



TWENTY - FIFTH ANNUAL INTERNATIONAL
PITTSBURGH COAL CONFERENCE

CALL FOR PAPERS
ABSTRACTS DUE MARCH 1, 2008

**COAL - ENERGY, ENVIRONMENT AND
SUSTAINABLE DEVELOPMENT**



September 29 - October 2, 2008
Pittsburgh, PA USA
The Westin Convention Center



Hosted By:
University of Pittsburgh
Swanson School of Engineering



The **Twenty-Fifth Annual International Pittsburgh Coal Conference** hosted by the University of Pittsburgh will be held at the Westin Convention Center in Pittsburgh, PA, USA from September 29 through October 2, 2008. The Program Committee along with the International Committee and the Conference Advisory Board invites you to submit papers for presentation at the Conference. The Conference's theme focuses on environmental issues and technologies surrounding the continued use of coal and the development of future coal-based energy plants to achieve near-zero emissions of pollutants, reduced costs, and high thermal efficiency while producing a suite of products to meet future energy market requirements. Technical, business, and policy-related papers dealing with current and future utilization as well as sustainable development of coal and other energy sources are sought for the Conference. This year's Program Topics include, but are not limited to the following:

PROGRAM TOPICS

1. Combustion Technologies

- Oxygen-enriched and oxygen: flue gas recycle combustion (OxyCombustion) of coal
- Recent results on combustion of coal and solid fuels
- Novel combustion concepts and advanced cycles
- Chemistry and kinetics of pollutant formation during combustion of coal
- Development of low NO_x combustors
- Environmental issues pertaining to coal combustion and compliance technologies
- Cost, environmental, and performance challenges for deploying new PCC plants

2. Gasification Technologies

- Operational performance, issues, and economics of commercial plants
- Market, technical, economic, and environmental issues for gasification
- Commercial and novel synthesis gas cleanup technologies
- Applications for production of synthetic natural gas
- Applications of gasification in the industrial sector (glass, steel, chemicals, etc.)
- Novel gasification technologies (e.g., gasifiers, air separation, feed systems, heat recovery)
- Fundamentals of gasification (including gasification of low rank) coals and co-gasification with biomass and waste materials
- Underground coal gasification - technologies, economics, projects

3. Hydrogen from Coal

- Future hydrogen markets, policies, economics, international programs and infrastructure issues associated with implementation of coal-to-hydrogen energy technologies.
- Generation of hydrogen from coal, including direct and indirect hydrogen production processes.
- Separation and/or purification of hydrogen.
- Hydrogen storage and delivery technologies.
- Application studies of the combustion or electrochemical (fuel cell) conversion of hydrogen or coal-derived syngas

4. Coal Utilization By-products

- Characterization and use of coal utilization by-products (including FGD material, fly ash, bottom ash, and slag)
- Beneficial utilization applications including construction, mine reclamation, agricultural, and manufacturing sectors
- National and international perspectives, encompassing case histories of individual projects, laboratory studies, demonstration, and full-scale implementation projects
- New innovative uses of coal utilization by-products

5. Environmental Control Technologies

- Operational experience with SCR_s on coal-fired boilers
- Novel mercury control technologies and field demonstration results
- Development and performance of mercury emission and deposition monitors
- Studies of natural and anthropogenic emissions of mercury, including updates of mercury emission inventories
- Leaching and re-volatilization of mercury and other metals from coal combustion or gasification byproducts

6. Global Climate Change: Science, Sequestration, and Utilization

- Kyoto protocol and policy issues
- CO₂ capture technologies
- Sequestration in geological sinks
- Enhancing natural sinks
- Modeling and assessments
- Non-CO₂ greenhouse gas capture and storage
- Multi-pollutant capture and storage
- CO₂ utilization

7. Synthesis of Liquid Fuels: GTL, CTL, and BTL

- Fischer-Tropsch synthesis
- Conversion to di-methyl ether and methanol
- Higher alcohol synthesis
- Engineering and economic analysis of synthesis gas conversion technologies
- Market studies

8. Chemicals, Materials, and Other Non-Fuel Uses of Coal

- Chemicals and materials from coal
- New materials derived from aromatic chemistry
- Innovative applications of coal-derived materials such as carbon composites, fibers, and nanomaterials
- Coal derived chemicals for use in polymer fabrication, fertilizers, infrastructure materials, and other unique materials

9. Coal Chemistry, Geosciences, and Resources

- Coal resource evaluations
- Coal geology
- Coal bed methane
- Petrology and geochemistry of coal
- Geotechnical characterization of coal-bearing strata
- Evaluation of trace elements considered to be health hazards
- C-H bond activation in synthetic coal chemistry
- Fundamental studies relating to the chemistry of coal

10. Gas Turbines and Fuel Cells for Synthesis Gas and Hydrogen Applications

- Studies on the combustion of hydrogen and synthesis gas
- Advances in fuel cells for applications to coal-based systems

11. Coal Production and Preparation

- Advances in mining technology
- Advances in coal beneficiation
- Waste utilization

12. Coal and Sustainability

- Coal as a competitive, environmentally-sound source of energy
- Advances in efficiency and environmental performance of coal mining and coal-based electrical generation
- Carbon footprint and sequestration

13. Special Symposium: NETL - University Consortium

- Research topics related to energy
- Research topics related to environmental issues

SUBMISSION OF ABSTRACTS

Papers may be submitted in all subject areas dealing with coal technologies and related policy issues.

To qualify for acceptance, you must submit a one-page abstract on or before March 1, 2008 via our online form :

www.engr.pitt.edu/pcc

The abstract must include sufficient content and information for adequate evaluation by the International Pittsburgh Coal Conference Program Committee. The Program Committee reserves the right to accept, place on a waiting list, or reject any paper.

NOTIFICATION OF ACCEPTANCE

By May 1, 2008, the Program Committee will inform the submitting author of the paper's status. If a paper is accepted, an original copy of the manuscript in PDF format, sent by e-mail or by mail on a CD, is due in the Conference Office on or before **July 15, 2008**.

PROCEEDINGS

The Twenty Fifth Annual International Pittsburgh Coal Conference Proceedings will be published in a CD-ROM format which will be available at the meeting. For a paper to be included in the Conference Proceedings, your paid registration and complete manuscript in English, saved on a computer diskette or sent by e-mail to the conference office, must be received before **July 15, 2008**.

ORAL PRESENTATION

Each author is allowed 20 minutes including a 5 minute discussion period. The Conference will provide computers and projectors for PowerPoint presentations. Video and other equipment may be rented by the Conference at the speaker's expense.

POSTER PRESENTATION

Interactive poster sessions will be scheduled in the late afternoon and early evening mid-way through the Conference. The Conference will provide the poster boards and easels for presentation setup.

REGISTRATION

Conference registration information including the registration form can be found online at:

www.engr.pitt.edu/pcc

If you have any questions or would like to be added to the mailing list, please do not hesitate to contact us:

International Pittsburgh Coal Conference
1249 Benedum Hall
Pittsburgh, PA 15261 USA
Tel:+1(412)624-7440 FAX: +1(412)624-1480
ipcc@pitt.edu
www.engr.pitt.edu/pcc

VENUE & HOTEL ACCOMMODATIONS

The Westin Hotel
1000 Penn Avenue
Pittsburgh, PA 15222
1-800-WESTIN1 (937-8461) or +1(412)281-3700

The technical sessions and accommodations will be in the Westin Hotel-Convention Center, which is located in the heart of the city's business and cultural districts. The Westin is just a short drive from Pittsburgh International Airport and hotel shuttles will be available from the Airport for a small fee. A block of rooms will be reserved at a special rate (single/double) for all participants who are requested to directly make reservations online via our website www.engr.pitt.edu/pcc. Reservations can also be made with the hotel directly by phone (listed above) or by fax: +1(412)227-4500.

Hotel reservations must be made by August 29, 2008 to receive the PCC group discount.

A NOTE TO AUTHORS

The Pittsburgh Coal Conference does not provide financial support to contributing authors. ALL CONFEREES MUST REGISTER FOR THE CONFERENCE AND PAY A REGISTRATION FEE. Benefits from participation include the privilege of presenting a paper at this Conference and publication of the paper in the Conference Proceedings for worldwide distribution.

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University of Pittsburgh
Swanson School of Engineering
1249 Benedum Hall
Pittsburgh, PA 15261, USA
Phone: +1(412) 624-7440; Fax: +1(412) 624-1480
E-Mail: ipcc@pitt.edu
Web Site: www.engr.pitt.edu/pcc

KEY CONFERENCE DATES:

Abstract Due	March 1, 2008
Author Notification	May 1, 2008
Preliminary Program	June 2008
Manuscript Due	July 15, 2008

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DATED MATERIAL!

International Pittsburgh Coal Conference

