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目前任职:

北京大学工学院水资源研究中心兼职教授

美国纽约州立大学教授

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背景资料:

郑焰教授是资深的环境地球化学家,于2010年当选为美国地质学会Fellow,现任美国纽约州立大学教授及哥伦比亚大学资深研究员,2007-2009/11任纽约州立大学皇后分校地球和环境科学院主任。主要研究方向为环境中微量元素的生物地球化学过程及其对人类和生态系统健康的影至2012年1月,共发表以水化学水资源为重点,以交叉学科为特色的SCI论文64篇,包括Nature Geoscience article 1篇,PNAS 1篇,及行内具的ES&T 8篇,EHP 2篇,GCA 8篇,WRR 3篇等,SCI引用约1900次,他引约1400次(候选人及所有合作者的引用均计作自引)。统计表明,他的引用率在国际环境地球化学界是非常高的,在该领域的海外华人中更是屈指可数。候选人具有丰富的科研管理经验,自2000年是哥伦比亚大学Superfund重大课题的核心成员和项目主持人。

郑焰教授指导的课题组受美国NIEHS和NSF资助,在东亚、北美等地进行大量野外和实验室工作,获得对砷在地下水迁移转化的多种新认识,将这些新认识应用于对水资源的保护、开发和持续利用。在孟加拉国为联合国任职25个月,带领约20人的团队,将自2000年的研究成果应用于水的管理开发和利用,解决了2百万高砷暴露人口的饮水安全问题,并筹集到两千万美元的项目经费。

教育经历:

1994-1999	哥伦比亚大学地球和环境科学系	海洋地球化学博士
1993-1994	哥伦比亚大学地球科学系	化学海洋学硕士学位
1991-1993	哥伦比亚大学地球科学系	同位素地球化学硕士学位
1983-1988	中国科学技术大学地球和空间科学系	地球化学学士学位

工作经历:

2009-2011	联合国儿童基金会驻孟加拉国	水环境和卫生项目官员
2005-2006	联合国儿童基金会驻中国	水环境和卫生技术顾问
1999至今	哥伦比亚大学拉蒙特地调所	副研究员(1999), 研究员(2006), 资深研究员(2008)
1998至今	纽约州立大学	助理教授(1998), 副教授(2002), 教授(2006)
1988-1991	中科院生态环境研究中心	助理研究员

发表论著:

- [1] *Radloff, K.A., Zheng, Y., Michael, H.A., Stute, M., Bostick, B.C., Mihajlov, I., Bounds, M., Huq, M.R., Choudhury, I., Rahman, M.W., Schlosser, P., Ahmed, K.M. and van Geen, A. (2011) Arsenic migration to deep groundwater in Bangladesh influenced by adsorption and water demand. Nature Geoscience, 4(11): 793-798.
- [2] *Mladenov N., Zheng Y., Miller M. P., Legg T., Simone B., Hageman C., Rahman M. M., Ahmed K. M., and McKnight D. M. (2010) Dissolved organic matter sources and consequences for iron and arsenic mobilization in Bangladesh aquifers. Environ. Sci. Tech. 44:123-128.
- [3] *Yang, Q., Jung, H.-B., Culbertson, C., Marvinney, R., Loiselle, M., Locke, D., Cheek, H., Thibodeau, H. and Zheng, Y**. 2009. Spatial Pattern of Groundwater Arsenic Occurrence and Association with Bedrock Geology in Greater Augusta, Maine, USA. Environmental Science & Technology. 43:2714 - 2719.
- [4] *Datta, S., Mailloux, B., Hoque, M.A., Jung, H.-B., Stute, M., Ahmed, K.M., Zheng, Y.**. 2009. Redox trapping of arsenic during groundwater discharge in sediments from the Meghna riverbank in Bangladesh. Proceedings of the National Academy of Sciences. 106:16930-16935
- [5] *Yu, G., D. Sun and Y. Zheng**, 2007. Health effects of exposure to natural arsenic from groundwater and coal in China: An overview of occurrence, Environmental Health Perspective, 115(4) 636-642.
- [6] Dhar R., Zheng Y., Saltikov C.W., Radloff K.A., Mailloux B.A., Ahmed K.M. and van Geen A. Microbes enhance mobility of arsenic in

- [7] He, Y.** and Zheng, Y. (2010) Assessment of in vivo Bioaccessibility of Arsenic in Dietary Rice by a Mass Balance Approach. *Science of the Total Environment*, 408:1430-1436.
- [8] Paul M.**, Reisberg L., Vigier N., Zheng Y., Ahmed K. M., Charlet L., and Huq M. R. (2010) Dissolved osmium in Bengal plain groundwater: Implications for the marine Os budget. *Geochimica et Cosmochimica Acta* 74(12): 3432
- [9] Garnier J. M., Travassac F., Lenoble V., Rose J., Zheng Y., Hossain M. S., Chowdhury S. H., Biswas A. K., Ahmed K. M., Cheng Z., and van Geen A.** (2010) Temporal variations in arsenic uptake by rice plants in Bangladesh: The role of iron plaque in paddy fields irrigated with groundwater. *Science of the Total Environment* 19:4185-4193.
- [10] Zheng, Y.** (2010) Flushing of arsenic from aquifer: Implications for safe drinking water options in high arsenic occurrence areas. In J. Jean, J. Bundschuh, and P. Bhattacharya (ed.) *Arsenic in Geosphere and Human Diseases: As2010*. CRC Press, Taylor & Francis Group, Leiden, the Netherlands, pp.90-93
- [11] Zheng, Y.** (2010) Mobilization of natural arsenic in groundwater: Targeting low arsenic aquifers in low arsenic occurrence areas. *Geography in China*. 37:723-729.
- [12] Morabia, A.** and Zheng, Y. 2009. On the influence of a raffle upon responses to an urban transportation survey in New York City, *Int. J. Public Health*, 54:1-4.
- [13] Jung, H.-B., Charette, M.A., Zheng, Y.** 2009. Field, Laboratory, and Modeling Study of Reactive Transport of Groundwater Arsenic in a Coastal Aquifer. *Environmental Science & Technology*. 43:5333-5338.
- [14] Zheng, Y.** (2008) The benefit of public transportation: Physical activity to reduce obesity and ecological footprint, *Preventive Medicine* doi:10.1016/j.ypmed.2007.11.019
- [15] van Geen A**, Zheng Y., Goodbred S., Horneman A., Aziz Z., Cheng Z., Stute M., Mailloux B., Weinman B., Hoque M. A., Seddique A. A., Hossain M. S., Chowdhury S. H., and Ahmed K. M. (2008) Flushing History as a Hydrogeological Control on the Regional Distribution of Arsenic in Shallow Groundwater of the Bengal Basin. *Environ. Sci. Technol.* 42(7), 2283-2288.
- [16] Dhar R. K., Zheng Y**, Stute M., van Geen A., Cheng Z., Shanewaz M., Shamsudduha M., Hoque M. A., Rahman M. W., and Ahmed K. M. 2008. Temporal Variability of Groundwater Chemistry in Shallow and Deep Aquifers of Arai hazar, Bangladesh. *Journal of Contaminant Hydrology*, 99:97-111.
- [17] Horneman, A**, Stute, M., Schlosser, P., Smethie Jr, W., Santella, N., Ho, D.T., Mailloux, B., Gorman, E., Zheng, Y., van Geen, A., 2008. Degradation rates of CFC-11, CFC-12 and CFC-113 in anoxic shallow aquifers of Arai hazar, Bangladesh. *Journal of Contaminant Hydrology* 97:27-41.
- [18] Weinman, B**, Goodbred, S.L., Zheng, Y., Aziz, Z., Singhvi, A.K., Nagar, Y.C., Steckler, M., van Geen, A., 2008. Contributions of floodplain stratigraphy and evolution to the spatial patterns of groundwater arsenic in Arai hazar, Bangladesh. *GSA Bulletin*. 120:1567-1580.
- [19] Aziz, Z**, van Geen, A., Versteeg, R., Horneman, A., Y. Zheng, Goodbred, S., Steckler, M., Stute, M., Weinman, B., Gavieli, I., Hoque, M., Shamsudduha, M., Ahmed, K.M., 2008. Impact of local recharge on arsenic concentrations in shallow aquifers inferred from the electromagnetic conductivity of soils in Arai hazar, Bangladesh *Water Resources Research*. 44, W07416, doi:10.1029/2007WR00600.
- [20] Radloff, KA**, AR Manning, B. Mailloux, Y. Zheng, MM Rahman, MR. Huq, KM Ahmed, M Stute, A van Geen, 2008. Considerations for conducting incubations to study the mechanisms of As release in reducing groundwater aquifers, *Applied Geochemistry*, 23:3224-3235.
- [21] A. van Geen**, K. Radloff, Z. Aziz, Z. Cheng, M.R. Huq, K.M. Ahmed, B. Weinman, S. Goodbred, H.B. Jung, Y. Zheng, M. Berg, P.T.K. Trar Charlet, J. Metral, D. Tisserand, S. Guillot, S. Chakraborty, A.P. Gajurel, B.N. Upreti. 2008. Comparison of arsenic concentrations in simultaneously-collected groundwater and aquifer particles from Bangladesh, India, Vietnam, and Nepal, *Applied Geochemistry*, 23:3244-
- [22] Stute, M**, Zheng, Y., Schlosser, P., Horneman, A., Dhar, R.K., Datta, S., Hoque, M.A., Seddique, A.A., Shamsudduha, M., Ahmed, K.M., van Geen, A., 2007. Hydrological Control of Arsenic Concentrations in Bangladesh aquifers. *Water Resources Research*. 43, doi:10.1029/2005WR004499.
- [23] Zheng, Y.** 2007. The heterogeneity of arsenic in the crust: A linkage to occurrence in groundwater. *Quaternary Sciences*, 27:6-19.
- [24] He, Y., Y. Zheng**, D. C. Locke. 2007, Cathodic stripping voltammetric analysis of arsenic species in environmental water samples, *Microchemical Journal*, 85(2): 265-269.
- [25] Wasserman, G. A.** , X. Liu, F. Parvez, H. Ahsan, D. Levy, P. Factor-Litvak, J. Kline, A. van Geen, V. Slavkovich, N. J. Lolocono, Z. Cheng, Zheng, J. H. Graziano, 2006. Water manganese exposure and children's intellectual function in Arai hazar, Bangladesh, *Environmental Health Perspectives* 114 (1): 124-129
- [26] van Geen, A.** , Y. Zheng, Z. Cheng, H. Yi, R. Dhar, J. M. Garnier, J. Rose, A. A. Seddique, M. A. Hoque, and K.M. Ahmed, 2006, Impact of irrigation with groundwater elevated in arsenic on rice paddies in Bangladesh, *Science of the Total Environment*, 367 (2-3): 769-777
- [27] van Geen, A.** , Y. Zheng, Z. Cheng, Z. Aziz, A. Horneman, R. K. Dhar, B. Mailloux, M. Stute, B. Weinman, S. Goodbred, A. A. Seddique, M