

## Jianmin Chen' Curriculum Vitae

OFFICE: Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention (LAP<sup>3</sup>)

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BORN: 7<sup>th</sup> March 1964, Zoncheng, Shandong Province, China

CITIZENSHIP: Chinese

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ResearcherID: G-6484-2010



### SUMMARY

Trained as a Chemist, Jianmin Chen received his M.S. degree in Analytical Chemistry in 1990 and Ph.D. degree in Physical Chemistry in 1993 from the Fudan University, Shanghai, China. He received directly the lecturer position and worked on solid superacid catalysis in the Chemistry Department at the same university. After his visiting to University of Pittsburgh, he moved to the Department of Science and Engineering at Fudan University, and working the atmospheric heterogenous reaction and cleaning production process of purifying anti-cancer paclitaxel, and bio-fuel. CS<sub>2</sub>, COS, DMS and SO<sub>2</sub> are very important atmospheric sulfur-containing compounds. It is well accepted that the atmospheric reaction of CS<sub>2</sub> with HO• is an important source of COS as well as the dominant sink of CS<sub>2</sub> in the atmosphere. Prof. Chen's group found that the catalytic oxidation of CS<sub>2</sub> over atmospheric particles or mixed aerosols may be an important way of the conversion from CS<sub>2</sub> or COS to sulfate close to the Earth's surface (Environ. Sci. Technol. 2001; 2007). The adsorption of SO<sub>2</sub> on the  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> surface results in the formation of sulfate complexes (J. Phys. Chem. C, 2007; 2009). Last two decades, Dr. Chen's interests mainly focus on atmospheric chemistry and the impact on air quality and public health. He leads one of the pioneers in atmospheric sciences in China, works on the control severe haze episodes often occurred in China. His group is working on the field observation and laboratory study of the nucleation, biomass burning, and haze formation mechanism. In his group, a series of advanced instruments has been built up such as self-designed aerosol chamber (Atmos. Environ. 2008; Environ. Sci. Technol. 2011; Atmos. Chem. Phys. 2017) and on-line versatile aerosol concentration enrichment system (VACES) for bio-toxic aerosol analysis (Atmos. Meas. Tech. 2021), wide-range particle spectrometer, LC Q Tof-MS, GCxGC Tof-MS, ATOFMS, TDMA, Laser-CRDS, Nephelometer et al., to investigate size distribution, hygroscopicity, optical property and chemical composition in PM<sub>2.5</sub>, Cloud, Fog and Frost. He has understood the evolution of inorganic secondary aerosol with organic matter in air quality and its links with biomass burning, coal-combustion, ships emission and fireworks. His made a great achievement to significantly decrease haze episode days, particularly because of biomass burning and Chinese Spring Festival fireworks, after his research report has been adopted to air pollution control strategy.

Dr. Chen has been honored as the University Distinguished Professor since 2012. He is currently the Executive Dean, Institute of Atmospheric Sciences and Director of the Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention (LAP<sup>3</sup>) in the Department of Environmental Science & Engineering. He has a long-term collaboration of co-papers, training programs and research projects with Atmospheric Chemistry Scientists, Dr. Abdelwahid Mellouki in CNRS-ICARE and Dr. Christian George in CNRS-IRCELYON (France) and Prof. Dr. Hartmut Herrmann TROPOS (Germany), as well as international collaboration with University of Helsinki (Finland), University of East Anglia (UK), University of Manchester (UK), Colorado State University (USA), University of Toronto (Canada), and Queensland University of Technology (Australia). Dr. Chen has published over 460 papers, citation times 12,200+, H-index 56, 34 Chinese patents and 2 USA patents. He is PIs of 23 projects founded by National Science Foundation of China (NSFC), Ministry of Science and Technology, Ministry of Education of China, et al.. Dr. Chen has served on many panels including NSFC since 2005. He is currently Associate Editors for the Journal of Geophysical Research: Atmosphere, Science of the Total Environment and Heliyon Environment, and editorial board members for several other international journals in related fields. He is a member of IUGG-China Group, IGAC-China Group. He received many honors and awards including the Clarivate Highly Cited Researcher 2020, Chevalier dans L'ordre des Palmes Cadémiques in 2015, State Council Special Allowance Expert by the State Council of the People's Republic of China in 2015, Baosteel Distinguished Teacher Award in 2010, the 1st Rank Award of Natural Sciences Achievement by the Ministry of Education of China in 2009, and the 1st Rank Award of Teaching by the Shanghai Municipal Education Commission in 2017.

## **EDUCATION**

Ph.D., Department of Chemistry, Fudan University, 1993 (Physical Chemistry)

M.S., Department of Chemistry, Fudan University, 1990 (Analytical Chemistry)

B.S., Department of Chemical & Engineering, Anhui University of Technology, 1985 (Analytical Chemistry)

## **PROFESSIONAL EXPERIENCE**

2012-Present, University Distinguished Professor, Department of Environmental Science & Engineering, Institute of Atmospheric Sciences, Fudan University

2000-2012, Professor, Department of Environmental Science & Engineering, Fudan University

1997-2000, Associate Professor, Department of Environmental Science & Engineering, Fudan University

1993-1995, Lecturer, Department of Chemistry, Fudan University

1985-1987, Assistant Professor, Department of Chemical & Engineering, Anhui University of Technology

## **SERVICE AS A DEAN/DIRECTOR**

2020-Present, Vice Director, IRDR International Centre of Excellence on Risk Interconnectivity and Governance on Weather/Climate Extremes Impact and Public Health (FDU-IRDR-ICoE-RIG-WECEIPHE), Fudan University

2016-Present, Executive Dean, Institute of Atmospheric Sciences, Fudan University

2015-Present, Co-Director, Fudan Tyndell Center (Adjunct Tyndell Center, UK), Fudan University and East Anglia University

2013-Present, Director, International Collaboration Base of Climate Change and Environment for Science & Technology at Fudan University, Ministry of Science and Technology of China

2012-Present, Director, Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention (LAP<sup>3</sup>), Science & Technology Commission of Shanghai Municipality

2012-2016, Adjunct Dean, School of Environmental Science & Engineering, Shandong University

2004-2009, Dean, Department of Environmental Science & Engineering, Fudan University

1998-2004, Vice Dean, Department of Environmental Science & Engineering, Fudan University

1994-1996, Vice Dean, Department of Chemistry, Fudan University

## **VISITING**

January - February 2012, CNRS - ICARE, Orléans, France

February - March 2010, CNRS - ICARE, Orléans, France

May - June 1999, Partner, "Educate The Educators" Program organized by United Nations Environmental Program (UNEP) and Lund University, Lund, Sweden

March 1996 - April 1997, Visiting Associate Professor, Department of Petroleum & Chemical Engineering, School of Engineering, University of Pittsburgh, Pittsburgh, USA

November - December 1995, Research Fellow, Tokyo University

## **LIST OF MAIN PROJECTS AS PIs**

1. Screening of Bio-toxic Pollutants in Atmospheric Fine Particulate Matter, supported by National Natural Science Foundation of China (Integration Project), Chief PI, 14 Million RMB, 2019.1-2021.12

2. Characterization and Analysis of Atmospheric Particulate Matter from Representative Cities in the Yangtze River Delta, National Natural Science Foundation of China (Key Project), Chief PI, 3.4 M RMB, 2018.1-2021.12
3. Atmospheric Fine Particulate Matter Explosive Growth and Its Control Strategy, supported by Ministry of Science and Technology of China (National Key Research and Development Program), Chief PI, 320 M RMB, 2016.9-2019.8
4. Instrument R&D for on-line Monitoring Key Chemical Components and Bio-toxicity of Fine Particles, National Natural Science Foundation of China (Key Instrument Project), Chief PI, 7.4 M RMB, 2016.1-2020.12
5. The Fourth Atmospheric Chemistry Summer School Training Program, Shanghai Municipal Education Commission, Chief PI, 300K RMB, 2019.11-2019.11
6. The Second Atmospheric Chemistry Summer School Training Program, Shanghai Municipal Education Commission, Chief PI, 300 K RMB, 2017.11-2017.12
7. Atmospheric Chemistry Summer School Training Program, Shanghai Municipal Education Commission, Chief PI, 300 K RMB, 2015.11-2015.12
8. PM<sub>2.5</sub>, Public Health and Law Issues, American Cyrus Chung Ying Tang Foundations (Donation for Scientific Research), Chief PI, 10 M RMB, 2014.5-2017.4
9. The First Atmospheric Chemistry Summer School Training Program, Shanghai Municipal Education Commission, Chief PI, 500 M RMB, 2013.5-2013.6
10. New particle formation under severe pollution environment, Science & Technology Commission of Shanghai Municipality, Chief PI, 400 K RMB, 2013.1-2015.12
11. The Role of Aerosol Interface of on Secondary Species, National Natural Science Foundation of China (Key Project), Chief PI, 3.8 M RMB, 2012.1-2016.12
12. The Fine Particles and Public Health in Shanghai, Science & Technology Commission of Shanghai Municipality (Key Project), Chief PI, 2.5 M RMB, 2012.8-2016.7
13. Atmospheric Particle Pollution and Prevention in Shanghai, Science & Technology Commission of Shanghai Municipality (Key Project), Chief PI, 2.0 M RMB, 2012.10-2014.9
14. Mixed Black Carbon Aerosol Formation Mechanism and its Impact on Atmospheric Visibility, Ministry of Education of China (Priority Development Project), 400 K RMB, 2012.1-2014.12
15. Emission and Optical Property of Aerosol emitted from Natural Gas Burning, National Natural Science Foundation of China, Chief PI, 430 K RMB, 2009.1-2011.12
16. Effect of Aerosol Heterogeneous Reaction on Regional Acid Deposition, National Natural Science Foundation of China (Key Project), Chief PI, 1.5 M RMB, 2006.1-2009.12
17. Aerosol Science and the Climate Impact, National Natural Science Foundation of China, Chief PI, 400 K RMB, 2008.1-2010.12
18. Agricultural Straw Biomass Burning and its Soot Emission in China, Ministry of Education of China (Key Project), Chief PI, 100 K RMB, 2008.7-2010.6
19. Heterogeneous Reaction between Atmospheric Particles and S-Containing Compounds, National Natural Science Foundation of China, Chief PI, 380 K RMB, 2004.1-2005.12
20. Cleaner Production of Purification of Paclitaxel and its Application, Innovation Fund of the Sanming City, 5 M, Chief PI, 2002.9-2005.8
21. Cleaner Production Process of Purification of Paclitaxel and its Concomitant, Innovation Fund of the State Council of China, Chief PI, 2 M RMB, 2002.1-2005.12
22. Cleaner Production Process of Purification anti-cancer paclitaxel, Chunsenji Corp., 500 K, Chief PI, 1999.1-2003.12

## **MAIN INTERNATIONAL COLLABORATION PROJECTS**

23. MARine atmospheric Science Unravalled: Analytical and mass spectrometric techniques development and application (MARSU), Research and Innovation Staff Exchange (RISE): H2020-MSCA-RISE-2015, 1.3 Million Euros, Co-PI (Chief PI: Abdelwahid Mellouki), 2016.2-2019.1
24. Fate and Impact of Atmospheric Pollutants, EU FP7 (AMIS, 98 K Euros), Co-PI (Chief PI: Abdelwahid Mellouki), 2011.8-2014.7
25. The Fourth Sino-Euuropean School on Atmospheric Chemistry (GZ 1613), Chinesisch.-Deutsches Zentrum fur Wissenschaftsforderung, Co-PI, 455.35 K RMB, 2019.11-2019.11
26. The Third Sino-Euuropean School on Atmospheric Chemistry (GZ 1438), Chinesisch.-Deutsches Zentrum fur Wissenschaftsforderung, Co-PI, 356.7 K RMB, 2017.11-2017.12
27. The Second Sino-Euuropean School on Atmospheric Chemistry (GZ 1227), Chinesisch.-Deutsches Zentrum fur Wissenschaftsforderung, Co-PI, 462.4 K RMB, 2015.10-2015.11
28. The First Sino-Euuropean School on Atmospheric Chemistry (GZ 921), Chinesisch.-Deutsches Zentrum fur Wissenschaftsforderung, Co-PI, 321.3 K RMB, 2013.5-2013.5

## **MAJOR HONORS AND AWARDS**

2020 Clarivate Highly Cited Researcher 2020 (770 Persons in China in 2020)

2017 The First Rank Award of Teaching, awarded by the Shanghai Municipal Education Commission

2015 de Chevalier dans L'ordre des Palmes Académiques, the Republic of France

2015 State Council Special Allowance Expert, awarded by the State Council of the people's Republic of China

2013 Award of an Excellent Academic Leader of Shanghai, awarded by Shanghai municipal government

2011 The Second Rank Award for the Natural Science, the Committee of Science and Technology of Shanghai Municipal Government

2010 The Baosteel Distinguished Teacher Award, Bao Steel

2009 The Award for the Advancement of Science and Technology, the Committee of Science and Technology of Shanghai Municipal Government

2009 The Second Rank Award for the Application Advancement of Science and Technology, the Ministry of Education of China

2008 The First Rank Award of Natural Sciences, the Ministry of Education of China

2004 The Patent Application Award, Shanghai Municipal Government

2002 The Leading Scientist of Science and Technology of Shanghai, Shanghai Municipal Government

2001 The First Rank Award for R&D, Shanghai Municipal Government

1999 The Second Rank Award for the Advancement of Science and Technology by Ministry of Education of China

1999 Distinguished Youth Teacher of Shanghai Municipal Government

## **PROFESSIONAL MEMBERSHIP (Present)**

### **International**

European Geosciences Union (EGU), American Geosciences Union (AUG), American Association for the Advancement of Science (AAAS), American Chemical Society (ACS), International Global Atmospheric Chemistry Project (IGAC) - China Group, International Union of Geodesy and Geophysics (IUGG)- China Group, Integrated Land Ecosystem-Atmosphere Processes Study (iLeaps) - China Group (Vice President), International Union of Geodesy and Geophysics (IAMAS) - China Group.

## **Domestic**

Vice President of Atmospheric Science Division of Chinese Society for Environmental Science, Vice President of Ozone Pollution and Control Division of Chinese Society for Environmental Science, Vice President of Environmental Chemistry Division of Chinese Society for Environmental Science, Director of Atmospheric Science Division of Shanghai Society for Environmental Science.

## **SERVICE ON EDITORIAL BOARD and EDITOR**

2020-present, *Journal of Geophysics Research: Atmospheres*

2018- present, *Associate Editor, Heliyon Environment*

2015- present, *Associate Editor, Science of the Total Environment*

2014- present, *Editorial Board for Journal of Earth, Oceans and Atmosphere*

2013- present, *Editorial Board for Journal of Environmental Science*

2012- present, *Editorial Board for Advances of Environmental Research*

2010- present, *Editorial Board for Environmental Chemistry (in Chinese)*

2008-present, *Editorial Board for Aerosol and Air Quality Research*

2007- present, *Board Member of Committee of Atmospheric Science Brand, National Environmental Science Society of China*

2006- present, *Editorial Board for Environmental Science Acta of China (a core Chinese journal)*

2005- present, *Editorial Board for Environmental Pollution & Control (a core Chinese journal)*

### **Guest Editor**

2020, *VSI: COVID-19: Impact by and on the Environment, for the Science of the Total Environment*

2019, *VSI: Eco-Island, for the Journal of Cleaner Production*

2018, *VSI: Toxicology and Health Effects of Fine Particulate Matter, for the Ecotoxicology and Environmental Safety*

2016, *SI: Regional transport and transformation of air pollution in eastern China, for the Atmospheric Chemistry and Physics*

2015, *SI: Preventing Smog Crises, for the Journal of Cleaner Production*

## **MAJOR PROFESSIONAL SPEAKING ENGAGEMENTS, SERVICE IN PANEL GROUPS AND EXTERNAL EVALUATION COMMITTEES**

2014

Opening ceremony and Plenary Chair. The 4th Sino-French Joint Workshop on Atmospheric Environment, Dec. 11-13, 2014, Lyon, France

Session Chair [SS14] Special Symposia (Aerosol Pollution and Haze Formation in East Asia Fundamental Characteristics and Formation), 2014 International Aerosol Conference, Aug. 28 – Sept. 2, 2014, Busan, Korea

Invited Presentation, Air quality in Shanghai and Jinan, China. A conference in the frame of the EU LIFE+ project PhotoPAQ, Science and Application for Urban Air Quality, 15th-17th April in Lyon, France

## **PEER-REVIEW**

*Nature Communication*

*Journal of Geophysical Research: Atmospheres*

*The Science of the Total Environment*

*Atmospheric Environment*

*Geophysical Research Letters*

*Journal of Aerosol Science*

*Atmospheric Chemistry and Physics*

*Analytical Chemistry*

*Chemosphere*

*Journal of Atmospheric and Solar-*

*Terrestrial Physics*

*Ecotoxicology and Environmental Safety*

*Talanta*  
*Water Research*  
*GeoHealth*  
*The Journal of Physical Chemistry*  
*Frontiers of Environmental Science and Engineering*  
*Particuology*  
*Science Bulletin*

*J. Colloid & Interface Science*  
*Environmental Research*  
*Journal of Cleaner Production*  
*Scientific Report*  
*Journal of Hazardous Materials*  
*Physical Chemistry Chemical Physic*  
*Aerosol and Air Quality Research*

## **TEACHING ACTIVITY**

### **UNDERGRADUATE/GRADUATE COURSES**

- Advanced Atmospheric Chemistry Graduate Course. 2 credit hrs. Autumn Quarter: 2017 (full course), from 2018-2020 (co-instructor).
- Atmospheric Chemistry Undergraduate Course. 2 credit hrs. Spring Quarter: 2017 (full course), from 2018-2020 (co-instructor).
- Environmental Disaster Undergraduate Course. 2 credit hrs. Spring/ Autumn Quarter, from 2013-2020 (co-instructor).
- Environmental Chemistry Undergraduate Course. 4 credit hrs. Autumn Quarter, from 1999-2015 (full course), 2016-2020 (co-instructor).
- Aerosol Chemistry Graduate Course. 2 credit hrs. Autumn Quarter: 2013-2015 (full course).
- Advanced Atmospheric Chemistry Graduate Course. 2 credit hrs. Autumn Quarter: from 2006-2015 (co-instructor).
- Cleaner Production, Undergraduate Course. 2 credit hrs. Spring Quarter, from 1999-2015 (full course)

### **GRADUATE STUDENT ADVISING**

*Ph.D. Advisor:*

**Present:**

Munira Abdumutallip (2020-);

Zhe Bai (2020-);

Zhe Liu (2020-);

Xiang Ding (2019-);

Di Wu (2019-)

Jianfeng Sun (2018-)

**Graduated:**

- Jiarong Li, 2020, " Microphysical Characteristics and S(IV) Multi phase Chemical Reaction Mechanism of Orographic Clouds"
- Hao Sun, 2020, "Chemical compositions and sources of atmospheric fine particles in a typical rural area in North China Plain and nearshore areas off the East China coast"
- Chao Zhu, 2020, "Effect of the cloud process on the formation mechanism of CHON compounds in aerosol samples applying FT-ICR MS and chemical composition of frost samples under severe polluted condition"
- Zhonghng Zhu, 2020, "Laboratory Study on Multiphase Reaction of Phenolic Compounds in Atmosphere"
- Fei Zhang, 2019, "Contribution of VOCs to SOAs formation and its mechanisms at air-liquid interfaces" .
- Duo Bu, 2019, "Physicochemical Characteristic of Wet Precipitation and Atmospheric Pollution in Lhasa, Tibet".

- Wenwen Sun, 2019, "The causes of the explosive growth of atmospheric fine particulate matters in the typical areas of Yangtze River Delta and North China Plain".
- Zhong L, 2018, "Characteristics of air pollution in Yangtze River channel and offshore of East China sea".
- Guoqiang Zhang, 2017, "Investigation of Secondary Organic Aerosol Formation from  $\alpha$ -Pinene and Ozone: Effect of Relative Humidity and Seed Aerosols".
- Chunlin Li, 2016, "Laboratory study on emission and aging of agricultural residue burning aerosol and the related health effect assessment and emission control policy research in China".
- Shijun Yang, 2016,
- Hongli Wang, 2015, "Severe Pollution of Fine Particles and the Formation in Urban Shanghai".
- Shuping Zha, 2015, "Influence of Agricultural Residue Field Burning on Atmospheric Quality in Shanghai".
- Hui Chen, 2015, "The alternation on hygroscopicity and absorption of Black Brown Carbon aerosol; and Ozonolysis of Monoterpenes".
- Ting Han, 2015, "Haze Episodes and Air Quality in Baoshan District of Shanghai".
- Roeland Cornelis JANSEN, 2014, "Secondary Inorganic Aerosol in the Yangtze River Delta of China".
- Chunpeng Leng, 2014, "Study on cloud condensation nuclear (CCN) activity of aerosols in Shanghai".
- Xuemei Wang, 2014, "Characteristics of atmospheric particle in urban district and Chongming Dongtan Wetland, Shanghai".
- Dawei HU, 2012, "Laboratory Study on Hygroscopicity and Optical Properties of Submicron Particles in Ambient Air".
- Pengfei Li, 2012, "Fog Water Chemistry and Fog-Haze Transformation in Shanghai".
- Jianfei Du, 2012, "Study on the physicochemical characteristics of precipitation and acid deposition in Shanghai".
- Min Zhang, 2011, "Physical and Chemical Characterization of Atmospheric Aerosols in Various Ocean Regions and Urban Shanghai".
- Sheng Wang, 2011, "Research and Application of Metal Film for Evaluating Materials Used in Storage and Display Cases in Museum".
- Liping Qiao, 2011, "Secondary Pollution Derived from Photooxidation of Dimethyl Sulfide and Field Observation of Methanesulfonate in the Atmosphere".
- Hefeng, 2009, "Laboratory Simulation of Biomass Burning Emission in China with Aerosol Chamber".
- Jinjun Lian, 2007, "PAHs in wet deposition in Shanghai"
- Qiuju Zhang, 2010, "Dust Heterogeneous Reaction with  $\text{SO}_2$ "
- Xingnan Yu, 2006, Dust Transport and Optical Properties
- Yu Ren, 2006, "PAHs in Atmospheric Particles and Computer' Dust"
- Yunxia Zhu, 2005, "Cleaning Production of Purifying Cephalotaxus"
- Haixia Lin, 2005, "Cleaning Production of Purifying Paclitaxel and Application"
- Hongbo Wu, 2005, "Heterogeneous Reactions Between Airborne Sulfur Containing Compounds with Mineral Oxides and Atmospheric Particles"

M.S. Advisor: 43 M.S.

#### **POSTDOCTORAL FELLOWS, *Principal Supervisor***

- Changliang Nie, postdoctoral fellow, 2020-present
- Xueyun Geng, postdoctoral fellow, 2020-present
- Chaihong Xu, postdoctoral fellow, 2018-present
- Zhenzhen Wang, postdoctoral fellow, 2018-present
- Xiaona Shang, postdoctoral fellow, 2019-present



- Monique Teich, postdoctoral fellow, 2017-2020
- Lan Yao, postdoctoral fellow, 2017-2020
- Kotaro Murata, postdoctoral fellow, 2017-2017
- Hongxiang Wu, postdoctoral fellow, 2015-2018
- Zheng Chang, postdoctoral fellow, 2015-2017
- Hailong Su, postdoctoral fellow, 2005-2007
- Ling Li, postdoctoral fellow, 2005-2007

**Senior Research Scientists**

- Hui Chen, Senior Research Scientist, 2017-present
- Kifle Zeleke Aregahegn, Senior Research Scientist, May-August 2018

## PUBLICATIONS (Total of 467 entries)

### 2021

1. Ma, J.; Shen, J.; Wang, P.; Zhu, S.; Wang, Y.; Wang, P.; Wang, G.; **Chen, J.**; Zhang, H., Changes in source contributions of particulate matter during COVID-19 pandemic in the Yangtze River Delta, China. *Atmospheric Chemistry and Physics Discussions* **2021**, *2021*, 1--18.
2. Yujiao Zhu, Likun Xue, Jian Gao, Jianmin Chen, Hongyong Li, Yong Zhao, Zhaoxin Guo, Tianshu Chen, Liang Wen, Penggang Zheng, Ye Shan, Xinfeng Wang, Tao Wang, Xiaohong Yao, and Wenxing Wang, Increased new particle yields with largely decreased probability of survival to CCN size at the summit of Mt. Tai under reduced SO<sub>2</sub> emissions. *Atmos. Chem. Phys.*, *21*, 1305–1323, 2021. <https://doi.org/10.5194/acp-21-1305-2021>

### 2020

2. Wang, L.; Zhang, L.; Ristovski, Z.; Zheng, X.; Wang, H.; Li, L.; Gao, J.; Salimi, F.; Gao, Y.; Jing, S.; Wang, L.; **\*Chen, J.**; Stevanovic, S., Assessing the Effect of Reactive Oxygen Species and Volatile Organic Compound Profiles Coming from Certain Types of Chinese Cooking on the Toxicity of Human Bronchial Epithelial Cells. *Environ Sci Technol* **2020**, *54*, (14), 8868-8877.
3. Wang, X.; Gemayel, R.; Hayeck, N.; Perrier, S.; Charbonnel, N.; Xu, C.; Chen, H.; Zhu, C.; Zhang, L.; Wang, L.; Nizkorodov, S. A.; Wang, X.; Wang, Z.; Wang, T.; Mellouki, A.; Riva, M.; **\*Chen, J.**; \*George, C., Atmospheric Photosensitization: A New Pathway for Sulfate Formation. *Environ Sci Technol* **2020**, *54*, (6), 3114-3120.
4. Xue, C.; Zhang, C.; Ye, C.; Liu, P.; Catoire, V.; Krysztofiak, G.; Chen, H.; Ren, Y.; Zhao, X.; Wang, J.; Zhang, F.; Zhang, C.; Zhang, J.; An, J.; Wang, T.; **Chen, J.**; Kleffmann, J.; Mellouki, A.; Mu, Y., HONO Budget and Its Role in Nitrate Formation in the Rural North China Plain. *Environ Sci Technol* **2020**, *54*, (18), 11048-11057.
5. Wang, T.; Liu, Y.; Deng, Y.; Cheng, H.; Yang, Y.; Feng, Y.; Zhang, L.; Fu, H.; **Chen, J.**, Photochemical Oxidation of Water-Soluble Organic Carbon (WSOC) on Mineral Dust and Enhanced Organic Ammonium Formation. *Environ Sci Technol* **2020**,
6. Li, R.; Cui, L.; Fu, H.; Zhao, Y.; Zhou, W.; Chen, J., Satellite-Based Estimates of Wet Ammonium (NH<sub>4</sub>-N) Deposition Fluxes Across China during 2011 – 2016 Using a Space – Time Ensemble Model. *Environ Sci Technol* **2020**, *54*, (21), 13419-13428.
7. Choi, M. S.; Qiu, X.; Zhang, J.; Wang, S.; Li, X.; Sun, Y.; Chen, J.; Ying, Q., Study of Secondary Organic Aerosol Formation from Chlorine Radical-Initiated Oxidation of Volatile Organic Compounds in a Polluted Atmosphere Using a 3D Chemical Transport Model. *Environ Sci Technol* **2020**, *54*, (21), 13409-13418.
8. Shi, J.; Xu, C.; Xiang, L.; Chen, J.; Cai, Z., Tris(2,4-di-tert-butylphenyl)phosphate: An Unexpected Abundant Toxic Pollutant Found in PM<sub>2.5</sub>. *Environ Sci Technol* **2020**, *54*, (17), 10570-10576.
9. Bai, Z.; Zhang, L.; Cheng, Y.; Zhang, W.; Mao, J.; Chen, H.; Li, L.; Wang, L.; Chen, J., Water/Methanol-Insoluble Brown Carbon Can Dominate Aerosol-Enhanced Light Absorption in Port Cities. *Environ Sci Technol* **2020**,
10. Zou, Z.; Zhao, J.; Zhang, C.; Zhang, Y.; Yang, X.; Chen, J.; Xu, J.; Xue, R.; Zhou, B., Effects of cleaner ship fuels on air quality and implications for future policy: A case study of Chongming Ecological Island in China. *J. Clean Prod* **2020**, *267*, (122088).
11. Li, R.; Cui, L.; Fu, H.; Li, J.; Zhao, Y.; Chen, J., Satellite-based estimation of full-coverage ozone (O<sub>3</sub>) concentration and health effect assessment across Hainan Island. *J. Clean Prod* **2020**, *244*, (118773).
12. Wei, M.; Liu, H.; Chen, J.; Xu, C.; Li, J.; Xu, P.; Sun, Z., Effects of aerosol pollution on PM<sub>2.5</sub>-associated bacteria in typical inland and coastal cities of northern China during the winter heating season. *Environ Pollut* **2020**, *262*, (114188).
13. Wang, J.; Wang, G.; Wu, C.; Li, J.; Cao, C.; Li, J.; Xie, Y.; Ge, S.; Chen, J.; Zeng, L.; Zhu, T.; Zhang, R.; Kawamura, K., Enhanced aqueous-phase formation of secondary organic aerosols due to the regional biomass burning over North China Plain. *Environ Pollut* **2020**, *256*, 113401.
14. Liu, Y.; Zhao, Q.; Hao, X.; Zhao, J.; Zhang, Y.; Yang, X.; Fu, Q.; Xu, X.; Wang, X.; Huo, J.; Chen, J., Increasing surface ozone and enhanced secondary organic carbon formation at a city junction site: An epitome of the Yangtze River Delta, China (2014-2017). *Environ Pollut* **2020**, *265*, (114847PT AA).
15. Chen, H.; Huo, J.; Fu, Q.; Duan, Y.; Xiao, H.; Chen, J., Impact of quarantine measures on chemical compositions of PM<sub>2.5</sub> during the COVID-19 epidemic in Shanghai, China. *Sci Total Environ* **2020**, *743*, (140758).
16. Zhu, C.; Li, J.; Chen, H.; Cheng, T.; Wen, L.; Herrmann, H.; Xiao, H.; Chen, J., Inorganic composition and occult deposition of frost collected under severe polluted area in winter in the North China Plain. *Sci Total Environ* **2020**, *722*, (137911).
17. Li, M.; Wang, X.; Lu, C.; Li, R.; Zhang, J.; Dong, S.; Yang, L.; Xue, L.; Chen, J.; Wang, W., Nitrated phenols and the phenolic precursors in the atmosphere in urban Jinan, China. *Sci Total Environ* **2020**, *714*, (136760).

18. Wu, C.; Wang, G.; Li, J.; Li, J.; Cao, C.; Ge, S.; Xie, Y.; Chen, J.; Liu, S.; Du, W.; Zhao, Z.; Cao, F., Non-agricultural sources dominate the atmospheric NH<sub>3</sub> in Xi'an, a megacity in the semi-arid region of China. *Sci Total Environ* **2020**, *722*, 137756.
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