

Rong Wang

Senior Postdoctoral Research Scientist

Department of Global Ecology, Carnegie Institution for Science, Stanford, USA

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Research interests

I aim at a systematic and unique understanding of the impact of human activities and natural processes on the environment using numerical modeling approach. I am interested in a broad range of environmental problems, including emissions, air pollution, climate change, carbon cycle and energy economics, with a focus on aerosols and Earth system modeling.

Education/Researches

- **Sep 2016 - present** Department of Global Ecology, Carnegie Institution for Science, Stanford, USA

Senior postdoctoral scientist

Topic: *Interaction between the energy system and economy*

Supervisor: Ken Caldeira

- **Jul 2016 - Sep 2016** Department of Global Ecology, Carnegie Institution for Science, Stanford, USA

Postdoctoral scientist

Topic: *Interaction between the energy system and economy*

Supervisor: Ken Caldeira

- **Jul 2014 - Jun 2016** Laboratoire des Sciences du Climat et de l'Environnement, France

Marie Curie International Incoming Fellowship (194,000 euros for 2 years)

Topic: *Fertilization effect of Aerosols on Earth **BIO**mass (FABIO)*

- **Jun 2013 - Jun 2014** Laboratoire des Sciences du Climat et de l'Environnement, France

Postdoctoral scientist

Topic: *Effects of Scattering and Absorbing Aerosols on the Asian Monsoon*

Supervisors: Yves Balkanski, Olivier Boucher and Philippe Ciais

- **Sep 2008 - Jun 2013** Peking University, China

Ph.D. (Environmental Geography)

Topic: *Global Emission, Atmospheric Transport, Health Impact and Radiative Forcing of Black Carbon*

Supervisor: Shu Tao (陶澍)

- **Sep 2004 - Jun 2008** Peking University, China

B.E. (Environmental Science)

Double B.E. (Theoretical Physics)

Research Experiences

2016

I am working with Prof. Ken Caldeira to study the Jevon's Paradox and energy-economy interactions.

2014–2016

I led an independent Marie Curie project (FP7-PEOPLE-2013-IIF) to study the atmosphere-biosphere interactions and the biogeochemical effects of aerosols in an Earth System Model.

2010–2014

I studied the global emissions, transport, health impact and climate forcing of black carbon aerosols in the atmosphere systematically.

2009

I studied the distributions of polycyclic aromatic hydrocarbons (PAHs) in the air, water, soil and sediment in a contaminated region in China by developing a spatially and temporally resolved model.

2008

I studied the atmospheric transport of PAHs to the Arctic by developing a chemical transport model based upon trajectory calculations.

Teaching

2011–2012

Teaching assistant for *Application of Statistical Methods in Environmental Study*.

Journal Review

Applied Energy

Atmospheric Chemistry and Physics

Atmospheric Environment

Biogeoscience

Environmental Science & Technology

Geographical Research Letter

Geoscientific Model Development

Nature Geoscience

Journal of Geographical Research- Atmosphere

Selected Honors

2015 Springer Thesis Prize - Recognizing Outstanding Ph.D. Research, Springer

2014 Marie Curie International Incoming Fellowship, Europe Commission

2013 Excellent Ph.D Dissertation Award, Peking University, China

- 2012 *Young Scientist Award, Ministry of Education of the People's Republic of China, China*
- 2012 *Novel Research Award, Peking University, China*
- 2012 *Fang Ruixian Scholarship, Peking University, China*
- 2011 *Wusi Scholarship, Peking University, China*
- 2010 *Lin Chao Geographic Scholarship, Peking University, China*
- 2009 *Guanghua Scholarship, Peking University, China*
- 2008 *Young Voice Award, Better Air Quality Workshop, Bangkok*
- 2005 *Prize in College Physics Competition, Beijing, China*

Publications:

Book:

1. **Wang, R.** Global Emission Inventory and Atmospheric Transport of Black Carbon: Evaluation of the Associated Exposure. Springer Theses 2015. 978-3-662-46479-3, Springer Berlin Heidelberg.

Papers under review/in preparation:

2. Kumar, D.B., Verma, S., Boucher, O., **Wang, R.** Constrained simulation of aerosol constituents and sources during pre-monsoon season and Tigerz experiment over the Indian subcontinent. *Atmos. Environ.*, under review.
3. Richon, C., et al. Modeling atmospheric deposition impacts on nutrients and biological budgets of the Mediterranean Sea. *Progress in Oceanography*, under review.

Published papers as the first author:

4. **Wang, R.;** Goll., D.; Balkanski, Y.; Boucher, O.; Ciais, P.; Hauglustaine, D.; Guenet, B.; Vuichard, N.; Janssen, I.; Penuelas, J.; Bopp, L.; Li, B.G.; Piao, S.L.; Huang, Y.; Peng, S.S.; Zhou, F.; Tao, S. Global forest carbon uptake due to nitrogen and phosphorus deposition from 1850 to 2100. *Global Change Biology*, in press.
5. **Wang, R.;** Moreno-Cruz, J.; Caldeira, K. Effects of carbon-tax revenue maximization on CO₂ mitigation. *Environmental Research Letters*, in press.
6. **Wang, R.;** Balkanski, Y.; Boucher, O.; Ciais, P.; Schuster, G. L.; Chevallier, F.; Samset, B. H.; Liu, J. F.; Piao, S. L.; Valari, M.; Tao, S. Estimation of global black carbon direct radiative forcing and its uncertainty constrained by observations. *J. Geophys. Res. Atmos.* 2016, 121, 5948-5971.
7. **Wang, R.;** Balkanski, Y.; Boucher, O.; Ciais, P.; Penuelas, J.; Tao, S. Significant contribution of combustion-related emissions to the atmospheric phosphorus budget. *Nature Geoscience.* 2015, 8, 48-54 (Research Article).
8. **Wang, R.;** Balkanski, Y.; Bopp, L.; Aumont, O.; Boucher, O.; Ciais, P.; Gehlen, M.; Penuelas, J.; Ethe, C.; Hauglustaine, D.; Li, B.G.; Liu, J.F.; Zhou, F.; Tao, S. Influence of anthropogenic aerosol

deposition on the relationship between oceanic productivity and warming. *Geophys. Res. Lett.* 2015, 42, 10745-10754.

9. **Wang, R.;** Balkanski, Y.; Boucher, O.; Bopp, L.; Chappell, A.; Ciais, P.; Hauglustaine, D.; Penueles, J.; Tao, S. Sources, transport and deposition of iron in the global atmosphere. *Atmos. Chem. Phys.*, 2015, 15, 6247-6270.
10. **Wang, R.;** Tao, S.; Balkanski, Y.; Ciais, P.; Boucher, O.; J.F. Liu, Piao, S.L.; Shen, H.; Vuolo, M.; Chen, H.; Chen, Y.; Cozic, A.; Huang, Y.; Li, B.G.; Li, W.; Shen, G.F.; Wang, B.; Zhang, Y.Y. Exposure to ambient black carbon derived from a unique inventory and high resolution model. *Proc. Natl. Acad. Sci. USA.* 2014, 111(7), 2459-2463 (Research Article).
11. **Wang, R.;** Tao, S.; Shen, H.Z.; Huang, Y.; Chen, H.; Balkanski, Y.; Boucher, O.; Ciais, P.; Shen, G.F.; Li, W.; Y. Zhang, Y. Chen, N. Lin, S. Su, B. Li, J. Liu, Li, W. Trend in Global Black Carbon Emissions from 1960 to 2007. *Environ. Sci. & Technol.* 2014, 48(12), 6780-6787.
12. **Wang, R.;** Tao, S.; Ciais, P.; Shen, H.Z.; Huang, Y.; Chen, H.; Shen, G.F.; Wang, B.; Li, W.; Zhang, Y.Y.; Lu, Y.; Zhu, D.; Chen, Y.C.; Liu, X. P.; Wang, W. T.; Wang, X. L.; Liu, W. X.; Li, B. G.; Piao, S. L. High resolution mapping of combustion processes and implications for CO₂ emissions. *Atmos. Chem. Phys.* 2013, 13, 5189-5203.
13. **Wang, R.;** Tao, S.; W. Wang, J. Liu, H. Shen, Shen, G.F.; Wang, B.; Liu, X.; Li, W.; Huang, Y.; Zhang, Y.Y.; Lu, Y.; Chen, H.; Chen, Y.C.; Wang, C.; Zhu, D.; Wang, X.; Li, B.G.; Li, W.; Ma, J. Black carbon emissions in China from 1949 to 2050. *Environ. Sci. & Technol.* 2012, 46, 7595-7603.
14. **Wang, R.;** Tao, S.; H. Shen, X. Wang, B. Li, Shen, G.F.; Wang, B.; Li, W.; Liu, X.; Huang, Y.; Zhang, Y.Y.; Lu, Y.; Ouyang, H. Global emission of black carbon from motor vehicles from 1960 to 2006. *Environ. Sci. & Technol.* 2012, 46, 1278-1284.
15. **Wang, R.;** Cao, H.Y.; Li, W.; Wang, W.; Wang, W.T.; Zhang, L.W.; Liu, J.M.; Ouyang, H.; Tao, S. Spatial and seasonal variations of polycyclic aromatic hydrocarbons in Haihe Plain, China. *Environ. Pollut.* 2011, 159, 1413-1418.
16. **Wang, R.;** Tao, S.; Wang, B.; Yang, Y.; Lang, C.; Zhang, Y.Z.; Hu, J.; Ma, J.M.; Hung, H.. Sources and pathways of polycyclic aromatic hydrocarbons transported to Alert, the Canadian High Arctic. *Environ. Sci. & Technol.*; 2010, 44, 1017-1022.
17. **Wang, R.;** He, Q.; Wang, Y.; Cao, J.; Tao, S.; Peng, H.; Liu, Y.; Meng, B. Impact of dissolved organic matter on sorption and absorption of fluorene and phenanthrene to maize root. *J. Agr. Environ. Sci.* 2009, 28(1), 35-39.
18. **Wang, R.;** Lang, C.; Cao, J.; Tao, S.; Zhang, G. A probabilistic model for transport of air pollutants based on forward trajectory calculations. *Acta Sci. Circum.* 2009, 29(7), 1-6.
19. **Wang, R.;** Peng, H.; Lu, S.; Cao, J.; Meng, B. Performance Assessment of TOC-5000A and Aurora 1030W. *Environ. Monitoring in China.* 2008, 4(6), 52-56.

Published papers as co-author:

20. Boucher O., Balkanski Y., Hodnebrog Ø., Myhre C.L., Myhre G., Quaas J., Samset B.H., Schutgens N., Stier P., **Wang, R.** Jury is still out on the radiative forcing by black carbon, *Proc. Natl. Acad. Sci.*

USA. 2016, doi:10.1073/pnas.1607005113.

21. Kangah Y., Ricaud P., Attié, J., Saitoh, N.; Hauglustaine, D.A., **Wang, R.**, Amraoui, L.E., Zbinden, R., Delon, C. Summertime upper tropospheric nitrous oxide over the Mediterranean as a footprint of Asian emissions. *J. Geophys. Res. Atmos.*, in press.
22. Ringeval, B.; Augusto, L.; Monod, H.; Apeldoorn, D.; Bouwman, L.; Yang, X.; Achat, D.; Chini, L.P.; Oost, K. V.; Guenet, B.; **Wang, R.**; Decharme, B.; Nesme, T.; Pellerin, S. Phosphorus in agricultural soils: drivers of its distribution at the global scale. *Global Change Biology*, 2017, doi: 10.1111/gcb.13618
23. Zhou, F.; Shang, Z.Y.; Zeng, Z.Z.; Piao, S.L.; Ciais, P.; Raymond, P.A.; Wang, X.H.; **Wang, R.**; Chen, M.P.; Yang, C.L.; Tao, S.; Zhao, Y.; Meng, Q.; Gao, S.S.; Mao, Q. New model for capturing the variations of fertilizer-induced emission factors of N₂O, *Global Biogeochem. Cycles*, 2015, 29, 885-897.
24. Chen, Y.; Shen, G.; Huang, Y.; Zhang, Y.Y.; Han, Y.; **Wang, R.**; Shen, H.; Su, S.; Lin, N.; Zhu, D.; Pei, L.; Zheng, X.; Wu, J.; Wang, X.; Liu, W.; Wong, M.; Tao, S. Household air pollution and personal exposure risk of polycyclic aromatic hydrocarbons among rural residents in Shanxi, China. *Indoor air* 2015, doi: 10.1111/ina.12204.
25. Huang, Y.; Shen, H.Z.; Chen, H.; **Wang, R.**; Zhang, Y.Y.; Su, S.; Chen, Y.C.; Lin, N.; Zhuo, S.; Zhong, Q.; Wang, X.; Liu, J.F.; Li, B.G.; Liu, W.X.; Tao, S. Quantification of global primary emissions of PM_{2.5}, PM₁₀, and TSP from combustion and industrial process sources. *Environ. Sci. & Technol.* 2014, doi: dx.doi.org/10.1021/es503696k.
26. Chen, Y.L.; **Wang, R.**; Shen, H.; Li, W.; Chen, H.; Huang, Y.; Zhang, Y.Y.; Chen, Y.C.; Su, S.; Lin, N.; Liu, J.F.; Li, B.G.; Wang, X.L.; Liu, W.X.; Coveney, R.M.; Tao, S. Global mercury emissions from combustion in light of international fuel trading. *Environ. Sci. & Technol.* 2014, 48 (3), 1727-1735.
27. Li, W.; Wang, C.; Wang, H.; Chen, J.; Yuan, C.; Li, T.; Wang, W.; Shen, H.Z.; Huang, Y.; **Wang, R.**; Wang, B.; Zhang, Y.Y.; Chen, H.; Chen, Y.; Tang, J.; Wang, X.; Liu, J.; Coveney Jr., R. M.; Tao, S. Distribution of atmospheric particulate matter (PM) in rural field, rural village and urban areas of northern China. *Environ. Pollut.* 2014, 185, 134-140.
28. Li, W.; C. Wang, H. Wang, J. Chen, Shen, H.Z.; Shen, G.F.; Huang, Y.; **Wang, R.**; Wang, B.; Zhang, Y.Y.; Chen, H.; Chen, Y.; Su, S.; Lin, N.; Tang, J.; Li, Q.; Wang, X.; Liu, J.; Tao, S. Atmospheric polycyclic aromatic hydrocarbons in rural and urban areas of northern China. *Environ. Pollut.* 2014, 192, 83-90.
29. Evangeliou, N.; Balkanski, Y.; Cozic, A.; Hao, W.M.; Mouillot, F.; Thonicke, K.; Paugam, R.; Zibitsev, S.; Mousseau, T.A.; **Wang, R.**; Poulter, B.; Petkov, A.; Yue, C.; Cadule, P.; Koffi, B.; Kaiser, J. W.; Møller, A.P. Fire evolution in the radioactively contaminated forests of Ukraine and Belarus: future risks for the European population and the environment, *Ecological Monographs*, 2014, doi: http://dx.doi.org/10.1890/14-1227.1.
30. Zhu, D.; Tao, S.; **Wang, R.**; Shen, H.; Huang, Y.; Shen, G.F.; Wang, B.; Li, W.; Zhang, Y.Y.; Chen,

- H.; Chen, Y.; Liu, J.; Li, B.; Wang, X.; Li, W. Temporal and spatial trends of residential energy consumption and air pollutant emissions in China. *App. Energ.* 2013, 106, 17-24.
31. Shen, H.; Huang, Y.; **Wang, R.**; Zhu, D.; Li, W.; Shen, G.F.; Wang, B.; Zhang, Y.Y.; Y. Chen, Lu, Y.; Chen, H.; Li, T.; Sun, K.; Li, B.; Li, W.; Liu, J.; Tao, S. Global atmospheric emissions of polycyclic aromatic hydrocarbons from 1960 to 2008 and future predictions. *Environ. Sci. & Technol.* 2013, 47, 6415-6424.
32. Ou-Yang, H.L.; Kong, X.Z.; Lavoie, M.; He, W.; Qin, N.; He, Q.S.; Yang, B.; **Wang, R.**; Xu, F.L. Photosynthetic and cellular toxicity of cadmium in *Chlorella vulgaris*. *Environ. Toxicol. Chem.* 2013, 32, 2762-2770.
33. Wang, B.; Li, K.; Jin, W.; Lu, Y.; Zhang, Y.Y.; Shen, G.F.; **Wang, R.**; Shen, H.Z.; Li, W.; Huang, Y.; Zhang, Y.Y.; X. Wang, X. Li, Li, W.u, H. Cao, Tao, S. Properties and Inflammatory Effects of Various Size Fractions of Ambient Particulate Matter from Beijing on A549 and J774A. 1 Cells. *Environ. Sci. & Technol.* 2013, 47(18), 10583-10590.
34. Yu, Y.; Wang, B.; Wang, X.; **Wang, R.**; Wang, W.; Shen, G.; Shen, H.; Li, W.; Wong, M.; Liu, W.; Tao, S. Hexachlorocyclohexanes (HCHs) in placenta and umbilical cord blood and dietary intake for women in Beijing, China. *Environm. Pollut.*, 2013, 127, 75-80.
35. Wang, Y. L.; Xia, Z.H.; Liu, D.; Qiu, W. X.; Duan, X. L.; **Wang, R.**; Liu, W. J.; Zhang, Y. H.; Wang, D.; Tao, S.; Liu, W.X. Multimedia fate and source apportionment of polycyclic aromatic hydrocarbons in a coking industry city in Northern China. *Environmental Pollution*, 2013, 181, 115-121.
36. Luysaert, S.; Abril, G.; Andres, R.; ...; **Wang, R.**; et al. The European land and inland water CO₂, CO, CH₄ and N₂O balance between 2001 and 2005. *Biogeosciences* 2012, 9, 3357-3380.
37. Ciais P, Dolman A J, Bombelli A, ..., **Wang, R.** et al. Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. *Biogeosciences*, 2014, 11: 3547-3602.
38. Shen, G.F.; Wei, S.; Wei, W.; Zhang, Y.Y.; Min, Y.; Wang, B.; **Wang, R.**; Li, W.; Shen, H.Z.; Huang, Y.; Yang, Y.; Wang, W.; Wang, X. X.; Wang, X.; Tao, S. Emission Factors, Size Distributions, and emission inventories of carbonaceous particulate matter from residential wood combustion in Rural China. *Environ. Sci. & Technol.* 2012, 46, 4207-4214.
39. Ding, J.; Zhong, J.; Yang, Y.; Li, B.; Shen, G.F.; Sub, Y.; Wang, C.; Li, W.; Shen, H.Z.; Wang, B.; **Wang, R.**; Huang, Y.; Zhang, Y.Y.; Cao, H.; Zhu, Y.; Simonich, S.L.M.; Tao, S. Occurrence and exposure to polycyclic aromatic hydrocarbons and their derivatives in a rural Chinese home through biomass fuelled cooking. *Environ. Pollut.* 2012, 169, 160-166.
40. Shen, G.F.; Tao, S.; Wei, S.; Zhang, Y.Y.; **Wang, R.**; Wang, B.; Li, W.; Shen, H.Z.; Huang, Y.; Chen, Y.; Chen, H.; Yang, Y.; Wang, W.; Wei, W.; Wang, X.; Li, W.; Wang, X.; Simonich, S. L. M. Reductions in emissions of carbonaceous particulate matter and polycyclic aromatic hydrocarbons from combustion of biomass pellets in comparison with raw fuel burning. *Environ. Sci. & Technol.* 2012, 46, 6409-6416.
41. Shen, G.F.; Tao, S.; S. Wei, Zhang, Y.Y.; **Wang, R.**; Wang, B.; Li, W.; Shen, H.Z.; Huang, Y.; Yang,

- Y.; Wang, W.; Wang, X.; Simonich, S. L. M. Retene emission from residential solid fuels in China and evaluation of Retene as a unique marker for soft wood combustion. *Environ. Sci. & Technol.* 2012, 46, 4666-4672.
42. Shen, G.F.; Tao, S.; Wei, S.; Zhang, Y.Y.; **Wang, R.**; Wang, B.; Li, W.; Shen, H.Z.; Huang, Y.; Chen, Y.; Chen, H.; Yang, Y.; Wang, W.; Wang, X.; Li, W.; Simonich, S. L. M. Emissions of parent, nitro, and oxygenated polycyclic aromatic hydrocarbons from residential wood combustion in rural China. *Environ. Sci. & Technol.* 2012, 46 (15), 8123-8130.
43. Ou-Yang, H.; Kong, X.; W. He, N. Qin, Q. He, Wang, Y.; **Wang, R.**; F.Xu. Effects of five heavy metals at sub-lethal concentrations on the growth and photosynthesis of *Chlorella vulgaris*. *Chin. Sci. Bull.* 2012, 57, 3363-3370.
44. Wang, B.; Xue, M.; Lu, Y.; Yang, Y.; Zhong, J.; Su, Y.; **Wang, R.**; Shen, G.F.; Wang, X.; Tao, S. Cell absorption induced desorption of hydrophobic organic contaminants from digested soil residue. *Chemosphere* 2011, 83, 1461-1466.
45. Wang, W.; Simonich, S.; Giri, B.; Chang, Y.; Zhang, Y.; Jia, Y.; Tao, S.; **Wang, R.**; Wang, B.; Li, W.; Cao, J.; Lu, X. Atmospheric concentrations and air–soil gas exchange of polycyclic aromatic hydrocarbons (PAHs) in remote, rural village and urban areas of Beijing–Tianjin region, North China. *Sci. of the Total Environ.* 2011, 409(15), 2942-2950.
46. Tao, S.; Wang, W.; Li, W.; Zuo, Q.; Wang, X.; **Wang, R.**; Wang, B.; Shen, G.F.; Yang, Y.; He, J.S. Polycyclic aromatic hydrocarbons and organochlorine pesticides in surface soils from the Qinghai-Tibetan plateau. *J. Environ. Monitoring* 2011, 13, 175-181.
47. Wang, W.; Simonich, S.; Giri, B.; Xue, M.; Zhao, J.; Chen, S.; Shen, H.Z.; Shen, G.F.; **Wang, R.**; Cao, J.; Tao, S. Spatial distribution and seasonal variation of atmospheric bulk deposition of polycyclic aromatic hydrocarbons in Beijing–Tianjin region, North China. *Environ. Pollut.* 2011, 159, 287-293.
48. Shen, H.Z.; Tao, S.; **Wang, R.**; Wang, B.; Shen, G.F.; Li, W.; S. Su, Huang, Y.; Wang, X.L.; Liu, W.X.; Li, B.G.; Sun, K. Global time trends in PAH emissions from motor vehicles. *Atmos. Environ.* 2011, 45, 2067-2073.
49. Li, Q.B.; Wang, X.Y.; **Wang, R.**; Sui, H.Q.; Li, W.; Li, L. Seasonal trends and potential sources of ambient air OCPs in urban and suburban areas in Dalian, China. *J. Environ. Monitoring* 2011, 13, 1816-1822.
50. Shen, G.F.; Wang, W.; Yang, Y.; Zhu, C.; Min, Y.; Xue, M.; Ding, J.; Li, W.; Wang, B.; Shen, H.Z.; **Wang, R.**; Wang, X.L.; Tao, S. Emission factors and particulate matter size distribution of polycyclic aromatic hydrocarbons from residential coal combustions in rural Northern China. *Atmos. Environ.* 2010, 44(39), 5237-5243.
51. Wang, W.; Massey Simonich, S. L., Xue, M.; Zhao, J.; Zhang, N.; **Wang, R.**; Cao, J.; Tao, S. Concentrations, sources and spatial distribution of polycyclic aromatic hydrocarbons in soils from Beijing, Tianjin and surrounding areas, North China. *Environ. Pollut.* 2010, 158, 1245-1251.
52. Wang, B.; L. Zhu, Z. Cong, **Wang, R.**; Tao S. Introduction to the methods of parameter estimation for environment monitoring data set with truncated data below a detection limit. *Acta Sci. Circum.*

2009, 29(6), 1-6.

Presentations:

53. **Wang, R.;** Balkanski, Y.; Boucher, O.; Ciais, P.; Penuelas, J.; Tao, S. A Large Contribution of Combustion-related Emissions to the Atmospheric Budget of Phosphorus. in AGU 2015 meeting, San Francisco, December 2015.
54. **Wang, R.** Understanding the role of aerosols in the Earth System. invited by Geophysical Fluid Dynamics Laboratory, Princeton, November 2015.
55. **Wang, R.;** Balkanski, Y.; Bopp, L.; Aumont, O.; Boucher, O.; Ciais, P.; Gehlen, M.; Penuelas, J.; Ethe, C.; Hauglustaine, D.; Li, B.G.; Liu, J.F.; Zhou, F.; Tao, S. Response of marine phytoplankton to deposition of anthropogenic N, P and Fe. in Goldschmidt 2015 meeting, Prague, August 2015.
56. **Wang, R.;** Balkanski, Y.; Laurent, B.; Adrian, C.; Boucher, O.; Ciais, P.; Penuelas, J.; Hauglustaine, D.; Tao, S. Simulation of Nitrogen, Phosphorus and Iron in the Atmosphere and Modelling of the Response by Marine and Terrestrial Ecosystems. in Imbalance-P kick-off meeting, Barcelona, January 2015.
57. **Wang, R.;** Tao, S. Balkanski, Y.; Boucher, O.; Ciais, P. Development of a global black carbon emission inventory (PKU-BC), and the implications for BC modeling. in GEIA's 16th Conference, Boulder, June 2014.
58. **Wang, R.;** Tao, S.; Balkanski, Y.; Ciais, P.. Influence of updating global emission inventory of black carbon on evaluation of the climate and health impact. in EGU General Assembly 2013, April 2013.
59. **Wang, R.;** Tao, S. Air quality and pollution sources to Beijing in August – prediction of air quality during the 2008 Olympic Games. in BAQ (Better Air Quality) workshop, organized by Clean Air Initiative for Asian Cities Center, Inc.; November 2008.