65th Annual Meeting of the International Committee for Coal and Organic Petrology

ICCP program & abstract book

25-31st August 2013’ Poland
University of Silesia, Sosnowiec
Welcome!

The Faculty of Earth Sciences at the University of Silesia in Sosnowiec has great pleasure in welcoming all participants and accompanying persons to the 65th Annual Meeting of International Committee for Coal and Organic Petrology. The Faculty of Earth Sciences is hosting the meeting for the first time. It is the third time for the ICCP Meeting to be held in Poland. Previous meetings took place in Kraków (1995) and Ustroń-Jaszowiec (1974).

The meeting involve reports on the workings of three ICCP commissions (General Coal And Organic Petrology, Geological Applications of Coal and Organic Petrology and Application of Petrology to Coal Utilisation and Mining) and a symposium on recent advances in coal and organic petrology and geochemistry. The Organizing Committee is very grateful for all the inputs into the meeting, for all your posters and oral presentations.

The Faculty of Earth Sciences is thanked for the facilities it provided for the hosting of the meeting. Other sponsors include the International Committee for Coal and Organic Petrology, Carl Hilgers-Technisches Büro (Germany), Żywiec Zdrój S.A. and A.S. und Co. (Germany).

I am very grateful to all the members of the organizing committee for their help. These are Prof. Krystyna Kruszewska, Prof. Janusz Janeczek, Prof. Monika Fabiańska, Prof. Leszek Marynowski, dr. Krzysztof Szopa, dr. Justyna Ciesielczuk, dr. Beata Smiej-Król, dr. Iwona Jelonek and Ms Marta Kasprzyk.

I am also very grateful to a number of Ph.D. and M.Sc. students for their help during the preparation of the meeting – work that still continues. These are Mr Maciej Rybicki, Ms Justyna Smolarek, Ms Kamila Banasik, Mr Piotr Kotula, Ms Magdalena Wolniak, Ms Martyna Trubic and Ms Katarzyna Wolniak.

I hope that all will find this meeting to be an opportunity for fruitful discussion and convivial academic exchange. I wish all our visitors an enjoyable visit to Poland,

Magdalena Misz-Kennan

Chair of the Organizing Committee
Honorary Committee:
Prof. dr. hab. Wiesław Banyś
Prof. dr. hab. Janusz Janeczek
Prof. dr. hab. Adam Idziak
Prof. dr. hab. Krystyna Kruszewska

Organizing Committee:
dr. hab. Magdalena Misz-Kennan               Ms Marta Kasprzyk
dr. hab. Monika Fabiańska, Prof. UŚ          Mr Maciej Rybicki
dr. hab. Leszek Marynowski, Prof. UŚ         Ms Kamila Banasik
dr. Krzysztof Szopa                          Mr Piotr Kotula
dr. Justyna Ciesielczuk                     Ms Justyna Smolarek
dr. Beata Smieja-Król                       Ms Martyna Trubic
dr. Iwona Jelonek                            Ms Magdalena Wolniak
                                                Ms Katarzyna Kańtoch

Editors: Justyna Ciesielczuk, Monika Fabiańska, Magdalena Misz-Kennan & Krzysztof Szopa


Front cover: overburned coal waste sample (10 cm in diameter) collected from the exploited Chwałowice Dump, Poland (back cover). Photo by Justyna Ciesielczuk

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International Committee for Coal and Organic Petrology
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Żywiec Zdrój
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B. Bielowicz, K. Mati: *The possibility of underground gasification of lignite from Polish deposits*

M. Arboleya, J. Pellegrini, J. Urbanczyk, V. López-Dias, C.G. Blanco, A.G. Borrego: *Palaeoenvironmental variation of a sub-mountainous Holocene peat in North Spain based on biomarkers and FTIR proxies*

B. Białecka, J. Calusz-Moszko, Z. Adamczyk, J. Komorek, M. Lewandowska: *Differentiation of Ni, Co, Cr, Cu, Zn and Pb content in coal seams from the Orzesze beds SW-part of Upper Silesia Coal Basin – Poland*

B. Bielowicz, K. Mati: *The possibility of underground gasification of lignite from Polish deposits*

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M. Kokowska-Pawłowska: *Relationship between the content of trace elements in coal lithotypes and their ashes (405 coal seam, USCB)*

J. Komorek: *Changes of the vitrinite and liptinite structures during heating under inert conditions according to the results of Micro-FTIR spectroscopy*

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B. Kwiecien, S. Pusz: *Highly metamorphosed organic matter – origin and some properties*

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65th ICCP Meeting, Sosnowiec, Poland,

August 25 - 31, 2013

Sunday, August 25th

15:00 - 18:00  Council Meeting
18:00 - 20:30  Registration and Ice Break Party

Monday, August 26th

08:30 - 09:00  Registration
09:00 - 10:30  ICCP welcome
10:30 - 11:00  Coffee Break
11:00 - 12:30  ICCP General Assembly
   1. Apologies for Non-attendance
   2. Minutes of Previous Meeting
   3. Arrangements for Sosnowiec Meeting
   4. Future Meetings
   5. Membership
   6. Elections (short, status)
   7. Editor’s Report
   8. Financial matters
12:30 - 13:30 Lunch
13:30 - 15:00  ICCP General Assembly
   9. ICCP Accreditation program
   10. ICCP Training Subcommittee
15:00 - 15:30  Coffee Break
15:30 - 15:45  Commission II Opening Remarks – P. Hackley & J. Kus
15:45 - 16:00  Thermal Indices – C. Araujo
16:00 - 16:45  Identification of Dispersed Organic Matter – J. Kus
16:45 - 17:00  CBM/CO$_2$ Sequestration – L. Gurba
**Tuesday, August 27th**

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<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9:00 - 9:45</td>
<td>Concentration of Organic Matter – J. G. Mendonça Filho</td>
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<tr>
<td>9:45 - 10:30</td>
<td>DOMVR Accreditation Program – A.G. Borrego</td>
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<tr>
<td><strong>10:30 - 11:00 Coffee Break</strong></td>
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<tr>
<td>11:00 - 11:45</td>
<td>Palynofacies – J.G. Mendonça Filho</td>
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<tr>
<td>11:45 - 12:30</td>
<td>Identification of Primary Vitrinite – P. Hackley</td>
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<td><strong>12:30 - 13:30 Lunch</strong></td>
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<tr>
<td>13:30 - 14:00</td>
<td>Reappraisal of Pseudovitrinite – L. Gurba</td>
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<tr>
<td>14:00 - 14:30</td>
<td>Dispersed Organic Matter White Paper – M. Hamor-Vidó</td>
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<tr>
<td>14:30 - 14:35</td>
<td>DOMVR and CIR in Commission II – A. G. Borrego</td>
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<tr>
<td>14:35 - 14:45</td>
<td>DOM Atlas – ICCP-TSOP I. Suarez-Ruiz</td>
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<tr>
<td>14:45 - 14:55</td>
<td>Shale Gas Studies – L. Gurba</td>
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<tr>
<td>14:55 - 15:00</td>
<td>Closing Remarks – P. Hackley &amp; J. Kus</td>
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<td><strong>15:00 - 15:30 Coffee Break</strong></td>
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<tr>
<td>15:45 - 16:15</td>
<td>Fly ash WG – I. Suárez-Ruiz &amp; B. Valentim</td>
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<tr>
<td>16:15 - 17:00</td>
<td>Coke Reflectance Measurements – D. Pearson</td>
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<tbody>
<tr>
<td>9:00 - 10:30</td>
<td>CBAP – I. Suárez-Ruiz</td>
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<tr>
<td><strong>10:30 - 11:00 Coffee Break</strong></td>
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<tr>
<td>11:00 - 11:50</td>
<td>Self-Heating WG – M. Misz-Kennan, J. Kus &amp; D. Flores</td>
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<tr>
<td>11:50 - 12:30</td>
<td>Coke Petrography WG – L. Johnson</td>
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<tr>
<td><strong>12:30 - 13:30 Lunch</strong></td>
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<tr>
<td>13:30 - 14:30</td>
<td>Carbon Materials – G. Predeanu</td>
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<tr>
<td>14:30 - 15:00</td>
<td>Commission III Concluding Remarks – I. Suárez-Ruiz &amp; M. Misz-Kennan</td>
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<tr>
<td><strong>15:00 - 15:30 Coffee Break</strong></td>
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<tr>
<td>15:30 - 15:40</td>
<td>Commission I Opening Remarks – D. Flores &amp; S. Kalaitzidis</td>
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<tr>
<td>15:40 - 16:10</td>
<td>Quick scan technique – C. Hilgers</td>
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<tr>
<td>16:10 - 17:00</td>
<td>Microscope Session</td>
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Thursday, August 29th

9:00 - 9:30  SCAP - Single Coal Accreditation Program – K. Christianis
9:30 - 9:55  Standardization Working Group – W. Pickel
9:55 - 10:10  ISO Standard – W. Pickel
10:10 - 10:30  Suberinite WG – P. Crosdale & A. Bouzinos

10:30 - 11:00  Coffee Break
11:00 - 11:20  Petrographic Image Database – J. Joubert, R. Delzepich, P. Ranasinghe & P. Hackley
Demonstration of USGS Photomicrograph Atlas – B. Valentine
11:20 - 11:40  Reflectance and Terminology of Zooclasts in Old Sediments - T. Gentzis
11:40 - 12:10  New Methodologies and Techniques in Organic Petrology WG – L. Gurba
12:10 - 12:20  Micro FTIR WG – K. Jin

12:30 - 13:30  Lunch
13:30 - 13:45  QEMSCAN – S. Rodrigues
13:45 - 14:00  Liptinite Editorial Group – W. Pickel
14:00 - 14:10  Distinguishing Features of Macerals EG – W. Pickel
14:10 - 14:30  ICCP Electron Microprobe Handbook – L. Gurba
14:30 - 14:50  Oxidation WG – J. Kus & M. Misz-Kennan
14:50 - 15:00  Com I Closing Remarks – D. Flores & S. Kalaitzidis

15:00 - 15:30  Coffee Break
15:30 - 17:00  ICCP General Assembly
   11. Registration
   12. Revision of Statutes
   13. Membership
   14. Website
   15. Elections
   16. Short reports from the Commission Meetings
   17. Short report from the Council Meeting
   18. Arrangements for 2014 Meeting
   19. ICCP Awards
   20. Others
Friday, August 30th

ICCP Symposium: Advances in coal and organic petrology and geochemistry

Chairpersons: I. Suárez-Ruiz & B. Kwiecińska

10:00 - 10:20 Organic geochemical properties of matrix and xylite coal from the Kolubara and Kostolac basins, Serbia
- D. Životić, A. Bechtel, R. Sachsenhofer, R. Gratzer, D. Radić, M. Obradović, K. Stojanović

10:20 - 10:40 Features and distribution of brown coal macerals of Late Pliocene - Early Pleistocene (?), Caldas, Colombia
- O. P. Gómez Rojas

10:40 - 11:00 Peat-petrographical characteristics of topogenous mires in relation to coal formation conditions
- S. Kalaitzidis, K. Christanis

11:00 - 11:20 Palaeobotany and vegetation successions recorded in coal – utilising the lost tool of etching
- N. Van de Wetering, J. Esterle

11:20 - 11:40 Petrographic consideration of coals from the Karoo Basin, Botswana: expanding the limited data pool
- N.J. Wagner, M. Johnston, J.C. Hower, M. Ndhlaso

11:40 - 12:00 coffee break

12:00 - 12:20 Multivariate studies of relationship between petrography and proximate analysis and its influence in the hardgrove grindability index for some thermal coals located in North Central Boyac? Colombia

12:20 - 12:40 Histograms of the gray scale gradient directions in coke texture analysis
- M. Piechaczek, A. Mianowski

12:40 - 13:00 An influence of geological pressure on the optical texture of coal
- Ł. Smędowski, S. Duber, A. Matuszewska

13:00 - 13:20 Instrumental methods of hard coal structural analysis- selected problems
- A. Matuszewska

13:20 - 13:40 Petro-chemical characterization of some borehole coal core samples from virgin area in Damodar Valley Basin, Eastern India

13:40 - 14:40 lunch
Chairpersons: D. Flores & S. Pusz

14:40 - 15:00  Reevaluation of vitrinite reflectance suppression through hydrous pyrolysis experiments
- P.C. Hackley, A.M. Bove, F.T. Dulong, M.D. Lewan, B.J. Valentine

15:00 - 15:20  Petrology and geochemistry of the lower Miocene lacustrine sediments (Most Basin, Eger Graben, Czech Republic)
- M. Havelcová, I. Sýkorová, K. Mach, H. Trejtnarová, J. Blažek

15:20 - 15:40  Organic geochemistry of the Kolmani River-1 Well, Upper Benue Trough, Nigeria: implication on source-rock potential for oil and gas
- T.A. Adedosu, T.R. Ajayi, Y. Xiong, A. Akinlua, Y. Li, C. Fang, Y. Chen

15:40 - 16:00  Geochemistry and environmental appraisal of some selected coals from Nigeria
- O.A. Ehinola, M.A. Amos, Q.-Y. Liu

16:00 - 16:20  Mineralogy, geochemistry and environmental assessment of medicinal clay from southeastern Nigeria
- O.A. Ehinola, M.A. Amos

16:20 - 16:40  A.S. & Co. - SpectraVision 4 - Overview and new Developments
- H. Althoff, H. Behl
Poland

Poland is the largest country in Central Europe, with a population of over 38 million. It borders with seven countries, namely, the Czech Republic, Slovakia, Ukraine, Germany, Belarus, Russia and Lithuania. Poland is a member of both NATO and the EU.

Poland is, and has always been, a crossroad of cultures. Here at the very heart of Central Europe, where East meets West, and North meets South, a rich array of cultures, traditions, perspectives and values permeate and enhance one another. One will find not only cultural diversity but also geographical diversity in the beautiful Baltic Coast, the Lake District, the virgin forestlands and breathtaking mountains - all within the reach of an adventurous train ride.

The climate is moderate and continental, with four seasons. Average temperatures, in summer, fall between 15 and 30°C and, in winter, between 0 and -20°C.

The currency is the polish złoty (PLN). At present, 1 Euro is about 4.2 złoty (pronounced zwoty)

Upper Silesia

Upper Silesia (Górny Śląsk) is a center of industry and economy. It is also well known for its strong sense of local and cultural autonomy. Silesia consists of more than 70 municipalities with a total population of approximately 4.6 million. Thanks to a well-developed road, rail, bus and tram infrastructure, commuting between cities in the region is fast and easy. Access to forests, parks, and green areas ensures tranquility and contact with nature.

Silesian voivodeship:

- 4.6 million inhabitants
- more than 70 municipalities
- 45 higher education institutions
- over 170,000 students
- the most industrialized region in Poland
- rich in natural resources such as coal, iron, lead and silver
- attracts many international investors
City of Katowice

- capital of the Silesian Voivodeship
- 3rd Polish city based on number of inhabitants (over 300,000)
- thriving business and IT center
- dynamically developing cultural center

University of Silesia in Katowice

University of Silesia:
50 study programs & 160 specializations
35,000 students & 200,000 alumni
600 cooperation agreements & 1,500 research projects

The University consists of 12 faculties and 4 university-wide and inter-faculty schools. University facilities are located in 4 cities, namely, Katowice, Sosnowiec, Chorzów and Cieszyn.

The University of Silesia in Katowice is one of the largest and most dynamic public universities in Poland. Founded in 1968, the university quickly established a reputation as a vibrant academic institution and an important interdisciplinary research hub. With a tradition of launching new programs to best meet the needs of rapidly-changing labor markets, the University of Silesia offers students a variety of programs and specialized fields of study. With outstanding research teams and well-equipped laboratories, it is an important player in the global research arena. We actively participate in European Commission initiatives focused both on educational- and scientific development, and realize projects within the Lifelong Learning Programme, the Research Fund for Coal and Steel and Framework Programmes.

The University of Silesia serves over 35,000 intramural and extramural students. It already has more than 200,000 proud alumni. Our community consists of 2,000 teachers and researchers.
Latest investments at the University of Silesia in Katowice

The Scientific Information Centre and Academic Library
Opened in 2012, the Scientific Information Centre and Academic Library (Polish acronym: CINiBA) is a modern scientific library open to everyone – not only students and researchers. As opposed to the traditional, remote, librarian-only stacks, most of the materials are available in open space. One can also use cutting-edge technologies and information tools. It is a friendly space designed to be accessible to everyone, including people with disabilities.

CINiBA is:

- a joint project of the University of Silesia and the University of Economics in Katowice
- a hybrid library – free access to different types of data carriers: books, magazines, databases, electronic texts, audio-visual materials, multimedia, and collections adjusted to the needs of all groups of users
- an award winning architectural project

Further information:  www.ciniba.us.edu.pl

All conference attendees are welcome to visit latest investments at the University of Silesia

Silesian Interdisciplinary Centre for Education and Research in Chorzów
The Silesian Interdisciplinary Centre for Education and Research represents a new standard in quality education for the 21st century. Its mission is to ensure the growth of innovation and the stimulation of the economic development of the region, and of the country as a whole. Here students enjoy hands-on access to unique, state-of-art laboratory equipment, and modern tools and techniques used in information technology. Further information: www.smcebi.us.edu.pl

Faculty of Philology in Sosnowiec
Opened in 2008, the Faculty of Philology building in Sosnowiec is perfectly suited to the needs of the modern-language programs.

The Faculty of Earth Sciences
The Faculty of Earth Sciences was established in 1974 as the seventh faculty of the University. It offers full-time and part-time programs (at Bachelor, Master and Doctoral levels) in geology, geography and geophysics. All of the facilities are located in Sosnowiec.

The Faculty consists of about 150 academics who are both teachers and researchers. The research carried out by faculty members encompasses all fields of earth science, and socio-economic processes in terms of their spatial distribution. The faculty is renowned for its research into karst and glaciers on Spitsbergen, surface- and sub-soil waters and aquifers, morphology, rocks and minerals, palaeontology, induced seismicity, migration of chemical elements and organic matter in the earth’s crust and the investigation into the effects of climatic changes taking place on Arctic glaciers. The application of advanced computer technology to the processing of aerial- and satellite photographs has enabled the collection of crucial data on changes to the natural environment in highly industrialized areas. A number of students at the Faculty contribute to the research through their active participation in student discussion groups, notably the Association of Young Geologists, the Association of Young Geographers and the Association of Young Geophysicists. The achievements of the Faculty have been recognized in many international publications and by numerous academic- and political institutions, e.g., the State Committee for Scientific Research.

Contact details:
The Faculty of Earth Sciences
E-mail: wnoz@us.edu.pl
Phone: +48 32 3689 400
Address: Będzińska 60, 41-200 Sosnowiec
www.wnoz.us.edu.pl
Useful transport links:
The Silesian agglomeration has a well-developed public transport network. Timetables (in English) are available at: http://www.kzkgop.com.pl/?lang=en

Many Taxi companies operate in and around Katowice and Sosnowiec. One that takes orders in English is Echo Taxi.

**Phone:** +48 32 201 42 00  
**Mobile phone:** +48 509 144 899  
**E-mail:** biuro@echotaxi.com.pl  
**Website:** www.echotaxi.com.pl

Useful Emergency Numbers:  
When calling from a landline, dial:  
999: Ambulance  
998: Fire Brigade  
997: Police  
981: Road Assistance  
When calling from a mobile phone, dial 112 (general emergency number).