in presence of light: A new source of nitrous acid indoors” within EU program “Integration of European Simulation Chambers for Investigating Atmospheric Processes” (EUROCHAMP 2), EC 7th Framework Programme. Host: Prof. Dr. Cornelius Zetzsch, University of Bayreuth, Germany.

**18/09/2013-17/10/2013:** “Quantification of hydroxyl radical (OH) from indoor emissions” within EU program “Integration of European Simulation Chambers for Investigating Atmospheric Processes” (EUROCHAMP 2), EC 7th Framework Programme. Host: Prof. Dr. Cornelius Zetzsch, University of Bayreuth, Germany.

## **Organisation of conference sessions**

**December 2011:** co-chair with Prof. Dr. Cornelius Zetzsch, University of Bayreuth, Germany, entitled as «Photochemical heterogeneous processes in the troposphere » at *American Geophysical Union (AGU)*, San Francisco, USA.

**December 2012:** co-chair with Prof. Dr. Cornelius Zetzsch, University of Bayreuth, Germany and Prof. Dr. Cort Anastasio, University of California, USA, entitled as «Heterogeneous photochemical processes in outdoor and indoor atmospheres » at *American Geophysical Union (AGU)*, San Francisco, USA.

**December 2013:** co-chair with Prof. Dr. Cornelius Zetzsch, University of Bayreuth, Germany and Dr. Hugo Destaillats, Lawrence Berkeley National Laboratory, CA, USA, entitled as « Heterogeneous photochemical processes in outdoor and indoor atmospheres » at *American Geophysical Union (AGU)*, San Francisco, USA.

**December 2014:** co-chair with Prof. Dr. Cornelius Zetzsch, University of Bayreuth, Germany, Dr. Hugo Destaillats, Lawrence Berkeley National Laboratory, CA, USA, and Prof. Dr. Daniel Knopf, School of Marine and Atmospheric Sciences, Stony Brook, USA, entitled as « Multiphase chemical processes on atmospheric aerosol (natural and anthropogenic) and/or environmental surfaces» at *American Geophysical Union (AGU)*, San Francisco, USA.

**July 2016:** co-chair with Prof. Dr. Michael Waring, Drexel University, Philadelphia, USA, entitled as “Emerging Research Areas in Indoor Oxidative Chemistry”, at *Indoor Air Conference*, Ghent, Belgium.

**May 2019:** co-chair with Prof. Dr. Tawatchai Charinpanitkul, entitled as “VOC and secondary precursors” at *Asian Aerosol Conference*, Honk Kong, China.

**October 2019:** co-chair with Prof. Dr. Zhengrong Li, entitled as “Indoor Chemistry” at *Healthy Buildings 2019*, Changsha, China.  
October

## **Reviewing experience**

- 1) PNAS, Atmospheric Chemistry and Physics, Environmental Science and Technology, Physical Chemistry Chemical Physics, Talanta, Journal of Electrochemical Society, Journal of Photochemistry and Photobiology A: Chemistry, Atmospheric

Environment, Science of the Total Environment, Environmental Pollution, Environmental Science and Pollution Research, Chemosphere, Photochemical and Photobiological Sciences, Building and Environment, Applied Catalysis B: Environmental, Environmental Science and Technology Letters.

- 2) Reviewer of national projects in the frame of Research Grants Council (RGC) of Hong Kong, ANR (National Agency of Research) and ANSES (French Agency for Food, Environmental and Occupational Health & Safety)
- 3) Reviewer for Natural Environment Research Council of the UK (NERC), UK.

## **Referee of PhD thesis**

- 1) **Candidate: Camille Mouchel-Vallon,**  
*Title:* The chemistry of organic compounds in the clouds: Multiphase modeling, University of Paris-Est Creteil, Paris, France, **2013**  
*Supervisor:* Prof. Dr. Bernard Aumont
- 2) **Candidate: Kifle Zeleke Aregahegn,**  
*Title:* Photosensitized reaction contributing to the growth and aging of atmospheric aerosols, IRCELYON, University of Lyon, France, **2014**.  
*Supervisors:* Dr. Christian George and Dr. Barbara Noziere
- 3) **Candidate: Hongqing Yao**  
*Title:* Application of advanced oxidation processes for treatment of air from livestock and industrial facilities, Department of Engineering, Aarhus University, Aarhus, Denmark, **2015**.  
*Supervisor:* Prof. Dr. Anders Feilberg
- 4) **Candidate: Chiemeriwo Godday Osuagwu**  
*Title:* Investigation of VOCs from diesel engine emissions using hydronium CIMS, International Laboratory for Air Quality and Health (ILAQH), Queensland University of Technology, **2019**.  
*Supervisor:* Prof. Dr. Branka Miljevic
- 5) **Candidate: Nairui Liu**  
*Title:* Novel applications of modelling techniques to understand and predict global urban air quality trends, International Laboratory for Air Quality and Health (ILAQH), Queensland University of Technology, **2020**.  
*Supervisor:* Prof. Dr. Lidia Morawska
- 6) **Candidate: Nadja Triesch**  
*Title:*, University of Leipzig, **2021**.  
*Supervisor:* Prof. Dr. Hartmut Herrmann