## Program of DFG-NSFC Symposium on "Geogenic Arsenic in the Environment", 21.-27. September 2014, Beijing

## (1) Genereal overview

Day	Activity
09/21/2014, Saturday	Flight to Beijing of German particpants
09/22/2014, Monday	1. Day of symposium, presentations; Welcome dinner
09/23/2014, Tuesday	2. Day of symposium, presentations
09/24/2014, Wednesday	3. Visiting water treatment plants for arsenic/fluoride
	removal in the Guanting Reservoir
09/25/2014, Thursday	4. Day of symposium, presentations
09/26/2014, Friday	5. Day of symposium, compilation of results and discussion
	of proceedings; Fare well dinner
09/27/2014, Saturday	Flight to Germany

## (2) Detailed time schedule of symposium

September 21, 2014 (Arrival day)

Registration	Volunteers from China University of Geosciences (Beijing)
8:00-11:30	Registration
12:00-20:30	Registration

**September 22, 2014** 

Opening	Chaired by Stefan Norra, Huaming Guo		
8:30-8:40	Welcoming speech by NSFC		
8:40-8:50	Welcomin	g speech by DFG	
8:50-9:00	· ·	g speech Prof. Yan es, Wuhan)	xin Wang (President of China University of
Session	Arsenic in	the food chain (C	Chaired by Stefan Norra, Yongguan Zhu)
9:00-9:25	Prof. Dr.	Zhu, Yong-guan	Arsenic in soil-plant systems
9:25-9:50	PD Dr.	Norra, Stefan	Arsenic in irrigated agricultural soils of Inner Mongolia, northern-Vietnam and West Bengal
9:50-10:15	Prof. Dr.	Ma, Lena Q	Arsenic speciation in edible plants and food products: environment and health implication
	Coffee break (10:15-10:25)		
10:25-10:50	Dr.	Pleßow, Alexander	Atmospheric dusts and aerosols and soil contamination – apples and pears?
10:50-11:15	Prof. Dr.	Zheng, Baoshan	Arsenic in coal and its effect on human health
11:15-11:30	Prof. Dr.	Cen, Kuang	Research on the relationship between the content of toxic elements of the local soil and water and Carcinogenic.
11:30–12:00	Conclusive discussion		
Lunch			

Session	Fate of arsenic in the environment (Chaired by Hailiang Dong, Hauke Harms)			
14:00-14:25	NN			
14:25-14:50	Prof. Dr.	Dong, Hailiang	Abundance and diversity of arsenite- oxidizing bacteria in the hot springs of western China	
15:00-15:25	Prof. Dr.	Lei, Mei	Field application of phytoremediation technique for arsenic contaminated land in China	
	Coffee break (15:25-15:35)			
Session	Fate of arsenic in the environment (Chaired by Yonghong Bi, Hauke Harms)			
15:35-16:00	Prof. Dr.	Harms, Hauke	Field application of a bioreporter-based test for arsenic in drinking water	
16:00-16:25	Prof. Dr.	Yao, Jun	Compound specific isotope analysis of organophosphorus pesticides in groundwater	
16:25-16:50	Prof. Dr.	Bi, Yonghong	Characteristics of arsenic contamination in the sediment cores from Three Gorges Reservoir, China.	
16:50-17:15	NN			
17:15–17:45		Conclusive discussion		
	Welcome dinner			

**September 23, 2014** 

Session	Geogenic distribution of groundwater arsenic in geological			
	formations (Chaired by Dongguang Wen, Michael Berg)			
8:30-8:55	Prof. Dr.	Wen,	Arsenic, fluoride and iodine in	
		Dongguang	groundwater of China	
8:55-9:20	Prof. Dr.	Berg, Michael	Subcontinental to regional prediction modeling of groundwater arsenic contamination in Southeast Asia and China	
9:20-9:45	Prof. Dr.	Zhang, Fucun	Occurrence, distribution, and release mechanism of groundwater arsenic in Yinchuan Plain, China	
	Coffee break (9:45-9:55)			
9:55-10:20	Dr.	Banning, Andre	Arsenic in German sediment basins and its dynamics during the evolution of Central Europe	
10:20-10:45	Dr.	Zhang, Yilong	The distribution of high arsenic groundwater in the Hetao Basin, Inner Mongolia	
10:45-11:10	Prof. Dr.	Tang, Jie	Study on the relationship between water environment and arsenism in China.	
11:10-11:40	Conclusive discussion			
	Lunch			
Session	Health impacts of environment arsenic (Chaired by Hanns-Jürgen Kunert, Guifan Sun)			
14:00-14:25	Prof. Dr.	Kunert, Hanns-	Specific effects of arsenic exposure on	

		Jürgen	neurocognitive functions:	
			Neuropsychological results of the	
			Vietnamese field study	
14:25-14:50	Prof. Dr.	Sun, Guifan	Prediction of groundwater arsenic	
			contamination through GIS model in	
			China.	
14:50-15:15	Prof. Dr.	Guo, Xiaojuan	Arsenic exposure and its adverse health	
			effects in Inner Mongolia	
15:15-15:40	Prof. Dr.	Norra, Christine	Mental health and neuropsychiatric	
			deficits of chronic arsenic exposure in the	
	Vietnamese field study			
15:40-16:10	Conclusive discussion			
	Coffee break (16:10-16:30)			
16:30-17:30		Discussion		
Dinner				

## **September 24, 2014**

Visiting water treatment plants for arsenic/fluoride removal in the Guanting Reservoir, which is the demonstration project of China-Germany collaboration.

8:30 –17:00	Water treatment plants for arsenic/F removal in the Guanting Reservior
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**September 25, 2014** 

Session		echanisms of arse	nic to groundwater environment (Chaired	
	by Yanxin Wang, NN)			
8:30-8:55	Prof. Dr.	Wang, Yanxin	Isotope geochemistry of high arsenic	
			groundwater	
8:55 – 9:20		NN		
9:20 – 9:45	Prof. Dr.	Sun, Jichao	Anthropogenic and natural sources of	
			groundwater arsenic in the Pearl River	
			delta	
		Coffee break	x (9:45-9:55)	
9:55-10:20	Dr.	Eiche, Elisabeth	Improved identification of Fe-minerals for	
			As retardation in aquifer sediments –	
			results from a case study in Van Phuc,	
			Vietnam.	
10:20-10:45	Prof. Dr.	Gao, Cunrong	Arsenic contamination of groundwater in	
			the Hetao plain of Inner Mongolia, China	
10:4511:05	Prof. Dr.	Rüde, Thomas	Arsenic and uranium from common	
			geological sources and causes of high	
			spatial heterogeneity of their	
			concentrations in groundwaters of south	
			eastern Germany	
11:05-11:35	Conclusive discussion			
	Lunch			
Session	Release mechanisms of arsenic to groundwater environment (Chaired			
	by Elisabeth Eiche, Qinghai Guo)			
14:00-14:25	Prof. Dr.	Ma, Teng	Geochemistry and hydrology of high	
			arsenic groundwater in irrigated field at	

			the Hetao Plain, North China	
14:25-14:50	Prof. Dr.	Pichler, Thomas	Understanding anthropogenic induced	
			release of geogenic As from limestone	
			aquifers - a combined chemical, stable	
			isotope, radiogenic isotope and modeling	
			approach	
14:50-15:15	Prof. Dr.	Guo, Huaming	Hydrogeologic and geochemical	
			comparison of high arsenic groundwater in	
			the Hetao, Yinchuan and Songnen basins	
	Coffee break (15:15-15:25)			
15:25-15:50	Prof. Dr.	Guo, Qinghai	Arsenic geochemistry of representative	
			high-temperature geothermal systems in	
			China	
15:50-16:15	Dr.	Wang, Ya	Hydrogeochemical factors affecting	
			arsenic distribution in a Quaternary coastal	
			aquifer-aquitard system of the Pearl River	
			Delta, China	
16:15-16:40	Dr.	Cao, Wengeng	Control mechanism of the sedimentary	
			structure on the distribution of high arsenic	
			groundwater in the Hetao basin	
16:40-17:30	16:40-17:30 Conclusive discussion			
Dinner				

**September 26, 2014** 

Session	Mitigation processes to reduce the availability of arsenic to human			
	beings (Cl	beings (Chaired by Alexander van Geen, Yongfeng Jia)		
8:30-8:55	Prof. Dr.	van Geen,	A review of scientific and practical issues	
		Alexander	relevant to arsenic mitigation in South and	
			Southeast Asia	
8:55-9:20	Prof. Dr.	Jia, Yongfeng	Transformation and the fate of arsenic in	
			sulfidic environment	
9:20-9:45	Prof. Dr.	Kappler,	Arsenic removal from groundwater by	
		Andreas	household sand filters in Vietnam	
	Coffee break ( <b>9:45-9:55</b> )			
9:55-10:20	Prof. Dr.	Feng,	Remediation of arsenic-contaminated	
		Chuanping	water and soils	
10:20-10:45	Prof. Dr.	Kersten,	Modeling the performance of akaganéite-	
		Michael	based fixed-bed granular ferric hydroxide	
			(GFH) adsorber for remediation of As-	
			contaminated groundwater	
10:45-11:05	Prof. Dr.	Zheng, Yan	Overcoming behavioral barriers in arsenic	
			mitigation: Examples from Bangladesh,	
			China and USA	
11:05-11:35		Conclusive discussion		
Lunch				

Session	Mitigation processes to reduce the availability of arsenic to human beings (Chaired by Chuanyong Jing, Michael Kersten)		
14:00-14:30	Prof. Dr.	Neumann, Thomas	Fixation of arsenic in estuarine sediments

14:30-15:00	Prof. Dr.	Jing, Chuanyong	Arsenic exposure, removal, and health	
			implication in typical areas in China	
15:00-15:30	Dr.	Stauder, Stefan	Arsenic speciation and removal from	
			groundwater: From research to practical	
			application	
	Coffee break			
15:40-17:30	Final Discussion			
Fare well dinner				

September 27, 2014 (Departure day)