Arsenic: The Geography of a Global problem

A symposium
On Wednesday 29 August
At the Royal Geographical Society-
Institute of British Geographers
Annual Conference

Royal Geographical Society
1 Kensington Gore
London
SESSION 1 - Extent, severity and nature of Arsenic contamination

09.00 – 09.20 The largest identified man-made environmental catastrophe
Richard Wilson, Harvard University

09.20 – 09.40 Predicting the Global Distribution of Natural Arsenic Contamination of Groundwater
Peter Ravenscroft Department of Geography, Cambridge University

09.40 – 10.00 Arsenic and Manganese Contamination of Drinking Water Resources in Cambodia: Coincidence of Risk Areas with Low Relief Topography
Johanna Buschmann, EAWAG, Switzerland

10.00 – 10.20 High concentrations of arsenic in drinking water result in the highest known increases in mortality attributable to any environmental exposure
Allan H. Smith, University of California, Berkeley, USA

10.20 – 10.40 Expertise and environmental justice
M. Manzurul Hassan, Jahangirnagar University, Savar, Dhaka, Bangladesh
SESSION 2 - Inter-relationships of Arsenic, Soil, Food, Water and Health

11.10 – 11.30 Factors affecting arsenic accumulation and speciation in rice
   Andy Meharg, University of Aberdeen

11.30 – 11.50 Arsenic accumulation in irrigated paddy soils and possible mitigation methods
   Hugh Brammer, c/o Department of Geography, University of Cambridge

11.50 – 12.10 Monte Carlo Based Quantification of Increased arsenic-related cancer risk due to rice intake in West Bengal, India.
   Debapriya Mondal and David Polya, University of Manchester

12.10 – 12.30 Evaluation of human exposure to inorganic arsenic in populations of northern Argentina
   Devesa, V., Instituto de Agroquímica y Tecnología de Alimentos (IATA-CSIC), Apdo 73, 46100 - Burjassot, Valencia, Spain.

12.30 – 12.50 Suffering for water, Suffering from water: Gendered and Classed dimensions of Arsenic Poisoning in Bangladesh
   Farhana Sultana, King's College London
SESSION 3 - Hydrochemistry and management of groundwater

14.40 – 15.00 Arsenic in groundwater: simplicity and complexity.
   John M. McArthur, Earth Sciences, University College London

15.00 – 15.20 Mobilisation of arsenic in the groundwater of the Blackfoot Disease area in Chia-Nan Plain, southwestern Taiwan
   Jiin-Shuh Jean, Department of Earth Sciences, National Cheng Kung University, Taiwan

15.20 – 15.40 Arsenic enrichment of ground water at two regions of the Chacopampean Plain, northwest Argentina
   Ondra Sracek, OPV s.r.o., Praha, Czech Republic

15.40 – 16.00 Towards a regional characterisation of the ‘deep aquifer’ in southern Bangladesh
   Mohammad Hoque, William Burgess (UCL), Matin Ahmed (Dhaka University)

16.00 – 16.20 Arsenic-contaminated aquifers: a study of the Ganga levee zones in Bihar, India
   Ashok Ghosh, A.N.College, Magadh University, Patna, India
SESSION 4 - Mitigation and sustainability of water supply in Arsenic-affected areas

16.50 – 17.10 Identifying the preferred arsenic mitigation options in Bangladesh
   Guy Howard, DfID; Feroze Ahmed, Bangladesh University of Technology

17.10 – 17.30 Surveillance Program to Monitor the Use of New Water Sources in Rural and Remote Areas
   Meera M Hira-Smith, University of California, Berkeley

17.30 – 17.50 Community Based Project to Mitigate Arsenic Pollution in West Bengal and Jharkhand, India
   Sudhanshu Sinha, India-Canada Environment Facility (ICEF)

17.50 – 18.10 Analysis of net impacts on disease burden of arsenic mitigation in Bangladesh
   George Adamson and David Polya, University of Manchester

18.10 – 18.30 Road to Sustainable Arsenic Management in Bangladesh: The Deep Aquifer Issues
   K M Ahmed, University of Dhaka; Guy Howard, DfID
SESSION 5: SHORT CONTRIBUTIONS AND DISCUSSION

18.45 – 18.55 Geochemistry and speciation of solid and aqueous phase arsenic in the Bengal Delta Plain aquifers
   Bibhash Nath National Cheng Kung University, Taiwan

18.55 - 19.05 The mobilization of arsenic in groundwater and arseniasis from the Hetao Area, Inner Mongolia
   Hui Zhang, Shanghai Jiaotong University, Shanghai 200240, P.R. China

19.05 – 19.15 Vulnerability of population exposed to Arsenic contamination in the mid-Ganga Plain of Bihar, India
   Nupur Bose, Dept. of Geography, A.N.College, Patna, India

19.15 – 19.25 Occurrence and Health Effects of Arsenic in China
   Yan Zheng, Queens College, City University of New York

   Mahmuder Rahman, Trust Co-Ordinator-DCHT, Dhaka Community Hospital, Bangladesh

19.35 – 19.45 The distribution of arsenic in groundwater in five states of India and geochemical data from an arsenic-affected area of Ballia District, Uttar Pradesh
   Ross Nickson, UNICEF Kolkata, India

19.45 – 20.15 General Discussion