Objective:

State-of-the-art presentations and discussions on current markets and upcoming opportunities for coal combustion by-products (CCB) utilization. A research-needs document will be produced based on the workshop discussions and used as a tool for establishing cooperation opportunities and funding.

Target Audience:

- Employees of utilities and other companies producing CCB
- Marketers or brokers of CCB
- Users of CCB, including producers and manufacturers of cement and concrete
- Academic, government and other professionals working on topics related to CCB

Benefits of Attending the Workshop:

- State-of-the-art presentations and leading discussions by knowledgeable speakers
- A research-needs document will be generated from the workshop discussions and distributed to the workshop participants
- Participate in a forum to discuss technical issues on CCB utilization
- Published workshop materials containing the presentations and participant discussions
- Networking opportunities to establish future cooperation activities and synergistic relationships
Workshop Topics

Speakers from government, industry and academia will lead the workshop discussions on the following topics:

- Current markets and production trends of coal combustion by-products
- Characterization needed for marketing purposes
- Impact of different feedstocks in ash properties
- Trace metals in ash: impact on utilization, placement and disposal
- Cement applications: challenges and opportunities
- Ammonia on fly ash: fate and impact on utilization and disposal
- Separation technologies and materials markets
- Impact of mercury control technologies on ash utilization
- FGD material: current and upcoming markets
- Novel applications of high LOI fly ashes
- Pilot and demonstration projects on novel applications
- Federal funding opportunities
Location

This workshop will be held in Room C213 Coal Utilization Laboratory at The Energy Institute, located in State College, Pennsylvania on the University Park Campus on June 10-11, 2004.

The campus is located in the center of the state, at the intersection of routes 26 and 322, fifteen miles south of Interstate 80. Please visit the Penn State Visitor's Guide for helpful maps, driving directions and distances, airport services, flight and reservation information, local weather, and things to do in State College and the surrounding region.

Delta Connection, US Airways Express, Northwest Airlink, and United Express serve the State College/University Park Airport. Rental cars and limousine and taxi services are available at the airport.
Registration

The $450.00 registration fee covers all instruction, course notes, program materials, refreshment breaks, lunches, and a Thursday night reception. Registrants are responsible for all other meals and lodging. The fee may be paid by check, money order, or purchase order (made payable to Penn State); IDCC (Penn State employees only to "&CNI" - a completed registration form is required to process your registration); a letter of authorization to bill your employer or organization; American Express, Discover, MasterCard, or VISA. An additional charge of $30.00 will be added to all walk-in registrations.

To register, complete the online registration form, or use the pdf printable registration form, or the Word.doc printable registration form and return with fee by Thursday, May 27, 2004. Fax registrations must be accompanied by credit card payment information. You may also register with your credit card by calling 800-PSU-TODAY (778-8632). You will be notified promptly of any cancellations or schedule or program changes. Conferences and Institutes will confirm your enrollment in the program and provide information on travel, accommodations, final registration, and parking.

Refunds
All cancellations must be received in writing by mail or fax. Full refunds will be made for cancellations received by May 19, 2004. Refund requests made after that time will not be honored, and the participant or sponsoring organization will be responsible for the fee. Anyone who is registered but cannot attend may send a substitute.

University Policies
Access - Penn State encourages individuals with disabilities to participate in its programs and activities. If you anticipate needing special accommodations or have questions about the physical access provided, please contact Katie Frieden at 814-863-5144 before your visit.

Cancellations - The University may cancel or postpone any course or activity because of insufficient enrollment or other unforeseen circumstances. If a program is cancelled or postponed, the University will refund registration fees but cannot be held responsible for any other related costs, charges, or expenses, including cancellation/changes or charges assessed by airlines or travel agencies.
Hotel Accommodations

A limited number of rooms have been set aside at The Nittany Lion Inn. The Inn offers rooms with double or twin beds, a limited number of single rooms, a full-service restaurant, a lounge, health club facilities, and nonsmoking and handicap-accessible guest rooms. Shuttle bus service runs continuously between The Nittany Lion Inn and The Penn Stater Conference Center Hotel, Monday through Friday.

To make your room reservation, please call 800-233-7505 or 814-865-8500, or fax 814-865-8501. Be sure to identify yourself as a participant in the Coal Combustion by-Products Workshop. Please give the registration clerk the following reservation identification number: FLY1110. Reservations should be made at least thirty days prior to the start of the conference.
Final Program

Thursday, June 10, 2004

Morning Sessions
Each session includes a presentation followed by discussion among the workshop participants. Workshop materials include the presentations and participant discussions.

7:30 - 8:30 a.m. Registration

8:30 - 8:45 a.m. Welcome and introductory remarks

8:45 - 9:25 a.m. CCPs in the US: Opportunities and Challenges. David Goss, American Coal Ash Association

9:25 - 10:05 a.m. From Waste to Byproduct to Product - The Evolution of Fly Ash as a Marketable Building Material. Keith Bargaheiser, ISG Resources

10:05 - 10:25 a.m. Break

10:25 - 11:05 a.m. Cement Applications: Challenges and Opportunities. Barry Scheetz, Penn State University

11:05 - 11:45 a.m. Inorganic Components in Coals and Their Behavior During Combustion and Gasification. Harold Schobert, Penn State University

11:45 a.m. - 1:00 p.m. Lunch

Afternoon Sessions
Each session includes a presentation followed by discussion among the workshop participants. Workshop materials include the presentations and participant discussions.

1:00 - 1:40 p.m. Coal - Biofuel Cofiring: Inorganic Chemistry and Its Effect on CCPs. Sharon Miller, Penn State University
Friday, June 11, 2004

Morning Sessions

Paul Ziemkiewicz, CBRC, West Virginia University

9:10 - 9:50 a.m. The Penn State Coal Ash Manure Storage.
Glen Cauffman, Penn State University

9:50 - 10:10 a.m. Break

10:10 a.m. - 12:00 p.m. Panel Discussion - Research-Needs Document
A research-needs document will be produced based on the workshop discussions and used as a tool for establishing cooperation opportunities
and funding. In addition to the topics discussed in the previous sessions, the following may also be included:

- Trace metals in ash: impact on utilization, placement and disposal.
- Ammonia on fly ash: fate and impact on utilization and disposal.
- FGD material: Current and upcoming markets.
- Separation technologies and materials markets.

12:00 - 1:15 p.m.    Lunch
Contacts

On program content, contact:
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On registration, contact:
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Conference Planner
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The Pennsylvania State University
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Exhibits

A limited number of exhibit spaces are available to showcase your organization or program. Space will be provided on a first-come, first-served basis. You will be contacted with additional information and details. Register now to be an exhibitor!

- Exhibitor and Conference registration fee on or before May 5, 2004 - $450.00 (includes one table and electricity).
- Exhibitor and Conference registration fee after May 5, 2004 - $495.00 (includes one table and electricity).
- Exhibitor fee only - $195.00 (includes one table and electricity).

To register, complete the [online registration form](http://www.egee.psu.edu/CCB/ccbexhibits.htm), or use the [pdf printable registration form](http://www.egee.psu.edu/CCB/ccbexhibits.htm), or the [Word.doc printable registration form](http://www.egee.psu.edu/CCB/ccbexhibits.htm) and return with fee by Thursday, May 27, 2004. Fax registrations must be accompanied by credit card payment information. You may also register with your credit card by calling 800-PSU-TODAY (778-8632). You will be notified promptly of any cancellations or schedule or program changes. Conferences and Institutes will confirm your enrollment in the program and provide information on travel, accommodations, final registration, and parking.
REGISTRATION FORM

Coal Combustion By-Products Workshop
Traditional Markets and Emerging Utilization Trends

• June 10-11, 2004 •

Return to Penn State by May 27, 2004.
Please print in ink or type. This form may be duplicated for additional registrations.
Important--To ensure a timely registration, please include complete information.

________________________________________________________________________________
Last name    First name    Middle initial
________________________________________________________________________________
Title

[ ] Male  [ ] Female

E-mail

Company or organization

________________________________________________________________________________
Business address (no. and street or box no.)

City State ZIP code Country

Business phone    Home phone    Fax

________________________________________________________________________________
Home address (no. and street or box no.)

City State ZIP code Country

Are you a Penn State alumna/alumnus?  [ ] Yes  [ ] No

Registration Fee:

A limited number of exhibit spaces are available to showcase your organization or program. Space will be
provided on a first-come, first-served basis. You will be contacted with additional information and details.
Register now to be an exhibitor!

[ ] Exhibitor and Conference registration on or before May 3, 2004: $450 *
[ ] Exhibitor and Conference registration after May 3, 2004: $495 *
[ ] Exhibitor only: $195 *
(Includes one table and electricity)

An additional charge of $30 will be added to all walk-in registrations.
REGISTRATION FORM

Method of Payment

Your payment, in full, must accompany your registration form. Fax or telephone registrations must be accompanied by credit card payment information. The Pennsylvania State University’s federal ID number is 24-6000376.

[ ] Enclosed is a check or money order for the amount indicated, payable to Penn State.
[ ] IDCC--Penn State employees only to &CNI. Document #__________. (A completed registration form is required to process your registration.)
[ ] Enclosed is a purchase order (made payable to Penn State) or letter of authorization from my employer or sponsoring organization.
[ ] Charge the fees checked above to my:

[ ] American Express   [ ] Discover   [ ] MasterCard   [ ] VISA

________________________________________________________________________________
Cardholder’s name (please print)

________________________________________________________________________________
Cardholder’s signature

_________________________ _____________            _____________ /________
Charge no.       Exp. date (mo./yr.)

(Credit card charges cannot be processed without signature and expiration date.)

Before Mailing
1. Complete all information.
2. Fill in your preferred fax number and e-mail address. (Whenever possible, we will use this information to contact you about your registration.)
3. Sign check and make payable to Penn State, or enter complete credit card information, including expiration date.
4. Where appropriate, indicate all conference preferences and fees.
   (Complete information and payment are necessary for registration.)

Send To
Conferences and Institutes Registration
The Pennsylvania State University
Box 108
State College  PA  16804-0108
Fax: 814-863-5175