

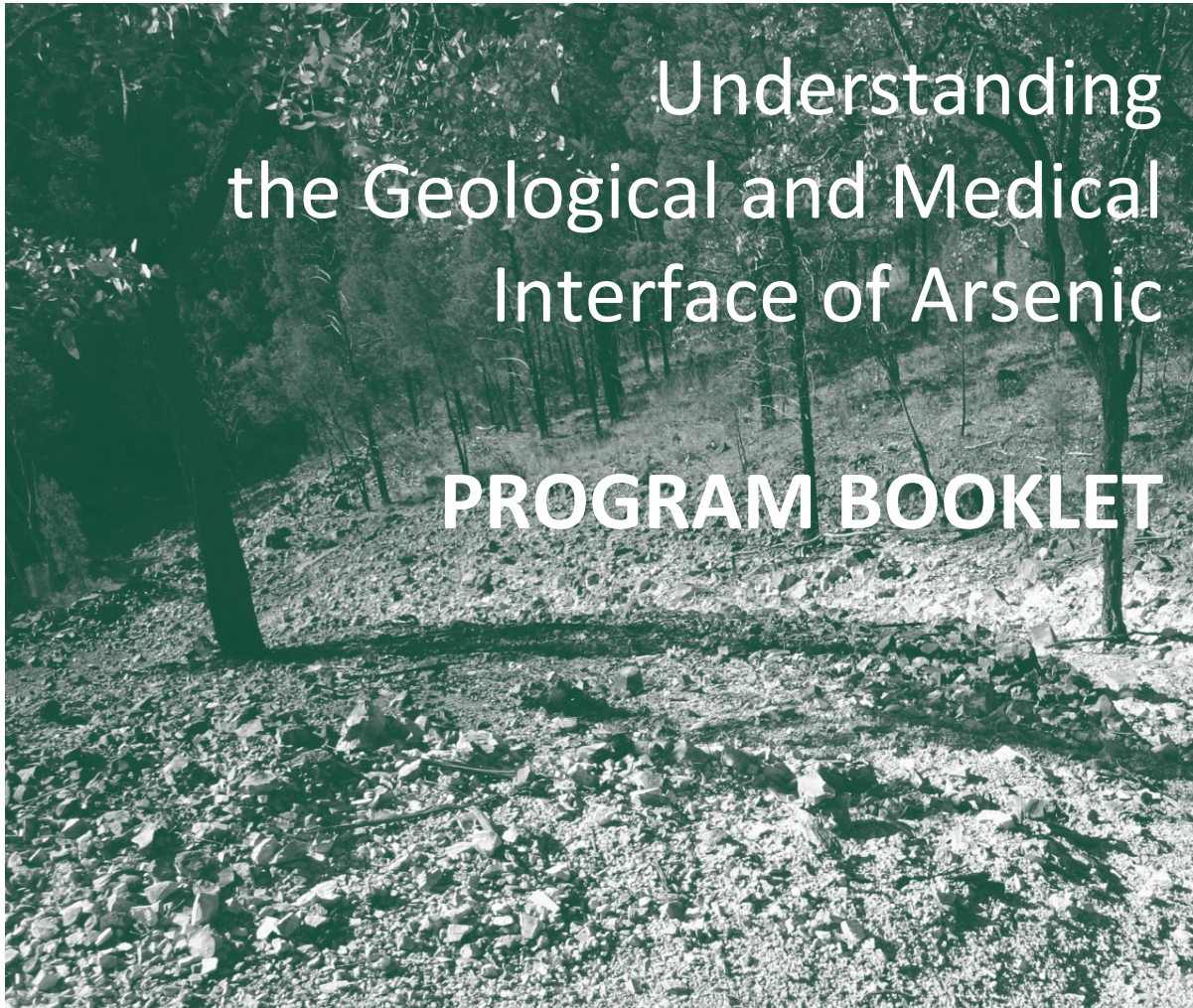


The 4th International Congress on Arsenic in the Environment

Understanding the Geological-Medical Interface of Arsenic

The Sebel Cairns, Cairns, Australia | 22-27 July 2012

Congress website | www.as2012.com.au





ACKNOWLEDGEMENTS

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BOOK SERIES

Arsenic in the Environment

■ Arsenic has been known as the 'silent toxin' since ancient times. Yet only since the discovery of the world's biggest arsenic calamity in South Asia about 20 years ago, has there been an exponential rise in scientific research. Since then, arsenic hazard has been described on an international level. This multi- and interdisciplinary series covers all fields of research concerning arsenic in the environment, and is aiming to present an integrated approach from the occurrence, transport and introduction of arsenic into the food and drinking water chain. Related public health effects and risk assessments are dealt with. Arsenic removal technologies and other methodologies to mitigate the arsenic problem are addressed not only from a technological, but also from an economic and social point of view considering legislative and political issues and international cooperation as, for example, international agreements or programmes for mitigating the arsenic problem. ■

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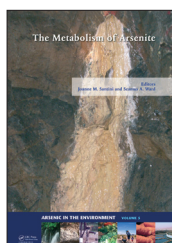
VOLUME 6

Arsenic Geochemistry

Darrell Kirk Nordstrom and Heather E. Jamieson

Expected 2013: 246 x 174: ~300pp
Hb: 978-0-415-57525-6: **£76.99 \$119.95**

This book provides an overview of arsenic in the environment emphasizing geochemistry. It covers arsenic in rocks, minerals, soils and sediments, surface and ground waters, vegetation and analytical chemistry, with a short section on toxicology and epidemiology, and case histories in about 50 countries.



VOLUME 5

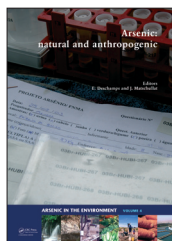
The Metabolism of Arsenite

Edited by Joanne M. Santini and Seamus A. Ward

June 2012: 246 x 174: 218pp
Hb: 978-0-415-69719-4: **£76.99 \$119.95**

Although human activities contribute to the release of arsenic from minerals, it is now clear that bacteria are responsible for most of the redox transformation of arsenic in the environment. This book reviews recent advances in the study of such bacteria. After a section on background – geology and

health issues – the main body of the book concerns the cellular machinery of arsenite oxidation. It concludes by examining possible applications.



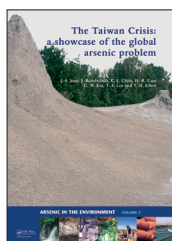
VOLUME 4

Arsenic: natural and anthropogenic

Edited by Eleonora Deschamps and Jörg Matschullat

February 2011: 246 x 174: 237pp
Hb: 978-0-415-54928-8: **£78.99 \$129.95**

This volume represents one of the first comprehensive and interdisciplinary examinations into arsenic's behaviour in air, water, soils, sediments, plants and the human body. Based on state-of-the-art investigations into the global arsenic cycle, the related human toxicology and available remediation technologies, arsenic is assessed holistically in all the environmental compartments. The authors offer concrete suggestions for risk reduction and management of environmental pollution that allow the reader to successfully tackle similar problems and find sustainable solutions.



VOLUME 3

The Taiwan Crisis: a showcase of the global arsenic problem

J.-S. Jean, J. Bundschuh, C.-J. Chen, H.-R. Guo, C.-W. Liu, T.-F. Lin and Y.-H. Chen

May 2010: 246 x 174: 234pp
Hb: 978-0-415-58510-1: **£59.99 \$94.95**

This book will improve the knowledge and understanding of the occurrence and genesis of arsenic-rich groundwaters in Taiwan. It deals with constraints on the mobility of arsenic in groundwater, its uptake from soil and water by plants, arsenic-propagation through the food chain, human health impacts, and arsenic-removal technologies. Taiwan case experiences are described in this book and can be applied worldwide.



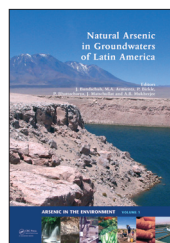
VOLUME 2

The Global Arsenic Problem: challenges for safe water production

Edited by N. Kabay, J. Bundschuh, B. Hendry, M. Bryjak, K. Yoshizuka, P. Bhattacharya and S. Anac

April 2010: 246 x 174: 268pp
Hb: 978-0-415-57521-8: **£66.99 \$104.95**

Arsenic contamination of groundwater is prevalent throughout the globe and is of increasing concern, necessitating the need for effective treatment to provide safe drinking water to communities. In the most affected regions large conventional treatment plants may not be appropriate and factors such as cost and acceptability as well as performance must be considered. This book, published in cooperation with leading experts in this field, provides a thorough analysis of the problems, solutions and possible alternatives to achieve a safe water production on a global scale.



VOLUME 1

Natural Arsenic in Groundwaters of Latin America

Edited by J. Bundschuh, M.A. Armienta, P. Birkle, P. Bhattacharya, J. Matschullat and A.B. Mukherjee

October 2008: 246 x 174: 782pp
Hb: 978-0-415-40771-7: **£140.00 \$219.95**

Over the last two decades, the As-containing groundwater in South-East Asia has received much attention, but the situation is just as crucial in Latin America. This book is a state-of-the-art overview of arsenic research in Latin America. It aims to increase awareness among administrators, policy makers and company executives and will also serve to inform the international scientific community.

RELATED SERIES:

Arsenic in the Environment - Proceedings

ISSN 2154-6568

This book series, "Arsenic in the Environment – Proceedings", which comprises the outcomes of the international congress series "Arsenic in the Environment" and other scientific events, constitutes a regular update on the newest developments of global arsenic research. This Proceedings series forms an ideal complement to the book series "Arsenic in the Environment". Both series together form an inter- and multidisciplinary source of state-of-the-art information and an international platform for arsenic research making an effort to link the occurrence of geogenic arsenic in different environments and media including ground- and surface water, soil and air, and its effect on human society.



As 2012

Understanding the Geological and Medical Interface of Arsenic

Proceedings of the 4th International Congress on Arsenic in the Environment, 22-27 July 2012, Cairns, Australia

Edited by J.-S. Jean, J. Bundschuh and P. Bhattacharya

July 2012: 246 x 174: 614pp
Hb: 978-0-415-57898-1: **£115.00 \$179.95**

The congress 'Arsenic in the Environment' offers an international, multi- and interdisciplinary discussion platform for arsenic research aimed at short-term solutions of problems with considerable social impact, rather than only focusing on cutting edge and breakthrough research in physical, chemical, toxicological, medical and other specific arsenic issues in the broader environmental realm. The session topics comprised: 1. Geology and hydrogeology of arsenic; 2. Medical and health issues of arsenic; 3. Remediation and policy; 4. Analytical methods for arsenic; and 5. Special topics.

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