附件一：

天津大学研究生招生宣传导师团申请表（2020）

团队名称	地-气界面科学和大气环境研究团队				
申报类型	☑ 普通类型　　□ 专项类型　　（仅可勾选一项，多选无效）				
团队人数	7	负责人	傅平青	联络人	吴礼彬
电子邮箱	wulibin@tju.edu.cn	办公电话		移动电话	15056966727

成员简介

学院	姓名	职 称	研究方向
地科院	傅平青	教授	大气环境化学
地科院	李晓东	教授	同位素地球化学
地科院	Chandra Mouli Pavuluri	教授	大气气溶胶稳定同位素
地科院	时宗波	教授	大气生物地球化学
地科院	王鑫	教授	冰雪中污染物与气候变化
地科院	邓君俊	副教授	气溶胶物理、化学、光学特性
地科院	胡伟	副教授	生物气溶胶

团队简介

（包括导师团队、承担项目、发表论文、申请专利以及获奖等高水平科研成果情况）

团队简介

本研究团队由 5 位教授、2 位副教授组成，其中包括国家自然科学基金委杰出青年基金获得者 1 人、优秀青年科学基金获得者 1 人，外籍教授 1 人；团队在大气污染成因、来源解析及控制技术；气溶胶-云-降水相互作用；沙尘与生物气溶胶的输送及气候效应；冰冻圈碳、氮循环过程；大气及水体微塑料的生态环境及健康效应；以及陆地-海洋-大气界面地球化学循环等研究领域开展了一系列具有原创性的科研工作，成员近五年在 PNAS, Environ. Sci. Technol., J. Geophys. Res.-Atmos., Atmos. Chem. Phys., Sci. Total Environ.等高水平 SCI 期刊上发表 SCI 论文 100 余篇。团队成员目前承担的主要科研基金项目包括：国家自然科学基金委中英重大国际合作项目 1 项、国家杰出青年科学基金项目 1 项、国家重点研发计划 1 项，中国科学院战略先导专项（B 类）课题以及国家自然科学基金面上项目 3 项、青年基金 3 项。

团队成员简介

傅平青（讲席教授，国家杰青）

天津大学表层地球系统科学研究院，博导、讲席教授，2016 年国家杰出青年科学基金获得者，2011 年中国科学院“引进国外杰出人才（百人计划 A 类）”入选者，2016 年获中国科学院“百人计划”终期评估“优秀”（全国地学界 3 人）。曾获第十四届中国矿物岩石地球化学学会“侯德封青年科学家奖”、南京大学首届紫金全兴环境基金“青年学者奖”、2019 年英国皇家学会“牛顿高级学者”基金获得者。国家自然科学基金委“大气污染与人类健康”中英重大国际合作项目（2016–2019）首席科学家；国家重点研发计划重点专项首席科学家。

一直从事大气有机气溶胶的来源、分子组成及其生物地球化学循环过程的研究。已发表 SCI 论文 150 余篇（其中中科院一区 Top 期刊论文 48 篇），被 SCI 刊物总引用超过 3600 余次，H-index 为 34。学术兼职如下：

1. nature 出版集团旗下《npj Climate and Atmospheric Science》副主编；
2. 国际环境地学 top 期刊《Science of the Total Environment》副主编；
3. 国际大气科学 top 期刊《Atmospheric Chemistry and Physics》客座编辑；
4. 中国环境科学学会挥发性有机物污染防治专业委员会常务委员；
5. 中国环境科学学会北极环境与生态专业委员会常务委员。

李晓东（教授）

天津大学表层地球系统科学研究院，博导、教授。研究领域为同位素地球化学，主要从事大气气溶胶无机硫（硫酸盐）、氮（铵盐和硝酸盐）物质的同位素组成及其在气溶胶来源、迁移转化等方面的示踪研究。近年来主持国家自然基金面上项目、国家重点研发计划项目子课题、天津市自然科学基金重点项目等多个项目，发表 SCI 论文 30 余篇，其中以第一作者或通讯作者发表 SCI 论文近 20 篇。

Chandra Mouli Pavuluri (教授)

天津大学表层地球系统科学研究院，博导、教授。先后在韩国 Seoul National University、美国 Kent State University 以及日本 Hokkaido University 进行科研与教学工作。研究方向包括 1）大气气溶胶和大气降水有机物的稳定碳、氮同位素以及

放射性 14C 的环境示踪；2）二次大气气溶胶形成、转化与降解系列过程中的稳定同位素分馏规律。迄今为止在 Atmospheric Chemistry and Physics、Geophysical Research Letters、Journal of Geophysical Research 等高水平期刊上发表 SCI 论文 30 余篇，参编专著 1 部，论文总引用次数 1000 余次，H-index 为 16。

时宗波（兼职教授）

天津大学表层地球系统科学研究院，兼职教授。研究领域为大气生物地球化学，主要从事大气污染及营养元素和生态系统相互作用等方面的研究。2005 年获得日本学术振兴学会（JSPS）外国人特别研究员计划资助。2007 年赴英国利兹大学从事博士后研究，现为英国伯明翰大学副教授。已在 Science Advances、PNAS、ES&T 等国际顶级刊物发表文章数十篇。

王鑫（教授，国家优青）

天津大学表层地球系统科学研究院，博导、教授。主要研究方向为大气物理与大气环境，2015 年获得国家自然科学基金委员会“优秀青年科学基金”项目(优青)，同年作为骨干成员获得国家自然科学基金委员会“创新研究群体”项目，其本人还是教育部“创新团队发展计划”项目骨干成员。截止到目前，申请人共发表 SCI 论文 35 篇，以第一或通讯作者在 J. Geophys. Res.-Atmos.、Atmos. Chem. Phys.、The Cryosphere 以及 Environ. Int.等大气环境及冰冻圈领域有影响力的学术期刊上发表 SCI 论文 17 篇，研究成果共被 Web of Science 引用超过 1000 余次，第一作者论文单篇最高引用 83 次，H-index 为 14。相关研究成果被联合国环境规划署亚洲区域评估报告、联合国政府间气候变化专门委员会第五次评估报告的不同章节中进行了多次引用和高度评价，申请人目前还担任中国气象学会大气物理委员会委员以及中国颗粒学会青年理事，同时还受邀担任 J. Geophys. Res.-Atmos.、Atmos. Chem. Phys. 以及 Sci. Total Environ.等十多个大气及环境领域 SCI 期刊审稿人。

胡伟（副教授）

博士，副教授。本科、硕士和博士分别毕业于中国农业大学（2011）、北京大学（2014）和日本熊本县立大学（2017）。2014-2017 年获国家留学基金委公派留学奖学金资助。2018 年入职于天津大学表层地球系统科学研究院。研究方向主要包

括大气微生物与大气过程、气溶胶物理与化学等。已发表学术论文 20 余篇，以第一/通讯作者在 Atmospheric Chemistry and Physics, Science of the Total Environment, Journal of Geophysical Research-Atmospheres 和 Atmospheric Environment 等地球科学和环境科学权威杂志发表论文 11 篇，论文总引用约 300 次，被多次邀请为 Science of the Total Environment, Atmospheric Environment, Atmospheric Research 和 Indoor Air 等多个期刊审稿人。

邓君俊（副教授）

天津大学表层地球系统科学研究院，副教授。中国科学院青年创新促进会会员，2016 年入选中国科学院区域大气环境研究卓越创新中心青年骨干。研究领域为大气环境与大气化学，主要从事大气气溶胶典型组分的来源、迁移转化规律与环境气候效应研究。近年来主持国家自然基金、科技部重大专项子课题、中科院青年领域人才项目和福建省自然科学基金等多个项目，发表 SCI 论文 30 余篇，其中以第一作者或通讯作者发表 SCI 论文 11 篇，SCI 引用 500 余次。

团队成员主持的主要研究项目：

1. 英国自然环境理事会重点项目（2019-2023）
2. 国家自然科学基金委中英重大国际合作项目（2016–2019）
3. 国家杰出青年科学基金项目（2017–2021）
4. 中国科学院战略先导专项（B 类）课题（2012– 2017）
5. 国家自然科学基金面上项目（2015–2018、2017-2020、2018-2021）
6. 国家重点研发计划—“全球变化及应对”重点专项-专题负责人（2016–2021）
7. 中国科学院战略性先导科技专项（B 类）子课题负责人（2012–2017）
8. 英国自然环境理事会和印度地球科学部英印重大国际合作项目（2017–2021）

团队成员代表性论文：

1. Yue, S.Y., L.J. Ren, T.L. Song, L.J. Li, Q.R. Xie, W.J. Li, M.J. Kang, W.Y. Zhao, L.F. Wei, H. Ren, Y.L. Sun, Z.F. Wang, R.M. Ellam, C.-Q. Liu, K. Kawamura, and **P.Q. Fu*** (2019) Abundance and diurnal trends of fluorescent bioaerosols in the troposphere over Mt. Tai, China, in spring. ***Journal of Geophysical Research –***

Atmospheres 124, 4158–4173.

2. Li, L.J., L.J. Ren, H. Ren, S.Y. Yue, Q.R. Xie, W.Y. Zhao, M.J. Kang, J. Li, Z.F. Wang, Y.L. Sun and **P.Q. Fu*** (2018) Molecular characterization and seasonal variation in primary and secondary organic aerosols in Beijing, China. ***Journal of Geophysical Research – Atmospheres*** 123, 12394–12412.

3. Zhao, W.Y., K. Kawamura, S.Y. Yue, L.F. Wei, H. Ren, Y. Yan, M.J. Kang, L.J. Li, L.J. Ren, S.C. Lai, J. Li, Y.L. Sun, Z.F. Wang, and **P.Q. Fu*** (2018) Molecular distribution and compound-specific stable carbon isotopic composition of dicarboxylic acids, oxocarboxylic acids, and α-dicarbonyls in $PM_{2.5}$ from Beijing, China. ***Atmospheric Chemistry and Physics*** 18(4), 2749–2767.

4. Cao, F., Y.L. Zhang*, L.J. Ren, J.W. Liu, J. Li, G. Zhang, D. Liu, Y.L. Sun, Z.F. Wang, Z.B. Shi, and **P.Q. Fu*** (2017) New insights into the sources and formation of carbonaceous aerosols in China: Potential applications of dual carbon isotopes. ***National Science Review*** 4(6), 804–806, doi.10.1093/nsr/nwx097.

5. Zhang, Y.L.*, H. Ren, Y.L. Sun, F. Cao, Y.H. Chang, S.D. Liu, X.H. Lee, K. Agrios, K. Kawamura, D. Liu, L.J. Ren, W.D. Du, Z.F. Wang, A.S.H. Prévôt, S. Szidat, and **P.Q. Fu*** (2017) High contribution of non-fossil sources to sub-micron organic aerosols in Beijing. ***Environmental Science & Technology*** 51(14), 7842–7852, DOI:10.1021/acs.est.7b01517.

6. Yue, S.Y., H. Ren, S.Y. Fan, L.F. Wei, J. Zhao, M.Y. Bao, S.J. Hou, W.Y. Zhao, L.J. Ren, M.J. Kang, L.J. Li, J.Q. Zhan, Y.L. Zhang, Y.L. Sun, Z.F. Wang, and **P.Q. Fu*** (2017) High abundance of fluorescent biological aerosol particles in winter in Beijing, China. ***ACS Earth & Space Chemistry*** 1(8), 493–502.

7. **Fu, P.Q.** *, S.G. Aggarwal, J. Chen, J.Li, Y.L. Sun, Z.F. Wang, H.S. Chen, H. Liao, A.J. Ding, G.S. Umarji, R.S. Patil, Q. Chen, and K. Kawamura (2016) Molecular markers of secondary organic aerosol in Mumbai, India. ***Environmental Science & Technology*** 50 (9): 4659–4667.

8. **Fu, P.Q.** *, K. Kawamura, J. Chen, and Y. Miyazaki (2014) Secondary production of organic aerosols from biogenic VOCs over Mt. Fuji, Japan. ***Environmental Science & Technology*** 48(15), 8491–8497.

9. **Fu, P.Q.** *, K. Kawamura, Y.F. Cheng, S. Hatakeyama, A. Takami, H. Li, and W. Wang (2014) Aircraft measurements of polar organic tracer compounds in tropospheric particles (PM10) over central China. ***Atmospheric Chemistry and Physics*** 14(8), 4185–4199.

10. **Fu, P.Q.** *, K. Kawamura, J. Chen, B. Charrière, and R. Sempéré (2013) Organic molecular composition of marine aerosols over the Arctic Ocean in summer: contributions of primary emission and secondary aerosol formation. ***Biogeosciences*** 10 (2), 653–667.

11. **Fu, P.Q.** *, K. Kawamura, K. Usukura, and K. Miura (2013) Dicarboxylic acids, ketocarboxylic acids and glyoxal in the marine aerosols collected during a round-the-world cruise. ***Marine Chemistry*** 148 (20), 22–32.

12. **Fu, P.Q.** *, K. Kawamura, J. Chen, J. Li, Y.L. Sun, Y. Liu, E. Tachibana, S.G. Aggarwal, K. Okuzawa, H. Tanimoto, Y. Kanaya, and Z.F. Wang (2012) Diurnal variations of organic molecular tracers and stable carbon isotopic composition in atmospheric aerosols over Mt. Tai in the North China Plain: an influence of biomass burning. ***Atmospheric Chemistry and Physics*** 12 (18), 8359–8375.

13. Zhou Yang, **Xiaodong Li***, Shilu Wang, Qinkai Li, Huang Huang, Gaoyang Cui (2019) Aerosol pollution in a megacity of southwest China inferred from variation characteristics of sulfate-$\delta^{34}S$ and water-soluble inorganic compositions in TSP. **Particuology** 43: 202–209.

14. Gaoyang Cui, **Xiaodong Li***, Qinkai Li, Jun Huang, Yuele Tao, Siqi Li, Jun Zhang (2017) Damming effects on dissolved inorganic carbon in different kinds of reservoirs in Jialing River, Southwest China. **Acta Geochim** 36(4): 581–597.

15. **Xiaodong Li**, Zhou Yang, **Pingqing Fu***, Jing Yu, Yunchao Lang, Di Liu, Kaori Ono, Kimitaka Kawamura (2015) High abundances of dicarboxylic acids, oxocarboxylic acids, and α-dicarbonyls in fine aerosols ($PM_{2.5}$) in Chengdu, China during wintertime haze pollution. ***Environmental Science and Pollution Research***, 11: 12902 – 12918.

16. Zhiqi Zhao*, Wei Zhang, **Xiaodong Li**, Zhou Yang, Houyi Zheng, Hu Ding, Qilian Wang, Jun Xiao, **Pingqing Fu*** (2015) Atmospheric lead in urban Guiyang, Southwest China: Isotopic source signatures. ***Atmospheric Environment*** 115: 163–169.

17. Dong Zhang, **Xiaodong Li**, Zhiqi Zhao*, Congqiang Liu (2015) Using dual isotopic data to track the sources and behaviors of dissolved sulfate in the western North China Plain. ***Applied Geochemistry*** 52: 43–56.

18. Xueyan Liu, Keisuke Koba*, Akiko Makabe, **Xiaodong Li**, Muneoki Yoh, Congqiang Liu (2013) Ammonium first: natural mosses prefer atmospheric ammonium but vary utilization of dissolved organic nitrogen depending on habitat and nitrogen deposition. ***New Phytologist***, doi: 10.1111/nph.12284.

19. **C. M. Pavuluri*** & K. Kawamura, Enrichment of 13C in dicarboxylic acids and related compounds during photochemical processing of aqueous aerosols: New proxy for organic aerosols aging, ***Scientific Reports*** 6:36467, doi: 10.1038/srep36467, 2016.

20. **C. M. Pavuluri***, K. Kawamura & **P. Q. Fu**, Seasonal distributions and stable carbon isotope ratios of water-soluble diacids, oxoacids and a-dicarbonyls in aerosols from Sapporo: Influence of biogenic VOCs and photochemical aging, ***ACS Earth and Space Chemistry***, DOI:

10.1021/acsearthspacechem.8b00105, 2018.

21. S. Wang, **C. M. Pavuluri***, L. Ren, **P. Q. Fu**, Y.-L. Zhang & C.-Q. Liu, Implications for biomass/coal combustion emissions and secondary formation of carbonaceous aerosols in north China, ***RSC Advances***, 8, 38108-38117, 2018.

22. S. R. Devineni, T. R. Madduri, N. R. Chamarthi, C.-Q. Liu, & C. **M. Pavuluri***, An efficient microwave-promoted three component synthesis of thiazolo[3,2-a]pyrimidines catalyzed by SiO2-ZnBr2 and antimicrobial activity evaluation, ***Chemistry of Heterocyclic Compounds***, 55(3), 266-274, 2019.

23. **C. M. Pavuluri***, K. Kawamura, N. Mihalopoulos, & T. Swaminathan (2015) Laboratory photochemical processing of aqueous aerosols: formation and degradation of dicarboxylic acids, oxocarboxylic acids and α-dicarbonyls. ***Atmospheric Chemistry and Physics*** 15, 7999–8012.

24. **C. M. Pavuluri***, K. Kawamura, N. Mihalopoulos, & **P.Q. Fu** (2015) Characteristics, seasonality and sources of inorganic ions and trace metals in Northeast Asian aerosols. ***Environmental Chemistry*** 12, 338–349.

25. **C. M. Pavuluri**, K. Kawamura*, & **P. Q. Fu** (2015) Atmospheric chemistry of nitrogenous aerosols in Northeast Asia: biological sources and secondary formation. ***Atmospheric Chemistry and Physics*** 15, 9883–9896.

26. **C. M. Pavuluri**, K. Kawamura*, M. Uchida, M. Kondo, & **P. Q. Fu** (2013) Enhanced radiocarbon and organic tracers in Northeast Asian aerosols during spring/summer. ***Journal of Geophysical Research*** 118, 2362–2371.

27. **C. M. Pavuluri**, K. Kawamura* (2012) Evidence for 13-carbon enrichment in oxalic acid via iron catalyzed photolysis in aqueous phase. ***Geophysical Research Letters*** 39, L03802, doi:10.1029/2011GL050398.

28. Li, W., Xu, L., Liu, X., Zhang, J. Lin, Y., Yao, X., Gao, H., Zhang, D., Chen, J., Wang, W., Harrison, R.M., Zhang, X., Shao, L., **Fu, P.**, Nenes, A., **Shi, Z.*** (2017) Aerosol – pollution interaction produces more soluble iron for the ocean ecosystems**.** ***Science Advances*** 3, e1601749.

29. Stockdale, A., Krom, M.D., Mortimer, R.J.G., Benning, L.G., Carslaw, K.S., Herbert, R., **Shi, Z**., Myriokefalitakis, S., Kanakidou, M., Nenes, A. (2016) Supply of bioavailable phosphorus to the oceans: understanding the nature of atmospheric acid processing of mineral dusts. ***PNAS***, doi:/10.1073/pnas.1608136113.

30. Ito, A., **Shi, Z**. (2016) Atmospheric delivery of anthropogenic bioavailable iron from mineral dust and combustion aerosols. ***Atmospheric Chemistry Physics*** 16, 85-99, doi:10.5194/acp-16-85-2016.

31. **Shi, Z**.*, Krom, M.D., Bonneville, S., Benning, L.G. (2015) Atmospheric processing outside clouds increases soluble iron in mineral dust. ***Environmental***

Science & Technology 49(3), 1472-74277, doi: 10.1021/es504623x.

32. **Shi, Z.*,** Krom, M., Bonneville, S., Baker, A., Bristow, C., Drake, N., Mann, G Carslaw, K., McQuaid, J., Jickells, T., Benning, L. (2011) Influence of chemic weathering and aging of iron oxides on the potential iron solubility of Saharan du during simulated atmospheric processing. ***Global Biogeochemical Cycles*** 25, doi:10.1029/2010GB003837**.**

33. **Shi, Z.*,** Woodhouse, M., Carslaw, K., Krom M., Mann, G., Baker A., Savov, I., Fones, G., Brooks, B., Drake, N., Jickells T., Benning L. (2011) Minor effect of physical size sorting on iron solubility of transported mineral dust, ***Atmospheric Chemistry and Physics*** 11, 8459-8469, doi:10.5194/acp-11-8459-2011.

34. **Shi, Z.*,** Krom, M., Bonneville, S., Baker, A., Jickells, T., Benning, L. (2009) Formation of iron nanoparticles and increase in iron reactivity in the mineral dust during simulated cloud processing. ***Environmental Science & Technology*** 43, 6592-6596, doi**:** 10.1021/es901294g.

35. **Shi, Z.**, Zhang, D., Hayashi, M., Ogata, H., Ji, H., Fujiie, W. (2008) Influences of sulfate and nitrate on the hygroscopic behaviors of coarse dust particles. ***Atmospheric Environment*** 42, 822-827.

36. **Wang, X.**, Wei, H., Liu, J., Xu, B., Wang, M., Ji, M., and Jin, H.: Quantifying the light absorption and source attribution of insoluble light-absorbing particles on Tibetan Plateau glaciers between 2013 and 2015, ***The Cryosphere*** 13, 309-324, 2019.

37. Zhou, Y., Wen, H., Liu, J., Pu, W., Chen, Q., and **Wang, X.**: The optical characteristics and sources of chromophoric dissolved organic matter (CDOM) in seasonal snow of northwestern China, ***The Cryosphere*** 13, 157-175, 2019.

38. Chen, Q. C., Wang, M. M., Sun, H. Y., **Wang, X.**, Wang, Y. Q., Li, Y. G., Zhang, L. X., and Mu, Z.: Enhanced health risks from exposure to environmentally persistent free radicals and the oxidative stress of PM2.5 from Asian dust storms in Erenhot, Zhangbei and Jinan, China, ***Environ. Int.*** 121, 260-268, 2018.

39. Wu, X., Liu, J., Wu, Y.[*], **Wang, X.**, Yu, X., Shi, J., Bi, J., Huang, Z., Zhou, T., and Zhang, R.: Aerosol optical absorption coefficients at a rural site in Northwest China: The great contribution of dust particles, ***Atmos. Environ.*** 189, 145-152, 2018.

40. **Wang, X.**, Wen, H., Shi, J., et al: Optical and microphysical properties of natural mineral dust and anthropogenic soil dust near dust source regions over northwestern China, ***Atmos. Chem. Phys.*** 18, 2119-2138, 2018.

41. **Wang, X.**, Liu, J., Che, H. Z., Ji, F., and Liu, J. J.: Spatial and temporal evolution of natural and anthropogenic dust events over northern China, ***Sci. Rep.*** 8, 2018.

42. Ren, Y., Zhang, X., Wei, H., Xu, L., Zhang, J., Sun, J., **Wang, X.**, and Li, W.: Comparisons of methods to obtain insoluble particles in snow for transmission

electron microscopy, ***Atmos. Environ.*** 153, 61-69, 2017.

43. **Wang, X.**, Pu, W., Ren, Y., Zhang, X., Zhang, X., Shi, J., Jin, H., Dai, M., and Chen, Q.: Observations and model simulations of snow albedo reduction in seasonal snow due to insoluble light-absorbing particles during 2014 Chinese survey, ***Atmos. Chem. Phys.*** 17, 2279-2296, 2017.

44. Zhou, Y., **Wang, X.**, Wu, X., Cong, Z., Wu, G., and Ji, M.: Quantifying Light Absorption of Iron Oxides and Carbonaceous Aerosol in Seasonal Snow across Northern China, ***Atmosphere-Basel*** 8, 2017.

45. Pu, W., **Wang, X.**, Wei, H. L., Zhou, Y., Shi, J. S., Hu, Z. Y., Jin, H. C., and Chen, Q. L.: Properties of black carbon and other insoluble light-absorbing particles in seasonal snow of northwestern China, ***The Cryosphere*** 11, 1213-1233, 2017.

46. **Wang, X.**, Pu, W., Zhang, X. Y., Ren, Y., and Huang, J. P.: Water-soluble ions and trace elements in surface snow and their potential source regions across northeastern China, ***Atmos. Environ.*** 114, 57-65, 2015.

47. **Wang, X.**, Pu, W., Shi, J. S., Bi, J. R., Zhou, T., Zhang, X. Y., and Ren, Y.: A comparison of the physical and optical properties of anthropogenic air pollutants and mineral dust over Northwest China, ***J. Meteorol. Res.*** 29, 180-200, 2015.

48. Pu, W., **Wang, X.**, Zhang, X. Y., Ren, Y., Shi, J. S., Bi, J. R., and Zhang, B. D.: Size Distribution and Optical Properties of Particulate Matter (PM10) and Black Carbon (BC) during Dust Storms and Local Air Pollution Events across a Loess Plateau Site, ***Aerosol Air. Qual. Res.*** 15, 2212-2224, 2015.

49. **Wang, X.**, Xu, B. Q., and Ming, J.: An Overview of the Studies on Black Carbon and Mineral Dust Deposition in Snow and Ice Cores in East Asia, ***J. Meteorol. Res.*** 28, 354-370, 2014.

50. **Wang, X.**, Doherty, S. J., and Huang, J. P.: Black carbon and other light-absorbing impurities in snow across Northern China, ***J. Geophys. Res.-Atmos.*** 118, 1471-1492, 2013.

51. **Wang, X.**, Huang, J. P., Zhang, R. D., Chen, B., and Bi, J. R.: Surface measurements of aerosol properties over northwest China during ARM China 2008 deployment, ***J. Geophys. Res.-Atmos.*** 115, 2010.

52. **Wang, X.**, Huang, J. P., Ji, M. X., and Higuchi, K.: Variability of East Asia dust events and their long-term trend, ***Atmos. Environ.*** 42, 3156-3165, 2008.

53. Qiu, Y., Wu, X., Zhang, Y., Xu, L., Hong, Y., Chen, J., Chen, X., **Deng, J.***, 2019. Aerosol light absorption in a coastal city in Southeast China: Temporal variations and implications for brown carbon. ***Journal of Environmental Sciences*** 80, 257-266.

54. **Deng, J.***, Zhang, Y., Qiu, Y., Zhang, H., Du, W., Xu, L., Hong, Y., Chen, Y., Chen,

J.*, 2018. Source apportionment of $PM_{2.5}$ at the Lin'an regional background site in China with three receptor models. ***Atmospheric Research*** 202, 23-32.

55. Zhang, Y., Zhang, H., **Deng, J.***, Du, W., Hong, Y., Xu, L., Qiu, Y., Hong, Z., Wu, X., Ma, Q., Yao, J., Chen, J.*, 2017. Source regions and transport pathways of $PM_{2.5}$ at a regional background site in East China. ***Atmospheric Environment*** 167, 202-211.

56. **Deng, J.**, Zhang, Y., Hong, Y., Xu, L., Chen, Y., Du, W., Chen, J.*, 2016. Optical properties of $PM_{2.5}$ and the impacts of chemical compositions in the coastal city Xiamen in China. ***Science of the Total Environment*** 557-558, 665-675.

57. Xing, Z.#, **Deng, J.#**, Mu, C., Wang, Y., Du, K.*, 2014. Seasonal variation of mass absorption efficiency of elemental carbon in the four major emission areas in China. ***Aerosol and Air Quality Research*** 14, 1897-1905. (co-first author)

58. **Deng, J.**, Xing, Z., Zhuang, B., Du, K.*, 2014. Comparative study on long-term visibility trend and its affecting factors on both sides of the Taiwan Strait. ***Atmospheric Research*** 143, 266-278.

59. **Deng, J.**, Du, K.*, Wang, W., Rood, M.J., 2013. Closure study on measured and modeled optical properties for dry and hydrated laboratory inorganic aerosols with mixtures of dicarboxylic acids. ***Atmospheric Environment*** 81, 177-187.

60. Du, K., Mu, C., **Deng, J.***, Yuan, F., 2013. Study on atmospheric visibility variations and the impacts of meteorological parameters using high temporal resolution data: an application of Environmental Internet of Things in China. ***International Journal of Sustainable Development and World Ecology*** 20 (3), 238-247.

61. **Deng, J.**, Du, K.*, Wang, K., Yuan, C.S., Zhao, J., 2012. Long-term atmospheric visibility trend in Southeast China, 1973-2010. ***Atmospheric Environment*** 59, 11-21.

62. **Deng, J.**, Wang, T.*, Jiang, Z., Xie, M., Zhang, R., Huang, X., Zhu, J., 2011. Characterization of visibility and its affecting factors over Nanjing, China. ***Atmospheric Research*** 101(3), 681-691.

63. **Deng, J.**, Wang, T.*, Liu, L., Jiang, F., 2010. Modeling heterogeneous chemical processes on aerosol surface. ***Particuology*** 8, 308-318.

64. **W. Hu**, H. Niu, K. Murata, Z. Wu, M. Hu, T. Kojima, D. Zhang*, 2018, Bacteria in atmospheric waters: detection, characteristics and implications, ***Atmospheric Environment*** 179: 201–221.

65. **W. Hu**, M. Hu*, W.W. Hu, J. Zheng, C. Chen, Y. Wu, S. Guo, 2017, Seasonal variations in high time-resolved chemical compositions, sources and evolution of atmospheric submicron aerosols in the megacity Beijing, ***Atmospheric Chemistry and Physics*** 17: 9979–10000.

66. **W. Hu**, K. Murata, S. Fukuyama, Y. Kawai, E. Oka, M. Uematsu, D. Zhang*, 2017, Concentration and viability of airborne bacteria over the Kuroshio Extension region in the northwestern Pacific Ocean: data from three cruises, ***Journal of Geophysical Research: Atmospheres*** 122: 12892–12905.

67. **W. Hu**, K. Murata, Y. Horikawa, A. Naganuma, D. Zhang*, 2017, Bacterial community composition in rainwater associated with synoptic weather in an area downwind of the Asian continent, ***Science of the Total Environment*** 601-602: 1775–1784.

68. **W. Hu**, K. Murata, S. Toyonaga, D. Zhang*, 2017, Bacterial abundance and viability in rainwater associated with cyclones, stationary fronts and typhoons in southwestern Japan, ***Atmospheric Environment*** 167: 104–115.

69. **W. Hu**, H. Niu, D. Zhang, Z. Wu, C. Chen, Y. Wu, D. Shang, M. Hu*, 2016, Insights into a dust event transported through Beijing in spring 2012: Morphology, chemical composition and impact on surface aerosols, ***Science of the Total Environment*** 565: 287–298.

70. **W. Hu**, M. Hu*, W.W. Hu, H.Y. Niu, J. Zheng, Y.S. Wu, W.T. Chen, C. Chen, L.Y. Li, M. Shao, S.D. Xie, Y.H. Zhang, 2016, Characterization of submicron aerosols influenced by biomass burning at a site in the Sichuan Basin, southwestern China, ***Atmospheric Chemistry and Physics*** 6: 13213–13230.

生源要求

（结合拟开展的研究工作，对生源的学科专业、研究方向等提出要求）

依托表层地球系统科学研究院、天津市环渤海关键带科学与可持续发展重点实验室以及地-气界面科学中心的研究规划，结合目前团队成员正在承担的国家自然科学基金项目以及科技部重大研发计划等项目，拟招收大气科学、地球化学、环境科学等相关专业的优秀学生攻读博士和硕士学位，研究方向主要是环境化学与大气科学。

招生宣传计划 （包括工作思路、团队分工、预期成果等）	
总结和分析团队前期招生来源，同时结合学校重点学科分析，遴选一流高校、一流学科重点生源校形成招生宣传重点校名单（重点考虑大气科学、地球化学、环境科学等领域重点专业学校）；组织导师队伍赴重点学校对相关专业学生开展宣讲和交流，提高一流高校、学科保送生比例；结合网络宣传手段，通过邮件往来，相关高校 BBS、社交网络平台、手机微信等传播方式，探索新媒体招生宣传途径。 团队分工如下：傅平青教授为导师团队负责人，时宗波教授和 Mouli 教授主要负责实验设计与科研方向设计，李晓东教授和王鑫教授主要负责招生宣传以及野外科考试验工作，胡伟副教授承担合作指导学生科研工作，邓君俊副教授承担学生的学习及就业指导工作。 预期成果是招收一流高校、学科相关专业硕士研究生 2 名、博士研究生 1 名，建立与重点生源校的长期合作关系，持续提高硕士研究生和博士研究生生源质量。	
团队负责人签字： 年　　月　　日	主管院长签字： （公章） 年　　月　　日

本表正反面打印。**入选团队的本表内容将在我校研究生招生网 yzb.tju.edu.cn 对外进行宣传，便于吸引生源，请不要包含涉密信息。**

附件二：

天津大学研究生招生宣传导师团拟录取名单（2019）

类型	学生姓名	毕业学校	所学专业	复试成绩	拟录取学院	拟录取专业	拟录取专业代码	导师姓名
推免硕士								
推免硕士								
推免硕士								
推免硕士								
推免硕士								
招考博士		本科： 硕士：	本科： 硕士：	务必逐项给出外国语、专业基础、专业综合、综合素质与能力**四项成绩**				必填