

ICCFR 2 Second International Conference on Coal Fire Research

19-21 May 2010
dbb forum Berlin, Germany

| Bridging the science, economics, and politics of coal fires

As a man-made hazard affecting limited natural resources in specific locales as much as the atmosphere at large, spontaneous coal seam fires are a delicate object of scientific research. Their very complex nature responds to a whole range of disciplines and necessitates a concerted interdisciplinary and international effort for effective mitigation.

The repercussions of the phenomenon spread right into the realm of society and politics. Coal fires are of relevance not only to scientists and mine managers but also to policy-makers and environmental lobbyists. Under the ever more pressing concern of global climate change, Berlin 2010 may rightly be seen in one trajectory with ongoing multilateral moves toward carbon reduction and management, including the upcoming COP15 conference in Copenhagen 2009 and its follow-up.

| Conference Date & Venue

19-21 May 2010, dbb forum berlin, Berlin, Germany
www.dbb-forum-berlin.de

| Participation and Contributions

Definite topics and speakers for the conference will be solicited in a later announcement. Check the project's platform www.coalfire.org for regular updates. Urgent inquiries may be addressed to info@iccf2r.de. The conference language is English.

| Target Groups

- Scientists and researchers, e.g. from:
 - Geophysics and Geosciences
 - Mathematics and modeling
 - Mining engineering
- Policy-makers and political stakeholders, e.g. from:
 - Governments and state administrations
 - International GOs and NGOs
 - Fire fighting departments and local interest groups
- Commercial entities and market players, e.g. from:
 - Coal mining and processing industries
 - CDM projects and CER trading
 - Science technology and supply

| Conference Organization

The Second International Conference on Coal Fire Research (ICCFR2) is being organized by the Sino-German Coal Fire Research Initiative, in close cooperation with a BMZ/GTZ project of similar outlook. For more information visit: www.coalfire.caf.dlr.de

SPONSORED BY THE



Federal Ministry
of Education
and Research



The project on which this publication is based received funding from the German Federal Ministry of Education and Research and the Ministry of Science and Technology of the P.R. China, under reference numbers FKZ 0330490 and 2007DFA90500, respectively. Responsibility for the contents of this publications lies with the authors.



DEUTSCH-CHINESISCHES
Jahr der Wissenschaft und Bildung
德中科学教育年
2009/10

This conference is being funded and organized as part of the Sino-German Year of Science and Education 2009/10.
www.deutsch-chinesisches-jahr-2009-2010.de



| Coal fires: a global disaster

The phenomenon is all but known: under certain conditions, still very common even in modern mining, coal can spontaneously ignite in an exothermic process. The fires springing from such combustion are insidious indeed. Though occurring all over the world, wreaking havoc on a particularly large scale in mining areas of South and East Asia, they have so far slipped public attention – this despite a host of dire economic and environmental consequences that, even at a global level, should hardly go unnoticed.

China is but one glaring example. With an output of over 2.4 billion t per year, it is the world's largest producer of raw coal. National exports and energy markets are highly dependent on the fuel; a dependence which is likely to increase if the Chinese economy continues to grow at its current pace. And yet, millions of tons of the precious resource are destroyed each year in coal seam fires, burning uncontrolled in a giant “Coal Fire Belt” from the ragged mountains of western Xinjiang to the plains of Inner Mongolia. And even more is lost for mining as vehicles and machines are barred from recoverable reserves by the fires.

Toxic and greenhouse gas emissions – carbon dioxide and monoxide, as well as methane, to name only the most prominent – pollute the environment in coal fire areas. Beyond their impact on mining and mine safety, coal fires pose an evident threat to the health and safety of people working and living in their vicinity, and, more importantly, to local, regional, and global climate. This alone warrants immediate extinction efforts and heightened global attention – from scientists, politicians, as well as the general public!

| Sino-German efforts at coal fire mitigation

Extinguishing uncontrolled coal seam fires is an extremely difficult, time-consuming, and costly enterprise. Even large-scale efforts often fail since they lack a thorough scientific understanding of the processes leading up to and controlling coal fire development. The Sino-German Coal Fire Research Initiative “Innovative Technologies for Exploration, Extinction, and Monitoring of Coal Fires in North China” was launched in autumn 2003 to address this patent lack of knowledge.

In a first three-year phase, expert teams from a number of Chinese and German research institutes set out to explore China's notorious coal fire areas, investigating the basic mechanisms and parameters that underlie coal spontaneous combustion and fire propagation. The results of their work were presented at the International Conference on Coal Fire Research, held under UNESCO auspices in Beijing 2005; they have been published in a monograph, the ERSEC Ecological Book Series – 4, which can be downloaded from:

<http://unesdoc.unesco.org/images/0015/001595/159538M.pdf>

A second conference is now to follow up on the Beijing success and develop in more detail and depth the subjects broached then. Scheduled for 19-21 May 2010 at ddb forum berlin, Germany, the event will serve once again both as a platform for the Sino-German Coal Fire Research Initiative and as a meeting point for international coal fire experts. These are kindly invited to join in on particular aspects of the project, inject their ideas and perspectives, and, of course, benefit from the expertise accumulated over years of continuous scientific work.

