

Rong Wang

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RESEARCH INTERESTS

- Interaction of energy, emissions, atmospheric chemistry, air pollution and climate change
- Atmospheric modelling of black carbon
- Impact of atmospheric deposition of nitrogen, phosphorus and iron on terrestrial and oceanic productivity
- Energy efficiency and transition to 100% renewable carbon-free energy system

EDUCATION

Peking University, Beijing, China

Ph.D., Environmental Geography

Jul 2013

Advisor: Shu Tao (陶澍).

Thesis: "Global Emission, Atmospheric Transport, Health Impact and Radiative Forcing of Black Carbon"

Peking University, Beijing, China

B.S. with Environmental Science

Jul 2008

Advisor: Shu Tao (陶澍).

Thesis: "Atmospheric Trajectory Model and Air Pollution in Beijing"

Second B.S. with Theoretical Physics

Jul 2008

PROFESSIONAL EXPERIENCES

Senior postdoc, Carnegie, Stanford, USA

Energy Efficiency and Energy Systems (Supervisor: Ken Calderia)

Jul 2016 – Jun 2018

Marie Curie International Incoming Fellowship, LSCE, France (*PI*, 194,000 euros for 2 years)

Aerosols and Earth Carbon Cycles (Independent Researcher)

Jul 2014 – Jun 2016

Postdoc, LSCE, France

Climate Models (supervisors: Yves Balkanski, Olivier Boucher and Philippe Ciais)

Sep 2013 – Jun 2014

PhD Candidate, Peking University, China

Atmospheric Modeling of Black Carbon (Supervisor: Shu Tao)

Sep 2008 – Jun 2013

TEACHING EXPERIENCE

Peking University, Beijing, China

Application of Statistical Methods

Sep 2011 – Dec 2011

JOURNAL REVIEW

Applied Energy (2)

Atmospheric Chemistry and Physics (2)

Atmospheric Environment (1)

Biogeoscience (1)

Environmental Science Technology (2)

Geographical Research Letter (1)

Geoscientific Model Development (2)

Nature Geoscience (1)

SELECTED HONOR

<i>Springer Thesis Prize (Springer)</i>	2015
<i>Marie Curie International Incoming Fellowship (Europe Commission)</i>	2014
<i>Excellent Ph.D Thesis (Peking University)</i>	2013
<i>Young Scientist Award (Ministry of Education of the People's Republic of China)</i>	2012
<i>Young Voice Award (Better Air Quality Workshop)</i>	2008

CONFERENCE PRESENTATIONS

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- 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.*
- Wang, R. *Understanding the role of aerosols in the Earth System. invited by Geophysical Fluid Dynamics Laboratory, Princeton, November 2015.*
- Wang, R.; Balkanski, Y.; Bopp, L.; Aumont, O.; Boucher, O.; Ciais, P.; Geblen, 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.*
- 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.*
- Wang, R.; Tao, S. *Development of a global black carbon emission inventory (PKU-BC), and the implications for BC modeling. in GELA's 16th Conference, Boulder, June 2014.*
- Wang, R.; Tao, S. *Influence of updating global emission inventory of black carbon on evaluation of the climate and health impact. in EGU General Assembly 2013, April 2013.*
- 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.*

PEER-REVIEWED 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

2. **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, under review.*
3. **Wang, R.**; Moreno-Cruz, J.; Caldeira, K. *Effects of carbon-tax revenue maximization on CO₂ mitigation. ERL, under review.*
4. Kangab 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., under review.*
5. Kumar, D.B., Verma, S., Boucher, O., **Wang, R.** *Constrained simulation of aerosol constituents and sources during pre-monsoon season and Tiger experiment over the Indian subcontinent. Atmos. Environ., under review.*
6. Ricbon, C., Dutay, J.C., Dulac, F., **Wang, R.**, Balkanski, Y. *et al. Modeling atmospheric deposition impacts on nutrients and biological budgets of the Mediterranean Sea. Progress in Oceanography, under review.*

7. Richon, C., Dutay, J.C., Dulac, F., **Wang, R.**, Balkanski, Y. Modeling the biogeochemical impact of atmospheric phosphate deposition from desert dust and combustion sources to the Mediterranean Sea. JGR-Oceans, under review.

Papers in 2016

8. 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
9. 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.
10. **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.

Publications as first author before 2016

11. **Wang, R.**; Balkanski, Y.; Boucher, O.; Ciais, P.; Pennel, J.; Tao, S. Significant contribution of combustion-related emissions to the atmospheric phosphorus budget. *Nature Geoscience*. 2015, 8, 48-54.
12. **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).
13. **Wang, R.**; Balkanski, Y.; Bopp, L.; Aumont, O.; Boucher, O.; Ciais, P.; Geblen, M.; Pennel, 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.
14. **Wang, R.**; Balkanski, Y.; Boucher, O.; Bopp, L.; Chappell, A.; Ciais, P.; Hauglustaine, D.; Pennel, J.; Tao, S. Sources, transport and deposition of iron in the global atmosphere. *Atmos. Chem. Phys.*, 2015, 15, 6247-6270.
15. **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. Time trend of global black carbon emissions from 1960 to 2007. *Environ. Sci. & Technol.* 2014, 48(12), 6780-6787.
16. **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.
17. **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.
18. **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.
19. **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.
20. **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.

21. **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, 35-39 (in Chinese).
22. **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 (in Chinese).
23. **Wang, R.**; Peng, H.; Lu, S.; Cao, J.; Meng, B. *Performance Assessment of TOC-5000A and Aurora 1030W*. *Environ. Monitoring.* 2008, 4(6), 52-56 (in Chinese).

Publications as co-author before 2016

24. 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.
25. 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.
26. Huang, Y.; Shen, H.Z.; Chen, H.; **Wang, R.**; Zhang, Y.Y.; Su, S.; Chen, Y.C.; Lin, N.; Zbuo, 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.
27. 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.
28. 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.
29. Li, W.; C. Wang, H. Wang, J. Chen, Shen, H., 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.
30. Evangeliou, N.; Balkanski, Y.; Cozic, A.; Hao, W.M.; Monillot, 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.
31. 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.
32. 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.
33. 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.
34. 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.

35. 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.
36. 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.
37. Luysaert, S.; Abril, G.; Andres, R.; Bastviken, D.; Bellassen, V.; Bergamaschi, P.; Bousquet, P.; Chevallier, F.; Ciais, P.; Corazza, M.; Dechow, R.; Erb, K.-H.; Etiope, G.; Fortems-Cheiney, A.; Grassi, G.; Hartmann, J.; Jung, M.; Lathière, J.; Lobila, A.; Mayorga, E.; Moosdorf, N.; Njakou, D. S.; Otto, J.; Papale, D.; Peters, W.; Peylin, P.; Raymond, P.; Rödenbeck, C.; Saarnio, S.; Schulze, E.-D.; Szopa, S.; Thompson, R.; Verkerk, P. J.; Vuichard, N.; **Wang, R.**; Wattenbach, M.; Zaehle, S. The European land and inland water CO₂, CO, CH₄ and N₂O balance between 2001 and 2005. *Biogeosciences* 2012, 9, 3357-3380.
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.