

- 14:30-16:00 Session VII: CCP Special uses and beneficiation**
Chairs: I. Putilova, S. Tsimas
- 14:30-14:50 Development of ferrocement matrix by using calcareous fly ash and ladle furnace slag as pozzolanic admixtures
I. Papayianni, M. Papachristoforou
- 14:50-15:10 CO2 optimized cement based on synthetic slag made of fly ash, *A. Buchwald, J. Wiercx*
- 15:10-15:30 Bituminous Coal Fly Ash as a Potential Scrubber Reagent for Low Activity Radioactive Wastes, *R.N. Lieberman, G. Segev, H. Coen*
- 15:30-15:50 Fly-ashes from fluid combustion as an alternative binder for cold recycling and stabilized base courses in pavement structures, *J. Suda, J. Valentin, M. Faltus*
- 16:00-16:30 Coffee break**
- 16:30-18:10 Session VIII: CCP Special uses**
Chairs: T. Szczygielski, E. Spanos
- 16:30-16:50 Use of High Volume Calcareous Fly Ash for the Production of a Hydraulic Binder for Road Pavements
C. Charalampidou, M. Chaniotakis, I. Papayianni, S. Tsimas
- 16:50-17:10 Construction of a pilot road with high volume calcareous fly ash binder, *I. Papayianni, E. Chaniotakis, E. Anastasiou, C. Leptokaridis*
- 17:10-17:30 Use of calcareous fly ash for improvement of mechanical and physical characteristics of soils, *I. Papayianni, M. Papachristoforou, E. Stavridakis*
- 17:30-17:50 Durability Properties of High Performance Fiber Reinforced Cementitious Composites Incorporating High Volumes of Fly Ash, *M. Sahmaran, M. Tokyay*
- 18:00-19:00 Open discussion**
- 19:00 Conference end**

SOCIAL PROGRAM for accompanying persons

Wednesday, September 26, 2012

- 10:00-16:00 Visit to the Royal tombs of ancient Macedonia in Vergina the kingdom of Alexander the Great

Thursday, September 27, 2012

- 10:00-12:00 Guided tour to the monuments of Thessaloniki
- 20:00-22:00 Waterfront walk and boat trip to Thermaikos gulf

Organizers:

- Aristotle University of Thessaloniki, Department of Civil Engineering, Laboratory of Building Materials
- Public Power Corporation S.A., PPC



Co-Organizers:

- ECOBA, European Coal Combustion Products Association
- Industrial By-Products Research and Development Association, EVIPAR
- National Technical University of Athens, Department of Chemical Engineering

Sponsors:



Organizing & Scientific Committee:

- Ioanna Papayianni, Professor AUTH
- Hans Joachim Feuerborn, ECOBA
- Fernando Caldas Vieira, ECOBA President
- Stamatis Tsimas, Professor NTUA
- Aggeliki, Moutsastou, Professor NTUA
- Tomasz Szczygielski, Polish CCP Union
- Nikolai Bech, ECOBA
- Rod Jones, University of Dundee
- Lindon Sear, Quality Ash Association
- Enric Vázquez, Em. Professor ETSEng.C.C.P
- Irina Putilova, Moscow Power Engineering Institute
- Argyro Kastanaki, PPC
- Panagiotis Tsiampas, PPC
- Nikos Koukouzas, ITESK

Secretariat:

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EUROCOALASH 2012



EUROCOALASH 2012 Conference

Thessaloniki, GREECE

September 25-27, 2012

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CONFERENCE SCIENTIFIC PROGRAMME

Tuesday, September 25, 2012

16:00-18:00 Conference registration

18:00-19:30 Conference opening

18:00-18:05 Conference opening, *I. Papayianni / EVIPAR*

18:05-18:15 Welcome note, *S. Simopoulos / Secretary General for Public Works, Ministry of Development*

18:15-18:25 Welcome note, *I. Mylopoulos / AUTH Rector*

18:25-18:35 Welcome note, *ECOBA representative*

18:35-18:45 Welcome note, *PPC representative*

18:45-19:10 Invited speaker, *V.M. Malhotra / CANMET*

19:10-19:30 Invited speaker, *M.J. McCarthy / University of Dundee*

19:30-21:00 Welcome music reception

Wednesday, September 26, 2012

09:00-11:00 **Session I: CCP Production, Management and Marketing**, *Chairs: V.M. Malhotra, F. Caldas-Vieira*

09:00-09:20 CCP Management in Europe, *F. Caldas-Vieira, J. Feuerborn*

09:20-09:40 The variability of Greek fly ashes – Estimation for their future evolution, *A. Kastanaki, D. Sotiropoulos, E. Papadopoulou*

09:40-10:00 Use of Calcareous Ash in Germany, *J. Feuerborn, B. Müller, E. Walter*

10:00-10:20 Development Fly Ash Utilization in Turkey and Contribution of Isken to the Market, *S. Uyanik, M. Topeli*

10:20-10:40 Coal ash management - retrospective and perspective *K. Szczygielski*

10:40-11:00 Statistical analysis as a key for the selection of suitable fractions of lignite fly ashes towards their further exploitation, *S. Tsimas, A. Moutsatsou, M. Zervaki, C.A. Drosou, O. Karakasi, A. Papadopoulou, I. Masavetas, E. Tsimas, G. Vardaka, A. Karamberi, K. Vavyloni*

11:00-11:30 Coffee break

11:30-13:30 **Session II: CCP Production, Management and Standardization**, *Chairs: J. Feuerborn, E. Chanotakis*

11:30-11:50 European Product Standards - update on status and changes with relevance to CCPs, *J. Feuerborn, A. Saraber, J. van den Berg*

11:50-12:10 Justification for the standardization of calcareous fly ash in Europe, *I. Papayianni*

12:10-12:30 Separation Technologies' 16 Years of Commercial Experience in Fly Ash Processing, *D. Bittner, S.A. Gasiorowski, W. Lewandowski*

12:30-12:50 Characterization of Coal ash from a Captive Power plant for Potential End Uses, *U. Kant, V.K. Saxena, A. Sarkar, K.K. Mishra*

12:50-13:10 Transfrontier Movements of Coal Combustion Products
P. Brennan

13:10-13:30 LLife Cycle Cost Analysis of road pavement with Greek High Calcium Fly Ash Roller Compacted Concrete
L. Apostolakaki, I. Papayianni

13:30-14:30 Lunch break

14:30-16:30 **Session III: CCP Utilization in Concrete**,

Chairs: N. Bech, E. Vazquez

14:30-14:50 Investigating Techniques for Evaluating Fly Ash Behaviour in Air-entrained Concrete, *G.M. Sadiqul Islam, M.J. McCarthy, L.J. Csetenyi, M.R. Jones*

14:50-15:10 Utilization of Coal Gasification Slag Collected from IGCC as Fine Aggregate for Concrete, *Y. Ishikawa*

15:10-15:30 Utilisation of lignite fly ash in oil sorption and energy saving during clinker production, *O.K. Karakasi, A. Moutsatsou*

15:30-15:50 Quantification and qualification of high lime fly ash by efficiency factor: Mechanical and durability aspects
D. Aponte, M. Barra, E. Vazquez

15:50-16:10 Use of calcareous fly ash in SCC, *E. Anastasiou, I. Papayianni*

16:10-16:30 The high – calcium fly ash as a component of self-compacting concrete, *T. Ponikiewski, J. Golaszewski*

16:30-17:00 Coffee break

17:00-19:00 **Session IV: Environmental Issues related to CCPs**

Chairs: A. Moutsatsou, N. Koukouzas

17:00-17:20 Using Fly Ash to Achieve Low Embodied CO₂ Concrete
M.D. Newlands, M.R. Jones, M.J. McCarthy, L. Zheng

17:20-17:40 Creating High-Value Eco-Friendly Materials from Industrial Coal Combustion Ash, *C. Tang, N. Thawornsak, S. Samrankrang, O. Jullaphan, M. Chareonpanich*

17:40-18:00 Integrated solutions on providing the consumer properties of ash and improvement of environmental and economic characteristics of power plant operation at burning hard coal of the un-steady quality in power boilers, *V. Putilov, A. Arkhipov, I. Putilova*

18:00-18:20 Use of New Industrial By-products and Mixtures for Reducing the Environmental Cost of Constructions
J.G. Tapali, S. Demis, V.G. Papadakis

18:20-18:40 Evaluation of k-value for calcareous fly ash use in concrete, *I. Papayianni, E. Anastasiou*

18:40-19:00 FFly Ash Radioactivity Measurements in Electric Power Industry of Serbia Thermal Power Plants, *D. Kisić, S. Miletić, S. Jovanović, I. Grzetić*

21:00 Conference dinner

Thursday, September 27, 2012

09:00-11:00 **Session V: New fields of CCP applications**

Chairs: A. Palomo, P. Tsiampas

09:00-09:20 "Alkaline Activation" as a procedure for the transformation of fly ashes into cementitious materials – Part I. Fundamentals
I. Garcia-Lodeiro, A. Fernández-Jiménez, A. Palomo

09:20-09:40 "Alkaline Activation" as a procedure for the transformation of fly ashes into cementitious materials – Part II. Immobilization of toxic and hazardous elements, *S. Donatello, A. Fernández-Jiménez, A. Palomo*

09:40-10:00 "Alkaline Activation" as a procedure for the transformation of fly ashes into cementitious materials – Part III. Reducing the clinker factor, *A. Palomo, A. Fernández-Jiménez*

10:00-10:20 "Alkaline Activation" as a procedure for the transformation of fly ashes into cementitious materials – Part IV. Other applications, *A. Fernández-Jiménez, C. Varga, A. Palomo*

10:20-10:40 Effect of sintering conditions on the production of ceramics from lignite fly and bottom ashes, *V. Karayannis, E. Katsika, A. Moutsatsou*

10:40-11:00 Improvement of Portland cement free cementitious material, *S. Aydin*

11:00-11:30 Coffee break

11:30-13:30 **Session VI: CCP special uses**

Chairs: M.J. McCarthy, A. Kastanaki

11:30-11:50 The Effect of Aqueous Solutions Treatments on Coal Fly Ash Surface and It's Interactions with Trace Elements
R.N. Lieberman, H. Coen

11:50-12:10 Modification of surface properties of South African coal fly ash for industrial filler applications, *L. van der Merwe, L. Prinsloo, R. Kruger, L. Mathebula*

12:10-12:30 Extraction of Alumina from Coal Fly Ash Generated from Inner-Mongolia Chinese Coal, *X. Liu, B. Wang, L. Zhao, Q. Sun*

12:30-12:50 Pressure infiltration technique for the synthesis of A356 Al/high-Ca fly ash composites, *G. Itskos, P.K. Rohatgi, A. Moutsatsou, N. Koukouzas, C. Vasilatos, J.D. Defow*

12:50-13:10 Alumina-rich Glass Cement from Lignite Coal Ash
A. Wolter

13:10-13:30 The effect of sintering processes of lignite calcareous ashes on the production of ceramics, *A. Moutsatsou, V. Karayannis, E. Katsika, C.A. Drosou*

13:30-14:30 Lunch break