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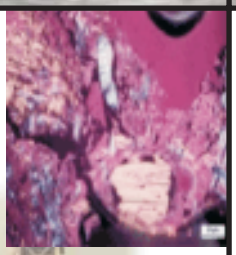

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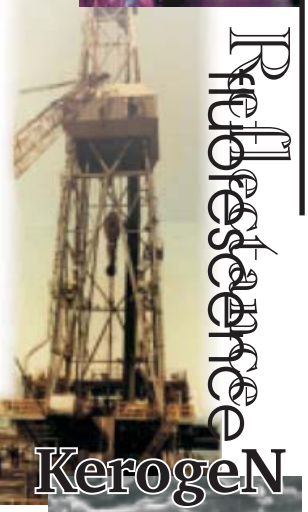

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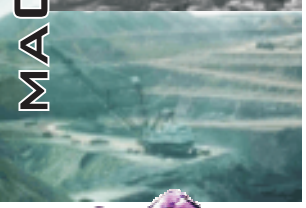

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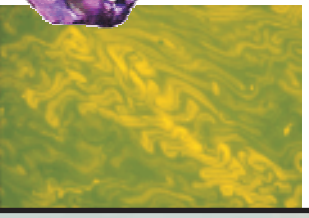


ICCP Accreditation Programs

inside this issue

Council of the International Committee for Coal and Organic Petrology (ICCP)

President (1999 - 2007)
Dr. Alan C. Cook
Keiraville Konsultants Pty. Ltd.
7 Dallas Street
Keiraville, NSW 2500
AUSTRALIA
Tel : +61-2-4229 9843
Fax : +61-2-4229 9624
mailto:alanccook@iccopozemail.com.au
Note: 'iccop' should be *removed* from ISP name to use this address

Commission II Chair
(2003 - 2007)
Dr. M. Ángeles Gómez Borrego
mailto:angeles@incar.csic.es

Commission II Secretary
(2003 - 2007)
Dr. Mária Hámor-Vidó
mailto:vido@mafi.hu

Vice-president
(2003-2007)
Prof. Dr. Lopo Vasconcelos
mailto:lopo@uninet.co.mz

General Secretary
(2000 - 2008)
Dr. Petra David
mailto:petra.david@tno.nl

Commission III Chair
(1999 - 2007)
Dr. Rosa Menéndez
mailto:rosmenen@incar.csic.es

Commission III Secretary
(2004 - 2008)
Dr. Georgeta Predeanu
mailto:gpredeanu@metal.icem.ro

Treasurer
(1997 -)
Dr. Rudolf M. Schwab
mailto:rudi.schwab@btinternet.com

Editor
(2000 - 2008)
Dr. Peter J. Crosdale
mailto:peter.crosdale@energyrc.com.au

Commission I Chair
(2000 - 2008)
Dr. Walter Pickel
mailto:walter.pickel@organicpetrology.com

Commission I Secretary
(2000 - 2008)
Dr. Deolinda Flores
mailto:dflores@fc.up.pt

Past President
Manuel João Lemos de Sousa . . . . . mailto:mlsousa@fc.up.pt
Returning Officer
Harold Smith . . . . . mailto:a.h.smith@sheffield.ac.uk
Honorary Auditor
Alan Davis . . . . . mailto:docadavis@worldnet.att.net
Reinhardt Thiessen Award Committee
Chair Marc Bustin . . . . . mailto:mbustin@eos.ubc.ca
Organic Petrology Award Committee
Chair Marc Bustin . . . . . mailto:mbustin@eos.ubc.ca
Young Scientist Award Committee
Chair Alan Cook . . . . . email address as above
Webmaster (http://www.iccop.org)
David E. Pearson . . . . . mailto:dpearson@coalpetrography.com
Archives
Faculdade de Ciências, Universidade do Porto
Dr Deolinda Flores . . . . . mailto:dflores@fc.up.pt
Handbook Administration
Petra David . . . . . mailto:petra.david@tno.nl

Membership Enquiries
Dr. Petra David
TNO Built Environment and Geosciences
Division of Geo-energy
P.O. Box 80015
3508 TA Utrecht
THE NETHERLANDS
Ph. +31 30 256 4648 Fax +31 30 256 4605
Email : . . . . . mailto:petra.david@tno.nl
OR visit our web site . . . . . http://www.iccop.org

From the Editor

As expressed elsewhere in this newsletter, voting results on the question of ICCP registration have shown a majority of members in favour. It is most certainly new and unchartered territory for ICCP but I believe that it is most necessary for us to head in this direction. However, only once we have all of the data from a number of jurisdictions will we be able to finally decide if this is indeed the future for our organisation. It seems to me the common sense way forward, especially given the nature of the activities in which we are now engaged.

Registration will, of course, bring on many changes. Not the least of these will be a thorough revision of the statutes. Lopo and others have put in much work on this issue. Members are reminded that, with or without registration, statutes revision is needed and member input is required to get the ICCP needed and required.

I am sure that the founders of ICCP would not have anticipated the very successful accreditation programmes (now 3), the reflectance standard and the organisation of the annual meetings to incorporate a greater scientific programme through mini symposia and joint meetings. ICCP has changed significantly over the years and perhaps it is indeed time to acknowledge those changes through the process of registration. A process that seems to me to be the next logical step. However, ICCP has some history and traditions which should not be ignored *"But human affairs are not always conducted by the plain dictates of common sense. There are many other principles which influence our transactions: And there is one in particular, which, tho' of a very erroneous complexion, is scarcely ever excluded from our most serious deliberations; I mean custom, or the practice of those who have preceded us. This is usually a power too mighty for reason to grapple with; and is often extremely troublesome to those who oppose it, since it has much of superstition in it's nature, and pursues all those who question it's authority with unrelenting vehemence"* (Walter, 1756, p. 484). Members are encouraged to positively engage in the process of registration in order to preserve the best customs of ICCP while still moving forward.

cheers and happy reading

Peter (ICCP Ed.)

From the President

Vote on Registration

The vote was held, and a substantial majority support further consideration of ICCP becoming a more formal organization. Elsewhere, some preliminary information received in response to the resolutions passed at Patras is presented. It is clear that the next stages are much more difficult compared with the one already taken. The strong support for registration means that however difficult the next steps are, we need to progress with them. My thanks go to those who voted and to the members who have contributed material of three jurisdictions for registration and an option through another organization. That information so far serves to show that even more work lies ahead in correlating the various options. Our thanks also go to our returning officer and to Petra for preparing excellent sets of papers to inform members of the issues.

It is, however, appropriate to comment at this stage that now the work really starts. Registration or affiliation with another organization is not a trivial matter. It will require more work from a range of members, especially those holding offices that now form part of ICCP Council.

Upcoming Elections

Last year was one with no requirements for elections to Council, and not surprisingly, it is being followed by a year with a relatively large number of elections. All of these are important. Council will be making nominations to the vacant positions but, as always, nominations will be open to additions from the floor, noting the restriction imposed by the statutes that no more than 2 nominations from the floor can be accepted. In the past, some nominations have been essentially last minute thoughts. While a proportion of these may have been felicitous thoughts, we should not rely on last minute inspiration. The statutes place some

Walter, Richard (1756) Voyage Round the World in the Years MDCCXL, I, II, III, IV. by George Anson Esq; Now Lord Anson, Commander in Chief of a Squadron of His Majesty's Ships, sent upon an Expedition to the South Seas. T. Osborne and J. Shipton, D. Browne, J. Hodges, W. Bowyer, W. Strahan, H.S. Cox, J. Ward, R. Baldwin, and S. Crowder and H. Woodgate. London. 8th Edition. 536pp.

Cover illustration from: Anon (n.d., ca. 1940) Cooking by Coal for Health & Pleasure. C.P. Perry & Son, Ltd., Fuel Contractors, Birmingham. 12pp.

restrictions on nominations, although the effect of these has not, perhaps, always been that originally intended. In particular, restrictions based on nationality are now much less effective than they were in the 1980s as more petrologists work in countries far distant from their country of birth. The reasons for the rules still exist, but the mobility of organic petrologists has made the wording in the statutes much less useful than when they were introduced.

Talent and willingness to undertake work for ICCP should be the main criteria for nominations. Candidates should be assessed on the basis of their work for ICCP as contributors to Working Groups, Commissions and Council. Especially with a possible change in the status of ICCP, a more than usually heavy responsibility will rest on the shoulders of those who we elect later this year.

Structure and Function within ICCP

Over recent years, a number of new members have joined ICCP and it may be useful to outline some of the structures within ICCP. The basic unit of ICCP work is the Working Group (WG), each of which has a convener; these are listed in the Commission minutes. Correspondence and requests about WGs should be addressed to the conveners. The WGs are organized into three Commissions. Each Commission has a Chair and Secretary. Questions and correspondence relating to the Commissions should be directed to the respective Chairs and Secretaries. Council has general oversight of the activities of ICCP. Council consists of the Commission Chairs and Secretaries, the Treasurer, the Editor, the Vice President and is chaired by the President with the General Secretary acting as Secretary. Requests and questions to Council should be directed through the General Secretary.

The Treasurer and Editor are to one side of the main committee structure but are members of Council and the names of their positions indicate their functions. Their reports and proposals normally are presented to Council, and then to the General Assembly.

The members meet as the General Assembly in the Plenary Sessions during the Annual Meetings. This group has some specific functions that are set out in the Statutes. It should also consider any decisions made within any of the Commissions that can have more general effects on ICCP and can at least in theory override Commission decisions. The structure and powers of the General Assembly are inherited from the early days of ICCP when membership was small and all, or almost all members attended the annual meetings. It may not be entirely suitable to the present size of membership but cannot be altered without extensive revision of the statutes.

This is an hierarchical system of responsibility. Hierarchical structures are common to most organizations. They are designed to permit free access at each level and to ensure that all requests are properly received, discussed and any decisions are recorded. To a great extent within ICCP, form does follow function.

We can note that email permits simultaneous contacts with many recipients. This ability does not remove the need for but rather emphasises the need for, and the advantages of, the formal structure. If we do not have structure, then ICCP would consist of something like 175 factorial sets of communications - that is a number rather larger than 10^{100} and potentially on each issue. Using the established structure cuts this down to a meaningful and manageable number as well as permitting a record of correspondence and the decisions that are made.

So if I, as President, wish to ask about the work of a WG, I should do that through the relevant Commission Chair. If I am a member of a working group, then I can contact the Convener directly on the work program, and otherwise I should use the structure that has been established. The structure is there for our benefit - we should use it.

Items for discussion are listed in agendas circulated before the annual meetings. Agendas have been a difficult subject. The need for them was formalized only as recently as the Oviedo meeting in 1994. There had been some agendas prior to that, although access to them was not always easy. I remember being told in the 80's that an item I wished discussed could not be considered because it was not on the agenda. “Could it go on the next agenda?” I asked. The answer was “No, because it has not yet been discussed”. Hopefully, access to agendas is now a great deal easier than that and the lines of approach are set out in the structure.

The aim is that decisions at all levels from WGs to Council and the General Assembly should be in terms of formal resolutions with formal votes. Agreement is generally determined by a simple majority of votes. Decisions are binding on ICCP as an organization although, within limits of correct

procedure, members are able to argue against decisions. Specific rules apply where a member wishes to reverse a decision.

Some parts of the structure may appear obscure, but there is a good reason for most of them.

New Accreditation Programs

Elsewhere is this issue, you will read of the two new accreditation programs being introduced. The three programs will be co-ordinated with a common base for processing the data although the Coal Blends system will have a more complex data structure compared with the other programs. There will be a common invoicing system across the three programs and in future years, we will be attempting to co-ordinate them to a greater extent than has been possible in 2006. This is an important development for ICCP. It should not, however, be the end of the introduction of new accreditation activities. If ICCP becomes registered, consideration should be given to building the accreditation activities more into the formal structure than has been the case previously and care has to be taken to make sure all procedures accord with normal corporate practices. It may also be a good time to revisit the matter of reflectance standards.

Fuel Prices

A year ago, I noted that longer-term contracts for coking coal had been written at about USD 125 per tonne and commented that the doomsayers forecast falls in prices. A small fall seems to have occurred to about USD 115 per tonne for 2006 contracts for coking coals, but more interestingly, coal qualities seem to be more accurately reflected in prices this year, with lower prices where vitrinite reflectance is less than about 1.15%. Steam coal prices fell dramatically in mid-2005 but have subsequently risen so that contract prices for 2005 are not much lower than for 2006. Steel prices have been lower and that is a negative factor, but both iron ore and coking coals remain in strong demand. It seems that some of the more optimistic economists are still expecting the discovery of new basins containing coking coals. Perhaps they don't grasp the fact that useful coal seams are large flat bodies that are difficult to miss if you drill a vertical borehole. This means that the chances of finding a new basin containing coking coal are small, no matter how high the price may be. Recovery of coking coals at greater depths may be a different matter. I don't, however, imagine there is a huge rush to peg out the Cooper Basin in Central Australia for coking coals even though there are an estimated 3 trillion tonnes of *in situ* coal there. Perhaps the miners are put off by having to mine at depths mostly greater than one kilometre and, below 2500 m, within overpressured sections. And even less interest in mining Australia's two other huge unmined basins, one under the offshore Gippsland Basin and the Triassic coals of Exmouth Plateau, situated at water depths greater than 1000 m - plus the overlying Jurassic and Cretaceous sections.

High growth rates in both China and India are still the major factors in the high prices for coking coals and so far both look to be continuing. Growth rates may decrease but so far coal producers have not shown an ability to increase production to the point where they flood the market. Rather some countries have become much smaller players in the export markets. The BP data for 2005 (http://www.bp.com/genericsection.do?categoryId=92&contentId=7005893) indicate truly astonishing growth for coal production for China from 999 million tonnes in 2000, to 1450 in 2002, 1668 million tonnes for 2003 and 1956 million tonnes in 2004. The BP statistics for 2005, excellent though they are, remind us of how rapidly the markets are moving when we look at prices for oil gas and coal and see how irrelevant late 2004 data appear in early 2006.

The debate about when peak oil production will occur is still sharply divided into the pessimists and the optimists, although few of the optimists seem to think the show can go on for a great deal longer. The Association for the Study of Peak Oil&Gas (ASPO) shows a small delay in peak oil on its website at http://www.peakoil.net/ compared with their earlier data. They are, however, still very pessimistic about the prospects for some of the largest fields such as Gawar and Burgan, suggesting that decline is now well advanced. The official Saudi line is that all is well - sorry about the pun - but they never produce the field data to back up their statements.

Meanwhile, we are "driven" by the economists and they seem to think that price will solve all problems. Price will solve some problems, but it does not easily take into account the special requirements for some purposes. Thus, electric trains can be a major, though dramatic, substitute

for cars. Aircraft would, however, have trouble following the wires, even if we could get the wires up in the sky! (I wrote that before a Melbourne tram took to the air to open the Melbourne Commonwealth Games) So, very different price forces will apply to different uses. There do not appear to be many plans being made to cover that situation, and yet even the optimists admit it must develop in the first half of this century. Additionally, price will start to serve as a mechanism after the problem has developed and not before. And it is all the more ironic that the price mechanism is the sacred cow of a group that is always banging on about the need to be proactive!

Just reading the financial pages of newspapers, does indicate that fuels in general are much more prominent in economic matters compared with the period since 1984. Certainly shares in oil companies are doing about as well as you might expect. Coal companies seem more prone than oil companies to various types of production woes - although the hurricanes in the GoM did their best to lift oil prices, and Australia has recently "chipped in" with a couple of smaller cyclones. (After I had written this, Queensland has collected category 5 cyclone Larry, but it was nowhere near oilfields and probably too far north to flood the coalfields.) War and more local disturbances are also major factors. It would be interesting to develop a model that scored weather against war as a cause of higher oil prices. Does anyone want to suggest the relative contributions?

Skills and Education

Both the coal and oil industries are complaining about skills shortages in relation to exploration and fuel technology. It appears that enrolments in earth sciences have increased, but a glance through many course outlines shows that few Universities now teach the courses that would provide the skills needed for exploration. Some time we should run a competition for the most amazing question asked by a client who has employed a new graduate.

ICCP as a group is still not making full use of our website as an educational medium. So far, the most promising new developments are the new accreditation programs. We need to make our work on classification more widely known and used.

ACC
20 March 2006

From the Vice-president

We are almost there again. Hope to see you in Bandung in a couple of months.

As you all know, ICCP organized a voting process on the principle of registration, and the majority declared in favour of ICCP being registered.

After many discussions in Patras in 2005, it was decided that a final decision on the registration would be taken when we know the regulations and financial costs of several countries concerning this procedure. Several people offered to get this information and send it to Petra by the middle February. We are waiting until Petra has made a resumé of this information received to date (see page 10) and the full information will be presented in Bandung.

The decision on being registered or not, and if yes, where, will influence the contents of our statutes that, as you know, are under revision.

Nevertheless, some issues are independent from the question of registration, and can be discussed and decided as soon as we can. I would like to raise some issues to be discussed during the next meeting:

a) Membership: decision on the types of members: do we continue with Associate and Full Member? Or do we consider only on category? Please go back to the table published in the ICCP Newsletter Nr. 34 (March 2005, pp 21-25) that presents a synthesis on contributions received on this and other issues.

b) General Assembly vs. Council Responsibilities: also the synthesis above mentioned deals with this issue. To remind you all, I copy here an important paragraph published in the Newsletter 34:

The present statutes define GA as the maximum organ for decision, and that is seen as a slowing factor for the normal Activities of ICCP. It needs, however, to be recognized that normal attendance at annual meetings mean that the General Assembly comprises about one third of members, perhaps a little more of active members. There are few mechanisms available for seeking views from the full membership - votes for positions on Council and appeals for contributions through the Newsletters being the main ways currently available. Also the statutes should define clearly the

roles of all council members and executive committee. How do members see the balance between rapid actions (basically that means Council having powers to make decisions between meetings) and the formality of the General Assembly making decisions. It can be argued that Council is in a better position to seek views of all the membership compared with the General Assembly. How can ICCP members present their views to a greater extent than has been the case in the past?

As it is really clear from the above words, things could sometimes run faster if Council had more power to decide on day-to-day matters, without waiting from approval from the GA. We must discuss on what matters Council is entitled to decide.

I believe each of us could use some of his/her time to give some thoughts on these issues and send them to us. We would be in position to present to GA the summary that could easy our discussions and avoid some endless in-circle discussions.

Hope to see you soon.

Lopo Vasconcelos
VP, ICCP

From the General Secretary

Dear Colleagues,

it has been a very busy few months since the last newsletter. Six applications have been received for membership to ICCP, one for re-admission and one for advancement to full membership. Council has approved these applications and the details are given in the 'Membership Matters Section'.

Results of the vote on the principle of ICCP registration were received late last year, with a clear majority voting to continue the process. Results of the vote have been earlier distributed to members by email but are again given in this issue of the newsletter (page 10). Investigations are now being undertaken as to the implications of registering in a number of different jurisdictions. Information received to date is from three jurisdictions.

Council has also been very active by email and approved the introduction of new accreditation programs in analysis of coal blends and vitrinite reflectance determination of dispersed organic matter. Details of these programs are given on pages 8 to 10.

with best wishes
Petra David
ICCP General Secretary

Corrigenda - ICCP News No. 36 November 2005

p8, column 1, line 9 - the year of the ICCP Meeting in Victoria is given as 2006 instead of 2007

p55, column 2, line 20 - "Sprint coal" should read "Splint coal"

Know Your Coal Petrologist #18

KYCP #17 (ICCP News 36) was our current President in full dance mode at the Annual Meeting. Do you know which past President also exhibits remarkable dancing talents? Answer page 39.

Coal Blend and DOM Vitrinite Reflectance Accreditation - Ready to Roll

Invitations are made to participate in two new accreditation programs, Coal Blends, and Vitrinite Reflectance in dispersed organic matter to all analysts who may be interested in taking part in these new programs.

At the Budapest meeting, it was agreed to establish Accreditation Programs both for coal blends and for vitrinite reflectance in dispersed organic matter and the minutes for that meeting contain further details. This document updates the previous information. The convener for the Coal Blends (CBAP) program is:

Dr. Isabel Suárez Ruiz
Instituto Nacional del Carbón - CSIC
Apartado 73
33080 Oviedo
SPAIN
Phone +34-98-511 9090 / Fax: +34-98-529 7662
mailto:isruiz@incar.csic.es

and the *pro temporare* convener for Dispersed Organic Matter Vitrinite Reflectance (DOMVR) is

Alan Cook
7 Dallas St
Keiraville
NSW 2500
Australia
Phone +61-2-42 299 843 / Fax +61-2 4229 9624
mailto:alanccook@iccopozemail.com.au

Note: 'iccop' should be removed from ISP name to use this address

As a result of the generosity of a number of members, both programs now have sufficient samples to be able to start with a round of analyses in 2006.

Coal Blends Accreditation Program (CBAP)

The initial set of analyses will be of two coal blend samples. In future years, single samples of a blend will be used to test for maintenance of accreditation.

For the first test in this program (CBAP) participants will received two un-mounted blend samples. Blends will be made up of two or three component coals with little or no overlap in the vitrinite reflectance ranges for the components. Blend samples will be prepared exclusively with coals of bituminous coal rank. Thus, sub-bituminous coals and anthracites will not be included in any blend.

On every blend sample participants will be asked to perform the petrographic analysis to determine the following five items which will be evaluated:

1. Number of components coals in the blends.
2. Overall mean random vitrinite reflectance for the blends. This analysis has to be performed according to the ISO 7404/5 (1994) standard.
3. Vitrinite reflectance for each mode reported. This analysis has to be performed according to the ISO 7404/5 (1994) standard and the procedure followed by the Coal Blends Working Group.
4. Overall maceral composition assessed in terms of vitrinite content (mineral matter free basis) for the blend samples. This analysis has to be performed according to the ISO 7404/3 (1994) standard.
5. Blend composition. Proportion of each component coal in the blend samples. Based on vitrinite reflectance measurements and performed according to the procedure developed by the Coal Blends Working Group.

Participants will be evaluated according to the results obtained after analyzing the properties outlined above. Detailed instructions for the analyses will be provided by the program Convener.

Dispersed Organic Matter Accreditation Program (DOMVR)

By contrast, for vitrinite reflectance of vitrinite occurring as dispersed organic matter (DOMVR), the only property to be tested is the reflectance of vitrinite in the samples. There will be six samples in the initial set, and once a petrologist is accredited for DOMVR, in subsequent years sets of two samples will be used. No ISO standard applies directly to measurement of vitrinite reflectance on dispersed organic matter. A full description of the methods to be used will be sent out with the samples

The conveners will provide a format for the

return of analyses and this format should be used by participants.

The statistical evaluation for both the new programs has the same basis as that agreed for the existing program, where analysts must achieve an average unsigned multiple of standard deviations for the set tested of less than 1.5. A detailed presentation of the mathematics of the test methods is given under "Accreditation" on the ICCP website at http://www.iccop.org For DOMVR, the test will essentially be one half of the testing used in the existing accreditation program. For the Coal Blends program, the larger number of variables to be tested makes the test more complex, but the principle is still the same. Analyst's values are compared with the group means in terms of the unsigned value for $(\text{variable}_{\text{analyst}} - \text{group mean})/(\text{group standard deviation})$. These unsigned multiples are then summed and the sum is divided by the number of variables tested. In order to pass, value for the AUMSD of less than 1.5 must be achieved.

Fees

Council has now approved the following fee structures:

Fees for Coal Blends Analysis Program (CBAP)

	Entry	Continuation
Members	$120.00 €100.80 £68.57	$100.00 €84.00 £57.14
Non-Members	$240.00 €201.60 £137.14	$200.00 €168.00 £114.28

US$1 = 0.5714 £; US$1 = 0.84€

Fees for DOM Vitrinite Reflectance Analysis Program (DOMVR)

	Entry	Continuation
Members	$60.00 €50.40 £34.28	$40.00 €33.60 £22.86
Non-Members	$120.00 €100.80 £68.57	$80.00 €67.20 £45.71

US$1 = 0.5714 £; US$1 = 0.84€

If you wish to take part in either of these programs, please write to the conveners as shown above. You will receive an acknowledgement of your participation and an invoice will follow within one to two weeks.

Participation is welcomed in both programs, but it is desirable that participants have some experience of these types of analysis. Attention is drawn to the previous studies related to these programs, the Coal Blends program run by Dr Isabel Suárez Ruiz in Commission III and the Vitrinite qualifying program run by Dr M. Ángeles Gómez Borrego in Commission II.

These two new programs add to the accreditation activities of the ICCP that were initiated with program on reflectance and vitrinite percentage (mf basis) analysis of single coals (SCAP). This program has proven very successful over the years and is now conducted by Dr. Kimon Cristanis. Currently, the 2006 exercise has been started and those wishing to participate in this exercise are invited to contact

Dr. Kimon Christanis
Section of Earth Materials
Department of Geology
University of Patras
GR-26500 Rio-Patras
Greece
Tel.: +30-2610-997568
Fax: +30-2610-997560
mailto:christan@upatras.gr

The introduction of these two new programs develops accreditation procedures into exciting new areas. As with the first accreditation venture, we are as much dependent upon the efforts of the participants as on those of the conveners and the numerous members assisting them.

The analysis of Coal Blends by petrographic methods is a unique method of defining the components of blends and has direct application to commercial work. The blends will be prepared at INCAR using their extensive facilities. The blend coals come from a wide range of sources and will provide excellent experience of well-defined blends. Accreditation within this program will indicate competence at analysing coal blends.

Analysis of whole rock samples for vitrinite reflectance is a technique of major importance for oil and gas exploration. The samples commonly used for these studies can present greater difficulties compared with coals in relation to

identification of vitrinite and in polishing and measuring the small vitrinite particles that are present. Accreditation within this program will be important in relation to standardizing analyses directed to oil and gas exploration studies as well as regional mapping of levels of organic maturation.

We hope to receive an overwhelming response to participate!

Isabel Suárez Ruiz
Alan Cook

FOOTNOTE
Both conveners are still anxious to receive samples of suitable materials for use in these accreditation programs - in no time at all we will need to prepare for year 3! For coal blends, the sample weight should be preferably 40kg at -5 mm with a minimum of -72 mesh material and each coal should be essentially isorank - that is the vitrinite reflectance should have a standard deviation less than about 0.07.

For the DOMVR program, samples should be 2-4 kg at -4 mm with a minimum of fines and isometamorphic from a rank range between about 0.5% and 1.8%. The proportion of dispersed organic matter in the sample should be in the range 1% to about 15%, preferably with vitrinite more abundant than inertinite, high liptinite rocks can be used, but the more complex rocks types will not be used in the initial stages

Samples should be sent to Dr. Isabel Suárez Ruiz or Alan Cook as appropriate.

ICCP will assist with costs for sending suitable samples to the conveners. Contact should be made with the relevant convener to determine the suitability of any given sample before material is sent to the convener. Within the blend program, the aim will be to prepare three component blends with little or no overlap in the vitrinite reflectance ranges for the components.

Vote on the Status of ICCP - Results of the vote

History

The issue of the status of ICCP was raised by Prof Lemos de Sousa in 1998 when he was President in relation to ICCP becoming formally associated with the UN. The UN has changed its rules and affiliation is now through ECOSOC. While we are not experts on UN matters, the ECOSOC rules seem quite clear. They will only consider organizations that are formally registered within a national set of laws and regulations.

Since that suggestion in 1998, it has become clear that there are other issues facing ICCP that would be solved or at the least improved by our being a formal registered organization. These include (but are not limited to) holding copyright on ICCP work, insurance liability and having formal status with organizations such as ISO. This last is especially important in relation to the Accreditation activities that have become so important in the last decade.

At the Budapest meeting (in 2004) it was resolved that:

Resolved ICCPC04/12/1. In order to continue the development of the role of ICCP, Council resolves to put the question of registration to the membership in the following terms:

(i) Council of ICCP be requested to submit plans to permit registration of ICCP as a formal organization to a vote of members prior to the 2005 meeting of the General Assembly; and

(ii) finalization of the material sent to members be the responsibility of the Executive of ICCP (President, General Secretary and Honorary Treasurer) and that it be based on the material given in Appendix III (at the end of this document)

This material, together with the proposed voting form, was made available in ICCP Newsletter #33.

The voting paper together with detailed information was sent out prior to the Patras meeting.

At the Patras meeting (in 2005) the matter was discussed again (members have been informed separately about this discussion - new members who wish to get more information can contact the General Secretary) .

Most of the comment relates either to the costs of being registered or to the method or location of registration. The original decision to call for a vote on the PRINCIPLE of being registered, or remaining as we are, acknowledged that this question remains to be answered. The decision to call for a vote on the principle was based on the view that it was pointless to devote considerable time and effort to answering these questions if a majority of the members do not wish ICCP to

become registered.

During the Patras meeting, Council agreed to the following resolution modified from one passed by the members sitting in Plenary Session:

Resolved ICCPC05/12/5. Council invites submissions from members on the costs and conditions of registration for the following jurisdictions:

Portugal; Spain; France; Germany; Greece; and Brazil;

and additionally requests members to report on the possibility of registration through either of the following organizations:

American Geological Institute; and European Union of Geosciences.

The submissions should include costs of initial application, cost for registration of name, renewal costs on an annual basis, requirements for reporting and costs of reporting, auditing requirements and costs, costs of professional liability insurance, any extra legal requirements and all legal implications for ICCP. For links with scientific organizations, an account should be given in relation to any limitations that the association might impose on ICCP together with a full account of the costs.

These submissions should be sent to the General Secretary on or before 14 February 2006.

Results of the vote

The result of the vote completed on 30th November 2005 has been declared by the returning officer, Dr Harold Smith, as follows:

Votes cast in the ballot on the Principle of Registration are as follows:

In Favour	*45*
Against	*13*
Abstention	*3*
Invalid (late votes)	*4*

This represents a membership participation of 37%

The majority of those voting in favour of registration is substantial.

On behalf of the ICCP Council, I thank those who voted for taking the time to record their wishes and I would like to encourage greater participation by members in following votes. The contributions of those who wrote in to the General Secretary are also gratefully acknowledged.

Feedback from members

In the past months, investigations have been made by a number of members in relation to how and where ICCP might be registered. Information on the conditions and costs of registration has been received from Greece (Dr. Kimon Christanis), Portugal (Dr. Deolinda Flores) and Australia (Dr Alan Cook). For Australia, detailed information for the state of New South Wales (NSW) has been provided but alternative sets of regulations for the Commonwealth of Australia (ASIC rules) and Queensland are also available and these are broadly similar to those for NSW. Full details of the NSW requirements and charges are available at:
http://www.fairtrading.nsw.gov.au/business/associations.html
A compilation of the relevant forms and charges is available from the General Secretary as a ZIP file.

Information in the replies received to date indicates that comparisons will not be straightforward. The various cost categories are not identical between the various jurisdictions and further work is needed before we can obtain a summary that allows easy comparisons. However, it can be noted that the range of costs is in the low hundreds to low thousands of dollars.

Enquiries in relation to other methods of affiliation have had some results. The European Geosciences Union (EGU) is linked to the Copernicus Gesellschaft, which provides a number of facilities for the Union. Contact to the Copernicus Gesellschaft revealed the the EGU itself is currently busy with the process of registering. Clearly further enquiries are necessary. Any help you can give will be greatly appreciated.

Further activities

In the forthcoming months the information which has been gathered by members will be compiled. A second vote will then be held once council is able to make some firm recommendations to members as to where ICCP should be registered and under which conditions.

With best wishes
Petra David
15 March 2006

News from the Commissions

Commission I

The accreditation program for single seam coals (now known as SCAP; to distinguish it from the upcoming other accreditation programs) has successfully and completely been transferred from the former convener Aivars Depers to Kimon Christanis and the next exercise has already taken off. We would like to thank Aivars Depers for his support in this smooth transition and Kimon for his very fast start. Other more formal changes with regard to the accreditation program include the accreditation committee, which is now called 'accreditation sub-committee' and has three members (Angeles, Rosa and Walter, in other words the chairpersons of the three commissions). It will be responsible for the support of all running and upcoming accreditation programs.

SCAP is always in need of new samples, especially with numbers of participants now being expected to be larger than 70. Therefore if you think you have a suitable single seam coal or can get hold of one, please contact Kimon Christanis or the chair/secretary of commission 1. Sample amount should be something like 5 kg or more, ideally prepared to a top size of 1mm (and few fines). The second requirement must not be met as the samples can be prepared elsewhere. The main problem is to get hold of as many samples as possible. Costs for postage will of course be covered by the ICCP.

Several conveners of Commission I responded to the request to report on progress in their respective working groups. Kimon and Stavros sent in a report of Peat Petrography Working Group (see page 14). Others are, as to be expected in the middle between two meetings, busy to prepare for the next meeting. The Temporal Variations of Coal Working Group has thanks to the support of several members increased its database significantly. Petra David is with the support of many volunteers making progress with the Handbook Edition Group. Peter Crosdale plans on sending out samples for the Degradinite Working Group prior to the next meeting.

A lot of work progress will surface at the Bandung Meeting (and a lot of work will have to be done there). The planning for the Commission I meeting in Bandung will depend greatly on who will be participating. Deolinda and I would therefore ask members of Commission I to let us know as soon as possible, if they intend to attend the meeting or not.

With best wishes
Deolonda Flores / Walter Pickel

Commission II

Work in Commission II has been active in many areas and a report of Thermal Indices Working Group exercise year 2005 by the convenor Carla Araujo is presented on page 17.

New products are about to appear from the WGs which finished their activities last year. The Atlas of Anthropogenic particles of the Environmental Applications of Organic Petrology WG is about to appear after editing at Indiana University. In addition, a paper with the results of the qualifying vitrinite for reflectance WG was submitted to the International Journal of Coal Geology and accepted for publication. The paper, authored by all the participants in the exercise and entitled "Influence of particle and surface quality on the vitrinite reflectance of dispersed organic matter: Comparative exercise using data from the qualifying system for reflectance analysis working group of ICCP" will be published in the near future.

The most notable event has been the approval of an accreditation program in Vitrinite Reflectance of Dispersed Organic Matter (VRDOM). The temporary convenor of this program is Dr Alan Cook. Details of the program, including how to participate, can be found on pages 8 to 10 of this ICCP News. Samples are requested from members for this program but the convenor should be contacted in the first instance to ensure suitability of the suggested material. ICCP will reimburse associated costs.

All the best
Mária Hámor-Vidó / Ángeles Gómez Borrego

Commission III

Heike Eickhoff, as convenor, is advancing the Coke Structure WG through co-operation with Prof. Cornelia Panaitescu. Analysis and discussion of 24 colour slides of coke microstructure has taken place in order to better evaluate coke textures and

nomenclature. This co-operation is a necessary continuation of the difficult problems regarding coke texture from coal blends, which may form the basis of future round robin exercises.

Dr. Slawka Pusz hasn't organized the Working Group of Application of Reflectance to Estimate Structural Order (SOWG) activity for the last two years. The reason results from a basic reorientation of research topics in her Institute, following structural transformations and her involvement in defining new scientific policy of the Institute. The problem will be discussed during the next meeting of the ICCP.

An accreditation program in the Coal Blends Analysis has been approved by Council and will commence in 2006. Full details can be found on pages 8 to 10 of this issue. Members are asked to take special note of the request for samples for this accreditation program, noting that costs will be borne by ICCP - but please contact the convenor first.

Kind regards
Georgeta Predeanu / Rosa Menéndez

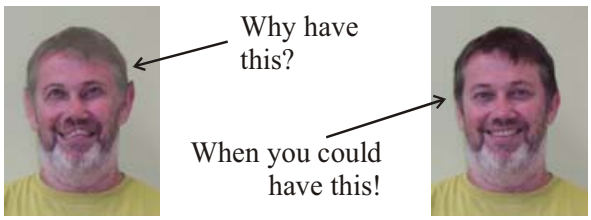
Council has approved the production of a new Directory in 2006

Deadline for inclusion of your photograph or changes in personal details is May 31, 2006.

Distribution of the directory will be concurrent with ICCP News No. 38

Changes in contact and personal details should be sent to the General Secretary:

Dr Petra David
TNO Built Environment and Geosciences
Division of Geo-energy
P.O. Box 80015
3508 TA Utrecht
The Netherlands
mailto:petra.david@tno.nl



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Jim Hower
mailto:hower@caer.uky.edu

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mailtoT.Daalen@elsevier.com

Samples Needed for Teaching

Samples of "Energy sources" for educational purpose are needed for teaching at our Technological Educational Institute of Kozani, Greece. Peat, brown coal, bituminous coal, anthracite, tar sand, bituminous shale or any other relevant samples that might be no longer necessary for you, could be useful. Please contact your ICCP member, Dr. Andreas Iordanidis at
mailto:aiordanidis@yahoo.co.uk
if you have any available.

Thank you in advance!
Andreas Ioranidis

ICCP Peat-Petrography Working Group Report on the 2005 Exercise

Kimon Christanis & Stavros Kalaitzidis
mailto:christan@upatras.gr

1. Introduction

The Peat-Petrography Working Group, established during the Meeting in Utrecht in 2003, has continued its activity during the past year. The preliminary results of the second-year exercise have been presented during the 57th ICCP Annual Meeting in Patras. In this issue we present the report of the 2005 exercise, whereas a more comprehensive report will be prepared taking into consideration also the 2004 results.

2. Method

For the second round-robin exercise, a gallery of 20 photomicrographs from polished blocks of intact peat samples had been distributed among the participants. The gallery included photomicrographs obtained both under white incident light and blue-light excitation (fluorescence). Most of the photos were taken from a eutrophic peat (Nissi topogenous mire, NW Greece) and some from an oligotrophic peat (ombrogenous mire from New Brunswick, Canada). The participants had to describe and identify 38 constituents (macerals) in total. Each participant could use his own-understanding "terms".

The members that conducted the exercise were (in alphabetical order):

Antonis Bouzinos
Kimon Christanis
Janet Dehmer
Deolinda Flores Fonseca
Ángeles Gómez Borrego
Mária Hámor-Vidó
Stavros Kalaitzidis
Wolfgang Kalkreuth
Irena Kostova
Walter Pickel
Ivana Sýkorová

3. General remarks

One of the conclusions of the 2004 exercise was that fluorescence is very essential for distinguishing the peat micro-constituents. Nevertheless, although the 2005 exercise included pairs of microphotographs under both white-incident light and blue-light excitation, the diversity of the replies was also noticeable. Of course, the fact that images were used reduced the ability of the participants to distinguish fine colour differences, as it would be possible under the microscope. Another point is that due to the immaturity of peat, the humic tissues display intense fluorescence, confusing the participants; consequently, several huminite macerals are referred as liptinite. The problem mainly occurred in differentiating between textinite and suberinite, in some case also cutinite (including epiderminite).

Most of the macerals in the microphotographs belonged to the huminite group. Notice has been given to provide a variety of telohuminite under variable degrees of gelification, in order to test if the terms that have been applied in the 2004 exercise (e.g. degraded or grey textinite, eu-textinite, textinite I or II) are applicable or not. The feedback was similar to this of the first exercise, since several terms were beyond the ICCP's nomenclature, like pre-textinite (referring to relatively fresh plant tissues), epiderminite and semidensinte (*see also Report of 2004 Exercise in ICCP News 34*). A thorough presentation of all these terms is within the intention of the convenors and will appear in a next report. Another significant confusion dealt with the distinction between corpohuminite and gelinite.

4. Statistics

The statistical evaluation followed the style of the 2004 exercise meaning that **the predominantly identified maceral** was chosen in order to evaluate statistically the results, and not necessarily the correct one, since it was the first time that fluorescence was included.

The first index that was calculated refers to the degree of agreement. The average agreement in the maceral identification was only 62%, with a range from 18 to 100%. Meaning that in average only seven participants identified the same maceral, and four participants provided different terms. The lowest percentage (18%) refers to cases that only two participants provided exactly the same term. It should be also pointed out that the "predominantly

identified maceral was not always the correct one. The results are almost similar to these of the 2004 exercise (agreement 58%). However, the agreement increases, if replies are grouped under maceral subgroups and groups (75 and 85%, respectively). Table 1 presents the scattering of the replies. Total agreement among the 11 participants has been achieved only for one(!) constituent, whereas in most of the cases (13 times) four different maceral names have been proposed. Nevertheless, it should be mentioned that in comparison to the 2004 exercise, in which the participants provided more than four macerals (31% of the requested points) in most of the cases, this year only 16% of the points were identified using more than 4 terms. If the replies are grouped on the basis of maceral subgroups (or groups including mineral matter), then the variance reduces significantly; in most of the cases the participants provided only two different sub-group names for the same constituent.

Table 1. Variance of the participant's identifications

Maceral differen-tiations	Identifications				% Identific-ations 2004
	number		%		
	Maceral	Sub-groups	Maceral	Sub-groups	Maceral
1	1	5	3	13	7
2	7	19	18	50	18
3	11	9	29	24	21
4	13	5	34	13	24
> 4	6	0	16	0	31

The ability of the participants to identify the constituents (Table 2), defined as the success in classifying them according to the "common" (not necessarily the correct one) maceral is presented in Table 2. It is obvious that, regarding the identification on maceral basis, the participants achieved this year moderate to high success (42-82%), which increases from the level of maceral to the group.

Table 2. Success (expressed in %) of participants (P1-11) to identify a maceral

	Maceral	Subgroup	Group
P1	82	89	92
P2	50	58	79
P3	66	92	97
P4	55	68	79
P5	63	76	84
P6	76	82	87
P7	66	82	89
P8	55	74	92
P9	42	58	68
P10	76	87	92
P11	53	68	76

The maceral that was easily identified by the majority of the participants this year was textinite, although different prefixes were added (e.g. pre-textinite, A or B, Figures 1 and 2).

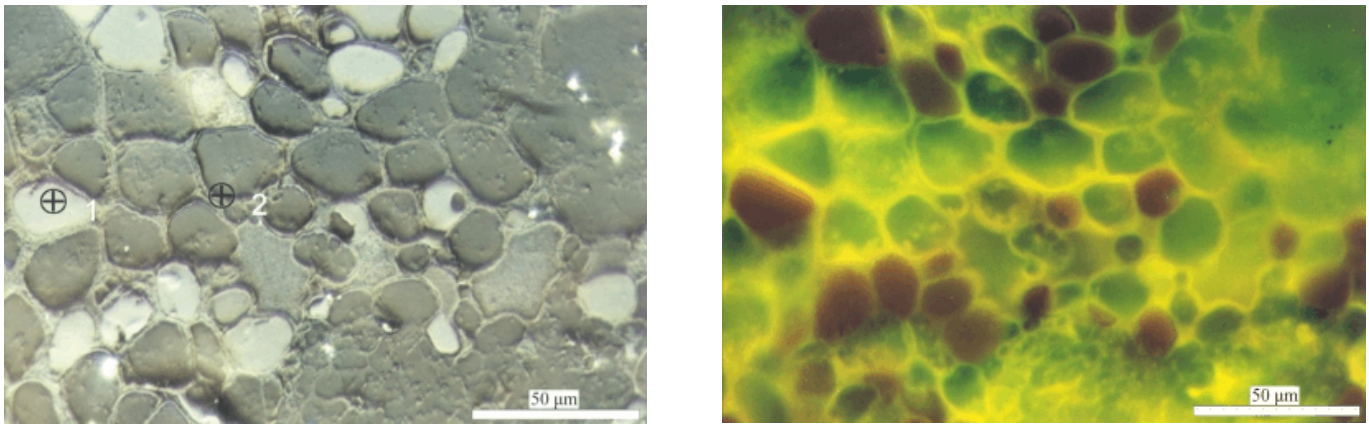

Figure 1. Point 1: corpohuminite (8 participants), textinite (1), textinite/suberinite (1), ulminite (1); Point 2: textinite (5); pre-textinite (2), corpohuminite (2), suberinite (2). Left image in reflected light, oil immersion; bottom image in fluorescence mode

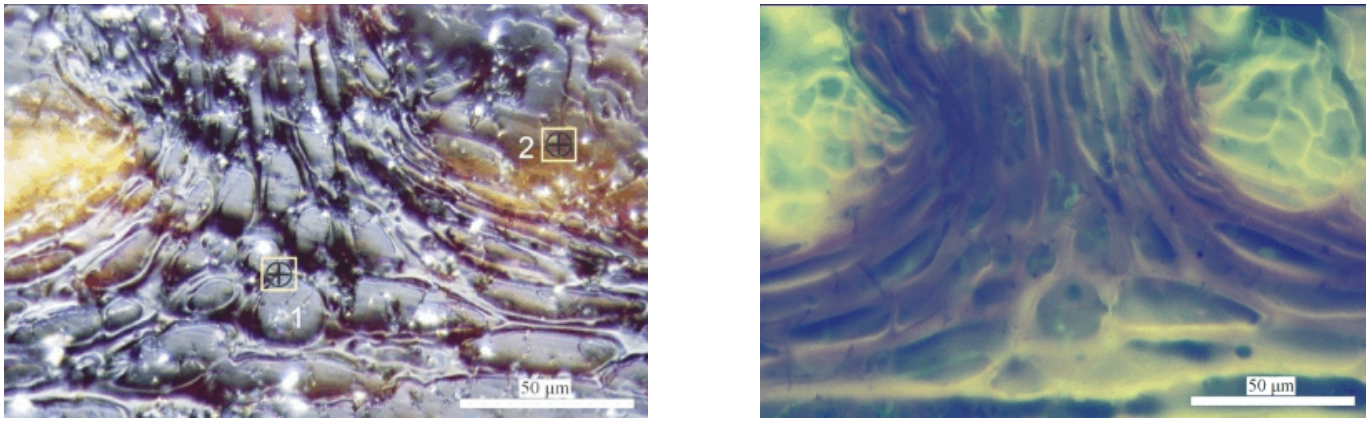

Figure 2. Point 1: textinite (8 participants), corpohuminite (3); Point 2: textinite (5), pre-textinite (2), suberinite (2), corpohuminite (1), cutinite (1).Letf image in reflected light, oil immersion; right image in fluorescence mode

5. Conclusions

The results of the 2005 exercise confirmed the conclusions of the first-year exercise. The main aspect is that huminite classification is applicable to peat petrography, although minor additions (in the form of prefixes such as 'pre-') could provide a more useful approach in the description of humification pathways. Moreover, the distinction between texto-ulminite and eu-ulminite (not included in the ICCP System 1994) might be useful.

Although fluorescence facilitated the identification of several macerals, significant differentiations appeared in a number of fluorescent huminites.

It might also be noted that identification beyond the maceral group level proved often to be difficult in other ICCP round robins with bituminous coals and lignites.

6. Next exercise

The next step might be the distribution among the volunteers of polished blocks from intact peat samples. The participants will be asked to take photomicrographs of several macerals and to identify them.

There is still time to join us in the PPWG!!!

DEADLINE FOR NEXT ICCP NEWS : 10TH JULY 2006

Know Your Coal Petrologist #19

Which young petrologist is waiting to be enlightened from above? Answer page 39.

Meeting Announcements

The 10th ALAGO meeting will be held in Salvador, Bahia, 5-9 November 2006. Chair persons include Zuleika Carretta Correa da Silva and Luiz Martinez in the Coal Geochemistry Session. Major topics include Organic Facies, Organic Geochemistry of Coal and CBM. For more information please see the ALAGO site at http://www.alago.org/

An International Conference on Changing Scenario in Palaeobotany and Allied Subjects is planned during November 15-17, 2006 at Birbal Sahni Institute of Palaeobotany, Lucknow (India) with Palynology and Fossil Fuels (Coal/Oil) Exploration as one of the main themes. For more details please visit: http://www.bsip.res.in

Thermal Indices Working Group - Exercise Year 2005

Convenor: Carla Viviane Araujo

1. INTRODUCTION

The Thermal Indices WG conducted over last years interlaboratory exercises with the aim of improving the reproducibility and comparability of spectral fluorescence microscopy.

Last exercises included, besides spectral fluorescence measurements, other maturity parameters such as vitrinite reflectance, VIRF and some parameters derived from organic geochemistry in order to check the correlations and deviations among them.

A sample from the Irati Formation collected from the lower oil shale seam of the Petrosix Quarry (São Mateus do Sul, Paraná state, Brazil) was analyzed in the Round Robin Exercise of 2004 and results were presented at the 56th ICCP Meeting in Budapest. At this meeting, it was agreed that the WG would analyse samples (Posidonia shale (PS) and Asturias carbonaceous shale (CS)) previously analysed for the Qualifying by the Vitrinite Reflectance WG (Table 1).

- Summary from Borrego *et al.* 2006

Carbonaceous shale. *... Most of the profiles are placed in the same range of vitrinite classes ... This indicates that the participants took readings in the same type of particles...* ***The group mean was R_o=0.70% and the group standard deviation 0.0456****.*

Posidonia shale. *The normalized histograms of sample PS were more complex than those of sample CS. The shape of the curves indicated more vitrinite classes in the histograms although most of them showed clear modal values. The standard deviations for the individual distributions were higher than in sample CS but still under 0.08 for 70% of participants.* ***The group mean for the sample was R_o=0.37 % and the standard deviation was higher than in sample CS (σ = 0.0658)****. The higher standard deviation of the group and the differences in the distribution shapes and positions between participants indicate higher complexity of PS compared to CS...*

Table 1: Sample origin, geological age and suggested depositional environment (Borrego et al. 2006)

	Shale	***Country***	***Age***	***Origin***
CS	Asturian Central Coal Basin	Spain	Carboniferous	Terrestrial
PS	Posidonia	Germany	Jurassic	Marine

2. RESULTS OF ROUND ROBIN EXERCISE 2005

The results on spectral fluorescence measurements, VIRF and organic geochemistry presented in this report are based on data provided by 13 participants (Table 2).

Table 2: List of participants and associated laboratories

Participant	***Institution***	***Country***
Carla Viviane **A**raujo/ Silvana Maria Barbanti / Taíssa Menezes	PETROBRAS R&D Center	Brazil
Angeles Gomez **B**orrego	INCAR	Spain
James **H**ower	University of Kentucky/ Center for Applied Energy Research	USA
Wolfgang **K**alkreuth	Federal University of Rio Grande do Sul -UFRGS	Brazil
Ralf **L**ittke/ Jan Schwarzbauer	RWTH Aachen University	Germany
João Graciano **M**endonça Filho	Federal University of Rio de Janeiro - UFRJ	Brazil
Jane **N**ewman/ Nick Moore	Newman Energy Research Ltd	New Zealand
Kathrin **R**eimer/ Petra David	TNO - Utrecht	The Netherlands

2.1 Spectral Fluorescence Measurements

Five participants provided results on spectral fluorescence measurements. Spectral data provided by these participants were corrected with the correction function from the calibrated common lamp source (Baranger *et al.* 1990). Two participants analysed the samples in the same system.

Participants were asked to make the measurements on both alginites and sporinites. All five participants provided spectral curves for alginites of the Posidonia sample.

For the Asturias sample two participants provided curves for sporinite, one participant for alginite and two participants reported that the spectral curves were not meaningful because no appropriate object for measurement was found.

Asturias Carbonaceous Shale

Sporinite and alginite are not abundant in the Asturias CS sample. In addition to this feature the subjects for measurements are usually very thin, this is probably the reason why two participants did not provide results for this sample. Figure 1 presents the spectral curve obtained for alginite by participant A and Figure 2 present the curves from participants B and H for sporinite. The correlation among the curves for sporinite is good and both trends to present a secondary peak that is a characteristic feature for sporinite fluorescence spectra in the range of a High Volatile Bituminous A-C rank. The same feature was observed in the sporinite from Irati sample analysed last year for this WG. Parameters obtained for both alginite and sporinite are summarized in Tables 3 and 4.

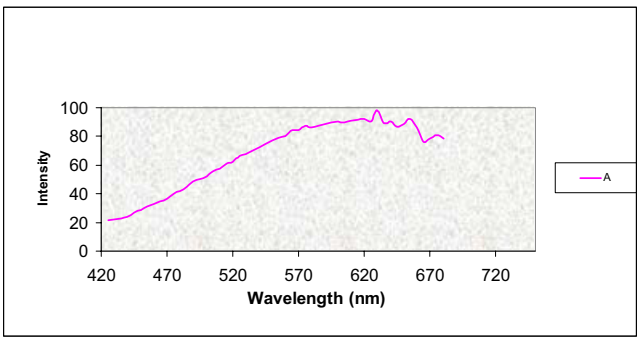

Figure 1 - Spectral curve for alginite provided by participant A

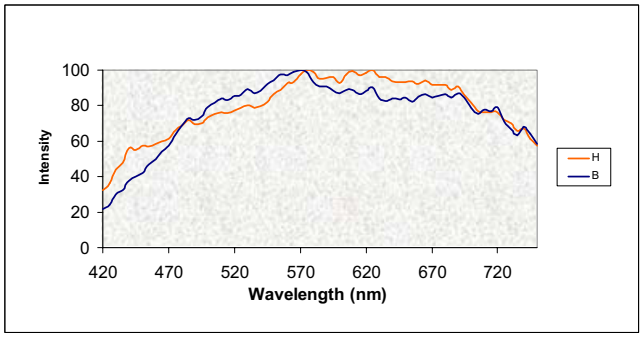

Figure 2 - Spectral curve for sporinites provided by participants H and B

Table 3: Spectral fluorescence parameters obtained for the alginite

Participant	***λmax (nm)***	***Q (I650/I500)***	***Q max (Imax/ I500)***
A	630	1.7	1.88

Table 4: Spectral fluorescence parameters obtained for the sporinite

Participant	***λmax (nm)***	***Q (I650/I500)***	***Q max (Imax/ I500)***
B	570	1.07	1.26
H	575/625	1.27	1.36

Posidonia Shale

Figure 3 presents fluorescence spectral curves of telalginite (tasmanites) provided by four participants. The correlation among these curves is very good, with λmax ranging from 510nm to 535nm and with excellent agreement in the determination of the Qmax values (1.01 - 1.03, Table 5).

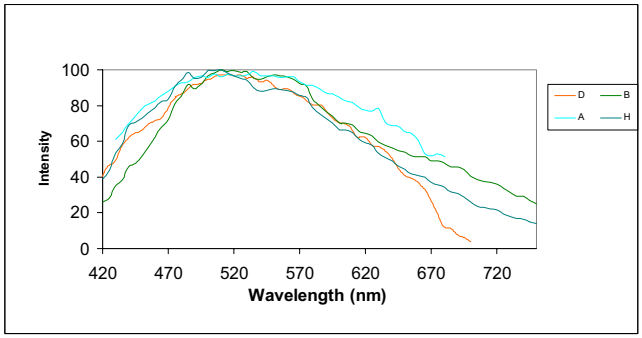

Figure 3 - Spectral curve for telalginite provided by four participants

Table 5: Spectral fluorescence parameters obtained for the telaginite

Participant	***λmax (nm)***	***Q (I650/I500)***	***Q max (Imax/ I500)***
A	535	0.68	1.03
B	510	0.55	1.03
C 1.1/1	550	0.82	1.43
C 1.1/4	595	0.96	1.46
C 1.1/5	570	0.71	1.22
C 1.1/12	560	0.81	1.40
D	515	0.43	1.03
H	510	0.45	1.01

Figure 4 shows the same curves of Figure 3 and in addition four spectral curves provided by participant C. It is worth to mentioning that this participant provided 10 curves to characterize this alginite population. The four curves presented in Figure 4, from participant C, were considered representative of the ten curves provided by this participant. The spectral fluorescence curves and parameters provided by participant C present a shift in λmax values ranging from 550nm to 595nm in relation to those values provided by other participants (510 - 535 nm). This feature could be either a response to subject selection for measurements, but it seems to be more likely related to systems calibration or, for instance, the size of the measuring diaphragm. Table 5 summarizes the fluorescence parameters obtained by the five participants.

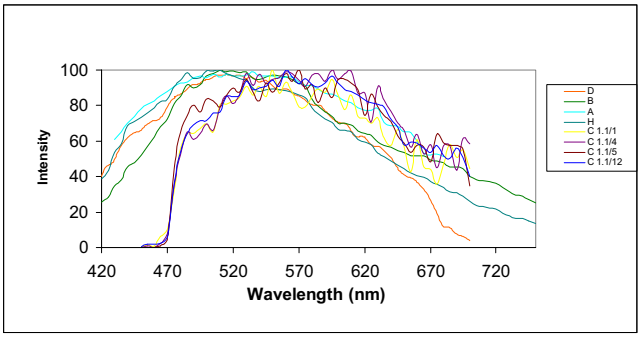

Figure 4 - Spectral curve for telalginite provided by five participants

2.2 VIRF

A report on VIRF results were provided by Jane Newman. In this report a brief summary of the results and interpretations based on VIRF is presented below:

*"... **The Asturias sample** contains abundant telovitrinite, none of which falls into the perhydrous field. Reflectance of subjects which have the appearance of vitrinite ranges from 0.62% to 0.92% Ro (random), and Ro (normal) calculated on all vitrinite is 0.82% (Figure 5). However a substantial population of subjects with reflectance above 0.82% exhibits uniformly low fluorescence and could, according to VIRF criteria, be classed with the inertinite group. This classification would reduce Ro (normal) to 0.74% (Figure 6)..."*

This second interpretation is closer to the actual values measured by participants in the WG (0.70%).

"The Posidonia sample produces a much more complex VIRF chart with more than one "vitrinite" population (Figure 7). The lower reflectance population has a distinctive granular texture and includes a significant perhydrous component. Similar complex charts have been obtained from shales ranging in age from Devonian to Early Cretaceous, and the low reflectance population is interpreted to represent a primitive vitrinite-like material which has reflectance up to 0.50% below Ro (normal). This material is provisionally entitled Population G, and was identified and discussed in the Irati Fm. sample (VIRF analysis of Irati Fm oil shale, Parana Basin, Brazil. Report for the ICCP Thermal Indices Working Group Exercise year 2004). *The average Ro (random) of Population G ... is approximately 0.30% whereas Ro (normal) calculated on the inferred normal vitrinite population is 0.69% (Ro random)...."*

The actual reflectance values measured were 0.37%, slightly higher than those derived for the population G, but significantly lower than those of the so called normal vitrinite population. No systematic presence of different vitrinite population was reported for this sample during vitrinite reflectance analysis by participants in the Qualifying for vitrinite reflectance WG.

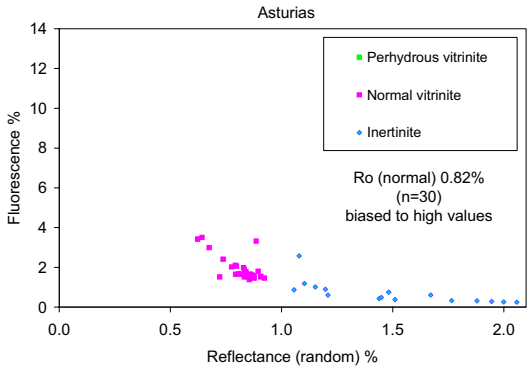

Figure 5 - VIRF chart for the Asturias sample. Maceral identifications are based on physical characteristics and are also compatible with chart interpretation based on VIRF criteria. However, an alternative VIRF interpretation is possible, as shown in Figure 6

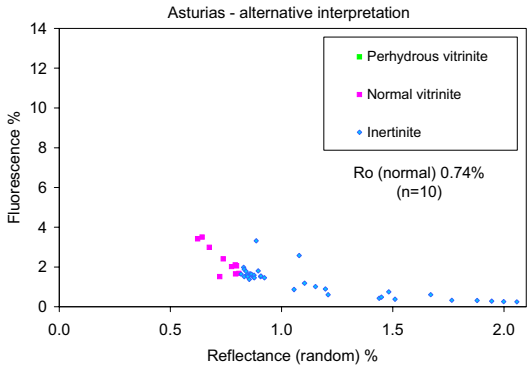

Figure 6 - Possible alternative interpretation of VIRF data for the Asturias sample. In this interpretation the subjects with reflectance above 0.81% reflectance, which (a) have relatively low fluorescence and (b) exhibit a low gradient relationship between reflectance and fluorescence, are assigned to the inertinite group …This results in Ro (normal) are 0.08% lower than in the Figure 5 interpretation

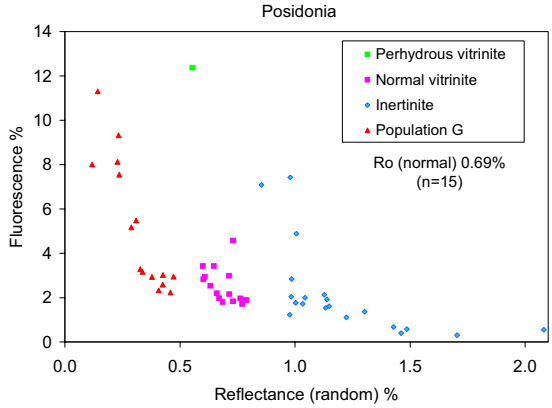

Figure 7 - VIRF chart for the Posidonia shale sample, showing distinct normal vitrinite and Population G populations

2.3 Organic Geochemistry

2.3.1 TOC/ Rock-Eval Pyrolysis/Ultimate and Proximate Analysis

Three participants provided results on bulk geochemistry (TOC/ Rock-Eval Pyrolysis) and one on ultimate/proximate analysis for Asturias CS and Posidonia shale samples (Tables 6 and 7). A good agreement between TOC values and wt.% C derived from ultimate analyses can be observed for both samples (Tables 6 and 7), although the carbon contents derived from ultimate analysis are slightly higher.

For the Rock-Eval pyrolysis data the best fit is presented by hydrocarbon source potential (S_2), hydrogen index (HI) and Tmax. The hydrocarbon source potential (S_2) and hydrogen index (HI) properly characterize the different type of organic matter of each sample and the Tmax point out the lower maturation of Posidonia shale sample in relation to the Asturias CS sample.

Table 6: Results on TOC, Rock-Eval Pyrolysis, Ultimate and Proximate Analyses for Asturias CS sample (ultimate and proximate analyses results in wt%)

	Participant			
	C	F	H	E
TOC (wt%)	8.4	7.9	7.9	-
S_1 (mgHC/grock)	0.62	0.38	0.23	-
S_2 (mgHC/grock)	13.08	10.45	12.62	-
S_3 (mgCO_2/grock)	0.22	0.69	0.49	-
HI (mgHC/gTOC)	165	132	160	-
OI (mgCO_2/gTOC)	2	9	6	-
Tmax (°C)	436	439	434	-
C	-	-	-	8.71
H	-	-	-	1.45
N	-	-	-	0.31
S	-	-	-	1.12
O	-	-	-	6.59
Ash	-	-	-	81.82
Moisture	-	-	-	2.05

Table 7: Results on TOC, Rock-Eval Pyrolysis,Ultimate and Proximate Analyses for Posidonia shale sample (ultimate and proximate analyses results in wt%))

	Participant			
	C	F	H	E
TOC (wt%)	14.1	12.6	12.9	-
S_1 (mgHC/grock)	5.82	4.43	3.92	-
S_2 (mgHC/grock)	92.12	90.33	93.77	-
S_3 (mgCO_2/grock)	0.44	1.1	0.37	-
HI (mgHC/gTOC)	655	718	727	-
OI (mgCO_2/gTOC)	3	9	3	-
Tmax (°C)	426	428	425	-
C	-	-	-	15.49
H	-	-	-	1.97
N	-	-	-	0.31
S	-	-	-	4.00
O	-	-	-	7.41
Ash	-	-	-	70.82
Moisture	-	-	-	2.42

2.3.2 Gas chromatography and mass spectrometry

n-alkanes and isoprenoids

Pristane/*n*-C_{17} and phytane/*n*-C_{18} ratios decrease with increasing thermal maturity as more *n*-paraffins are generated from kerogen by craking (Tissot *el al*., 1971 *in* Peters & Moldowan, 1993). The pristane/phytane ratio changes by thermal evolution in coal, and this can be extended to kerogens of comparable composition. Brown and subbituminous coals have moderate pristane:phytane ratios (1 to 7) whereas high volatile bituminous coals have higher values (7 to 15, Tissot & Welte, 1984).

The carbon preference index (CPI) was proposed as a maturity parameter based on the progressive change of the distribution of long-chain *n*-alkanes during maturation (Bray and Evans, 1961 *in* Tissot & Welte, 1984). Thermal degradation of kerogen during catagenesis generates new alkanes without predominance. Nevertheless, the CPI values are influenced by the type of organic matter and by the degree of maturity (Tissot & Welte, 1984). Despite the various limitations of this index it can be considered as a qualitative indicator and be used in association with another independent index. CPI values above 1.5 always refer to relatively immature samples (Tissot & Welte, 1984).

Figures 8 and 9 present a general GC profile for the studied samples. Tables 8 and 9 summarize some ratios derived from GC analyses provided by participants, except participant G that provided results based on m/z 85 monitoring and total ion chromatogram.

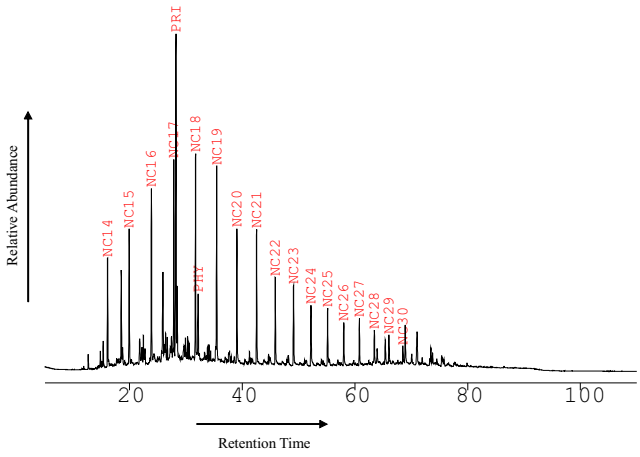

Figure 8- Aliphatic hydrocarbon distribution for Asturias CS sample for illustration

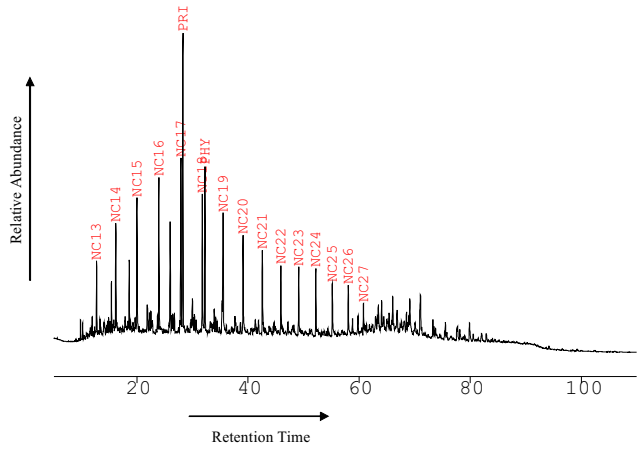

Figure 9- Aliphatic hydrocarbon distribution for Posidonia shale sample for illustration

The Pr/Ph ratios for the Asturias CS sample (Table 8) are generally high compared to Pr/Ph ratios for the Posidonia shale sample (Table 9). For the Asturias CS sample some differences can be detected between participants as shown by the low

Pr/Ph and phytane/*n*-C_{18} ratios reported by participant F (Table 8). Pr/Ph ratio up to 5.6, for the Asturias sample, is lower than what would be expected based on the group mean Ro of 0.70% obtained for the Qualifying for Vitrinite Reflectance WG.

CPI indices, for the Asturias sample, are mostly lower than 1.5 (except for some ratios provided by participant G). This would indicate a relatively high maturity in agreement with the group mean Ro of 0.70% obtained for the Qualifying for Vitrinite Reflectance WG. Nevertheless, the Pr/Ph ratio is lower than expected for this vitrinite reflectance.

The correlation of ratios among four different participants, for the Posidonia shale sample, is reasonably good (Table 9). It is worth to mention that the CPI indices are mostly lower than 1.5 like in Asturias CS sample despite the lower mean group vitrinite reflectance of the Posidonia shale. The ratios involving the *n*-alkanes of medium boiling point were more similar.

Table 8: Results from GC analyses for the Asturias CS sample

	Participant			
	C	F	G*	H
Pr/Ph	4.07	3.20	5.25	5.64
Pr/n-C_{17}	2.12	2.18	2.0	2.12
Ph/n-C_{18}	0.51	0.11	0.4	0.4
CPI (22-32)	1.14	0.98	-	1.01
CPI (24-32)	1.17	1.20	-	0.98
CPI (26-32)	1.3	1.38	-	0.67
CPI (26-30)	1.17	0.99	3.03	1.02
CPI (26-28)	1.26	0.99	9.16	1.08
CPI (28-30)	0.99	0.98	1.17	0.94
CPI (20-22)	1.19	0.43	1.11	1.19

* from the m/z 85

Table 9: Results from GC analyses for the Posidonia shale sample

	Participant			
	C	F	G*	H
Pr/Ph	1.68	1.47	1.42	1.73
Pr/n-C_{17}	1.86	2.07	2.15	1.96
Ph/n-C_{18}	1.61	1.13	1.44	1.55
CPI (22-32)	1.02	1.29	1.52	1.04
CPI (24-32)	1.03	1.48	1.6	1.05
CPI (26-32)	1.15	1.95	1.60	-
CPI (26-30)	1.13	1.20	1.64	1.18
CPI (26-28)	1.31	0.75	1.18	1.18
CPI (28-30)	0.94	1.95	1.89	-
CPI (20-22)	0.91	0.90	1.01	1.01

* from the Total Ion Chromatogram (TIC)

Terpanes

Figures 10 and 11 present the distribution of terpanes illustrating the range considered for the biomarker ratios presented on Tables 10 and 11.

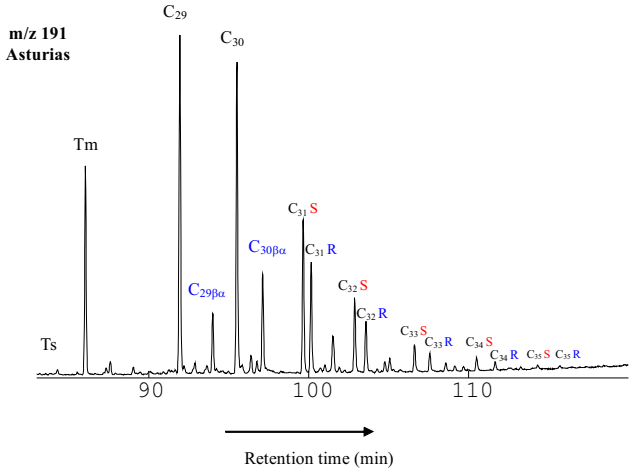

Figure 10- Mass chromatogram, m/z 191, showing terpane distribution for Asturias CS sample. A detail of the range considered for the ratios presented on Table 10

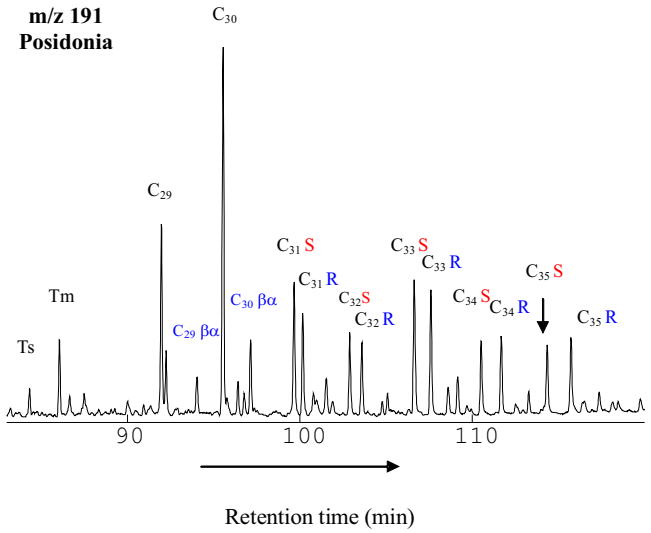

Figure 11- Mass chromatogram, m/z 191, showing terpane distribution for the Posidonia shale sample. A detail of the range considered for the ratios presented on Table 11

The correlation between the results on terpane distribution is good (Table 10), particularly between participants F and H. The best correlations were obtained for homohopanes from C_{31} to C_{33} S/(S+R) ratios. Ts/(Ts+Tm) ratio is both maturity and source dependent (Peters & Moldowan, 1993). The values obtained for this ratio (0.03-0.15; Table 10) seems to be anomalously low for the Asturias CS.

The isomerization of the biologically more abundant R isomer into the thermally more stable S isomer for homohopanes reaches its thermal equilibrium stage at ca. 0.6% VRE, with S/(S+R) ratios of ca. 0.6. The Asturias CS shale extract shows S/(S+R) ratios mostly around 0.6 for C_{31}-C_{33} homohopanes (Table 10), which point out that it already reached the equilibrium.

Ts/(Ts+Tm) ratios for the Posidonia shale sample are low (0.14 to 0.39, Table 11) but higher than those for the Asturias CS sample. As it was observed in the Asturias CS sample the best correlations were achieved for the homohopanes C_{31} - C_{33} S/(S+R) ratios. The extracts of the Posidonia shale sample show S/(S+R) ratios ranging from 0.31 to 0.64. For the C_{32} homohopane, the average value around 0.53 (except for participant G), point out that the extract from this sample is close to the equilibrium.

Table 10: Terpane maturity parameters for the Asturias CS sample

Ratios	***Participant***		
	C	F	H
Ts/Ts+Tm	0.15	0.03	0.02
Tm/C_{27}β	n.d.	n.d.	n.d.
C_{29} αβ/(αβ+βα)	n.d.	0.85	0.85
C_{30} αβ/(αβ+βα)	n.d.	0.75	0.76
C_{31}αβS/(22S+22R)	0.58	0.59	0.58
C_{32}αβS/(22S+22R)	0.60	0.58	0.59
C_{33}αβS/(22S+22R)	0.52	0.59	0.59
Homohopanes/ C_{30} αβ	1.16	1.5	1.47
C_{27} hopanes/ C_{30} αβ	1.47	0.73	0.68
C_{31} αβ hopanes/ C_{30} αβ	0.46	0.83	0.84

G participant reported a severe contamination by phthalate for Asturias sample, n.d.: not detected

Table 11: Terpane maturity parameters for the Posidonia shale sample

Ratios	***Participant***			
	C	F	G	H
Ts/Ts+Tm	0.39	0.28	0.14	0.27
Tm/C_{27}β	n.d.	n.d.	0.12	n.d.
C_{29} αβ/(αβ+βα)	n.d.	0.83	0.87	0.84
C_{30} αβ/(αβ+βα)	n.d.	0.81	0.81	0.83
C_{31}αβS/(22S+22R)	0.57	0.54	0.45	0.57
C_{32}αβS/(22S+22R)	0.54	0.52	0.64	0.53
C_{33}αβS/(22S+22R)	0.57	0.47	0.31	0.52
Homohopanes/ C_{30} αβ	1.16	2.41	1.55	2.56
C_{27} hopanes/ C_{30} αβ	0.61	0.37	0.26	0.29
C_{31} αβ hopanes/ C_{30} αβ	0.49	0.66	0.54	0.64

Steranes

Three participants provided results from sterane analyses of the Asturias CS sample and 4 participants for the Posidonia shale sample. Participant H provides results based on MRM-GC-MS technique, besides the results based on selective ion monitoring analyses. Biomarker ratios provided by MRM-GC-MS analysis were

considered for maturity evaluation when available since they are more precise due to the monitoring of specific transitions from molecular ions to the diagnostic ions. Figures 12 and 13 present the distribution of the steranes, for illustration, with a detail on the range considered for the ratios presented on Tables 12 and 13.

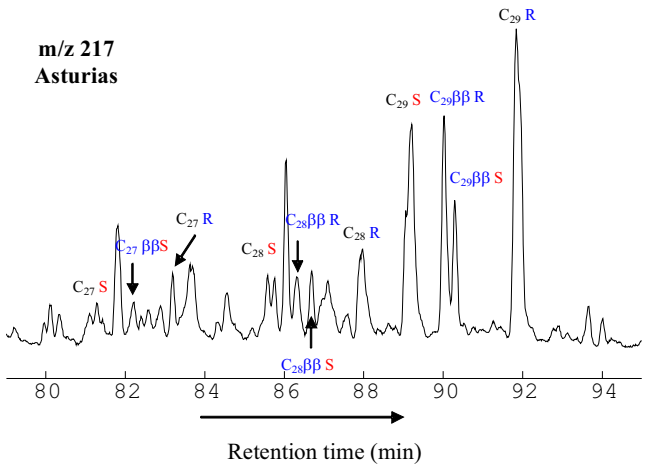

Figure 12- Mass chromatogram, m/z 217, showing the distribution of steranes for the Asturias CS sample. A detail of the range considered for the ratios presented on Table 12

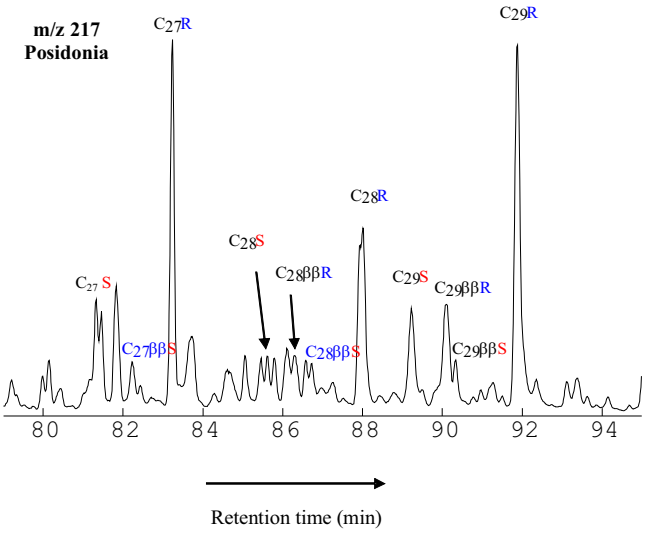

Figure 13- Mass chromatogram, m/z 217, showing the distribution of steranes for Posidonia shale sample. A detail of the range considered for the ratios presented on Table 12

The level of agreement among the sterane ratios is lower than for the terpane analyses. Low correlation of ratios could be related to differences on analytical procedures or on calculations.

The commonly occurring series from C_{27} to C_{29} ααα and αββ steranes were detected. There is a predominance of C_{29} steranes in the Asturias sample (Table 12) that can be related to the higher plant input. The Posidonia sample presents a predominance of C_{27} and C_{29} steranes (Table 13), which is consistent with algal and higher plant input.

Biologically more abundant R isomers on C-20 position isomerise into the thermally more stable S configuration with thermal maturation, and αα (14β, 17β (H)) isomers are isomerized to thermally more stable ββ (14β, 17β (H)) isomers (Mackenzie *et al*., 1982a, Mackenzie *et al*., 1982b, Mackenzie & Mckenzie, 1983). In the Asturias sample the C_{29} ααα 20S/(20S+20R) ratio, ranging from 0.44 to 0.52, is close to the empirical endpoint, ie. ca. 0.54 for the ratio S/(S+R), equivalent to ca. 0.9% VRE. In the Posidonia shale sample this ratio ranges from 0.25 to 0.38 and do not reach the empirical endpoint (ca. 0.54), pointing out the lower maturation of Posidonia compared to the Asturias CS sample. The isomerization ratio of the C_{29} ββ/(ββ+αα) ranges from 0.32 to 0.38 for the Asturias CS sample and from 0.16 to 0.32 for the Posidonia shale sample. In both samples these ratios are far from the empirical endpoint that is 0.7, equivalent to ca. 1% VRE (Peters & Moldowan, 1993).

An estimation of VRE from the C_{29} S/R ratio based on a relationship published by Sofer *et al*. (1993) is also provided (Tables 12 and 13). Some of the VRE for Asturias CS sample correlates to 0.70%, that is, the mean group vitrinite reflectance achieved by the Qualifying for vitrinite reflectance WG. On the other hand, the range of VRE for the Posidonia shale sample (0.52% to 0.66%) is significantly higher than the 0.37% achieved by the Qualifying for vitrinite reflectance WG.

Table 12: Sterane maturity parameters for the Asturias CS sample

Ratios	***Participant***			
	C	F	H	H*
C_{27} steranes (%total C_{27} to C_{29} regular steranes)	15	19	17	
C_{28} steranes (%total C_{27} to C_{29} regular steranes)	40	20	20	
C_{29} steranes (%total C_{27} to C_{29} regular steranes)	43	61	63	
C_{27} ααα 20S/(20S+20R)	0.80	0.50	0.35	0.37
C_{28} ααα 20S/(20S+20R)	0.53	0.24	0.41	0.44
C_{29} ααα 20S/(20S+20R)	0.44	0.50	0.41	0.52
C_{29} ααα 20S/20R	0.79	0.99	0.69	1.07
VR equivalent (Sofer *et.al*,1993)	0.75	0.75	0.70	0.89
C_{27}αββ/(αββ+ααααα)	0.26	n.d.	0.59	0.37
C_{28}αββ/(αββ+ααααα)	0.26	0.42	0.45	0.42
C_{29}αββ/(αββ+ααααα)	0.32	0.34	0.40	0.38

G participant reported a severe contamination by phthalate for Asturias sample;
n.d.: not detected
* MRM-GC-MS (metastable reaction monitoring)

Table 13: Maturity related steranes parameters for the Posidonia shale Sample

Ratios	***Participant***				
	C	F	G	H	H*
C_{27} steranes (%total C_{27} to C_{29} regular steranes)	39	37	30	40	
C_{28} steranes (%total C_{27} to C_{29} regular steranes)	34	24	20	21	
C_{29} steranes (%total C_{27} to C_{29} regular steranes)	31	39	50	39	
C_{27} ααα 20S/(20S+20R)	0.40	0.37	0.43	0.20	0.23
C_{28} ααα 20S/(20S+20R)	0.35	0.10	-	0.23	0.21
C_{29} ααα 20S/(20S+20R)	0.36	0.28	0.38	0.22	0.25
C_{29} ααα 20S/20R	0.56	0.39	0.61	0.27	0.33
VR equivalent (Sofer *et.al*,1993)	0.63	0.56	0.66	0.49	0.52
C_{27}αββ/(αββ+ααααα)	0.18	n.d	-	0.25	0.17
C_{28}αββ/(αββ+ααααα)	0.36	0.27	-	0.29	0.19
C_{29}αββ/(αββ+ααααα)	0.32	0.26	-	0.25	0.16

n.d.: not detected
* MRM-GC-MS (metastable reaction monitoring)

Aromatic hydrocarbons - Methylphenanthrene Index

The methylphenanthrene index is based on the distribution of phenanthrene and three or four of its methyl homologs which shows a progressive change during maturation (Radke *et al.*, 1982a, *in* Tissot & Welte, 1984). The increase of relative abundance of 2- and 3-methylphenanthrene during maturation can be explained on the basis of rearrangement reactions, which, at higher temperatures, favor these thermodynamically more stable isomers (Tissot & Welte, 1984).

The Methylphenanthrene index MPI 1 is defined as follows:

- MPI1=(1.5*(3MP+2MP))/(PHEN+9MP+1MP);

A similar ratio, Methylphenanthrene index MPI 2, may be used as controls means or as a substitute for MPI1:

- MPI2=(3*(2MP))/(PHEN+9MP+1MP);

Table 14: Maturity related methyphenanthrene parameters for the Asturias CS sample

Ratios	***Participant***			
	C	F	G	H
MPI 1	0.79	0.34	0.78	0.73
MPI 2	0.26	0.37	0.87	0.88

Table 15: Maturity related methyphenanthrene parameters for the Posidonia shale sample

Ratios	***Participant***			
	C	F	G	H
MPI 1	0.56	0.17	0.52	0.49
MPI 2	0.18	0.16	0.52	0.55

The numerical value of MPI2 is generally somewhat higher than of the MPI1. This difference reflects a slight predominance of 2- over 3-methylphenantrene which is common to the methylphenanthrene distribution (Tissot & Welte, 1984).

According to Peters & Moldowan (1993) several difficulties limit the use of methylphenantrene indices. Among them, the most relevant for this study is that samples with different maturities can show identical ratios.

Tables 14 and 15 summarize the methylphenanthrene indices provided by four participants. It is possible to observe that the MPI 1 ratios present a better correlation among participants than MPI 2. Results of participants G and H present a good correlation for both MPI1 and MPI2. The problem with the low correlation among results for MPI 2 may be, more likely, related to calculations.

MPI 1 ratios are, in general, higher for the Asturias CS sample than for the Posidonia shale sample, reflecting the higher maturation level of the Asturias CS sample.

It is worth to mentioning that previous exercises of the Thermal Indices WG did not include MPI parameters.

3. REMARKS AND DISCUSSION

- A good correlation among the spectral fluorescence curves and parameters for sporinites from the Asturias CS sample was observed. Participants reported to have problems in obtaining meaningful measurements due to the particular features of liptinite present in this sample. A very good correlation among spectral fluorescence curves and parameters was observed for the majority of participants for the Posidonia shale sample.

- VIRF analysis provided two possible interpretations for Ro (normal) to the Asturias CS sample. The Ro (normal) of 0.74% derived from the alternative interpretation present a good correlation with the group mean 0.70% Ro achieved by the Qualifying for vitrinite reflectance WG. For the Posidonia sample the VIRF chart is much more complex. A Population G was recognized in this sample presenting approximately 0.30% Ro whereas the Ro (normal) calculated on the inferred normal vitrinite is 0.69%.

Tmax from pyrolysis Rock-Eval present, in general, a good correlation, as well as the parameters derived from the GC analyses (*n*-alkanes and isoprenoids). For the terpane analyses the best correlations were presented by the homohopane (S/S+R) ratios for both samples. The ratios based on sterane analysis presented, in general, a better correlation for the Asturias sample. MPI 1 ratios are, in general, higher for the Asturias CS sample than for the Posidonia shale sample.

Some relevant observations have arisen from the results obtained by this exercise. Figures 14 and 15 summarize the distribution of some microscopic and chemical maturity parameters.

The parameters for the Asturias CS sample present a narrower dispersion (Figure 14) when compared to the Posidonia sample (Figure 15). There is a good correlation between the mean group Ro (random) 0.70%, alternative VIRF 0.74%, the rank range based on sporinite λmax and some isomerization ratios (VRE from the steranes C_{29} ααα *S/R* ratio and C_{29} ααα 20*S*/(20S+ 20R) ratio). Tmax from pyrolysis Rock-Eval indicates a slightly lower maturation level, whereas fluorescence parameters derived from alginite tends to point out a slightly higher maturation.

The correlation among different maturity parameters for the Posidonia shale sample, present a much more complex scenario (Figure 15). The higher complexity for maturation evaluation, presented by Posidonia sample, in comparison to the Asturias sample, was previously observed by the Qualifying for vitrinite reflectance WG exercise and VIRF analysis. A general good agreement of chemical maturity parameters, including Tmax from Rock-Eval pyrolysis, point out a higher maturation level for the Posidonia sample than the 0.37% Ro random, suggesting that this value may be suppressed. It is worth to mentioning the good correlation between the mean group Ro (random) of 0.37% and spectral fluorescence parameters provided by some participants. In this case, spectral fluorescence parameters do not point out suppression. The same behaviour was previously observed by the Thermal Indices WG for the Alpha sample study in 2002. The vitrinite population G identified by the VIRF study, as not true vitrinite, is probably included on the particles measured by the Qualifying vitrinite for reflectance WG, which yielded a group mean Ro (random) of 0.37%. VIRF Ro (normal) 0.69% is based on a population which was not registered as vitrinite by the Qualifying for vitrinite reflectance WG, and provides some

support for the various geochemical parameters which suggest the Posidonia shale has higher maturity than Ro (random) 0.37%.

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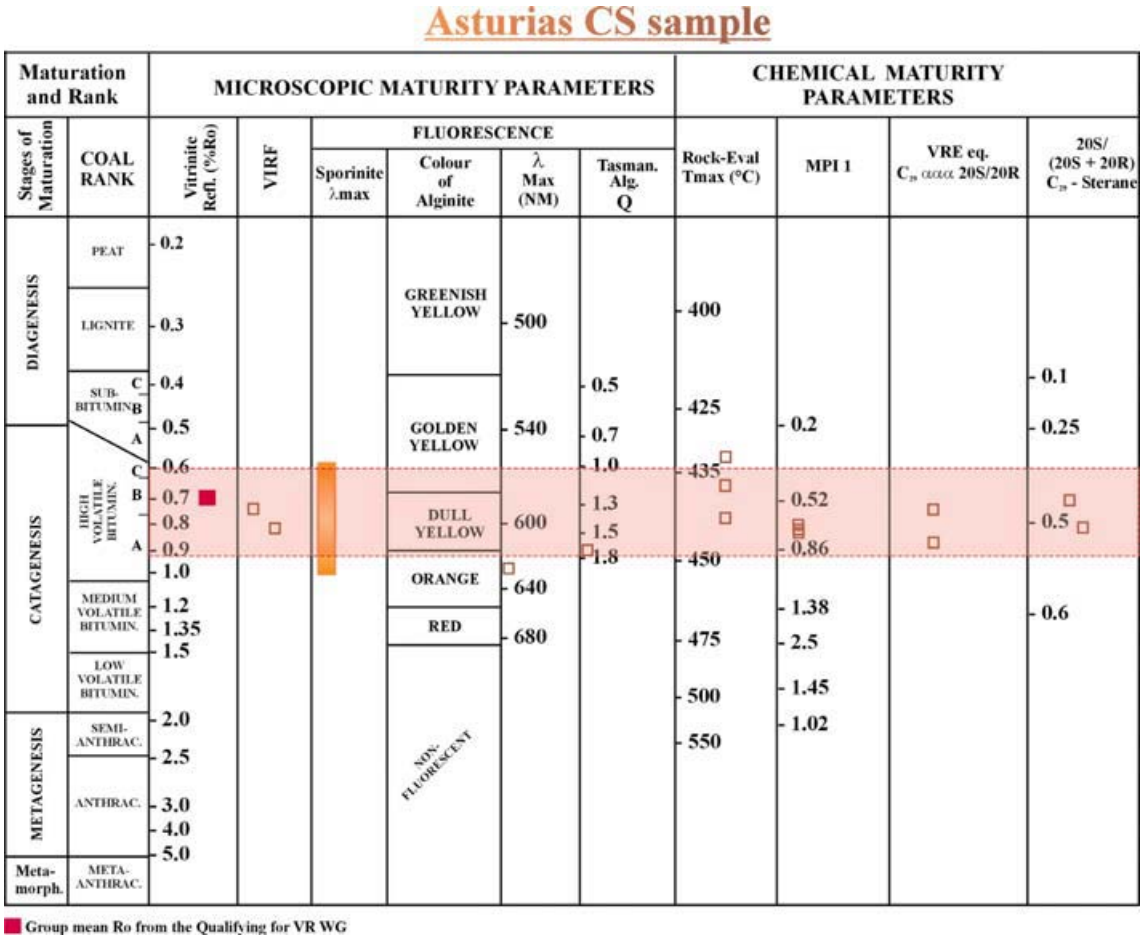


Figure 14: Correlation of microscopic and chemical maturation parameters chart from Asturias CS sample (modified from Mukhopadhyay, 1994)

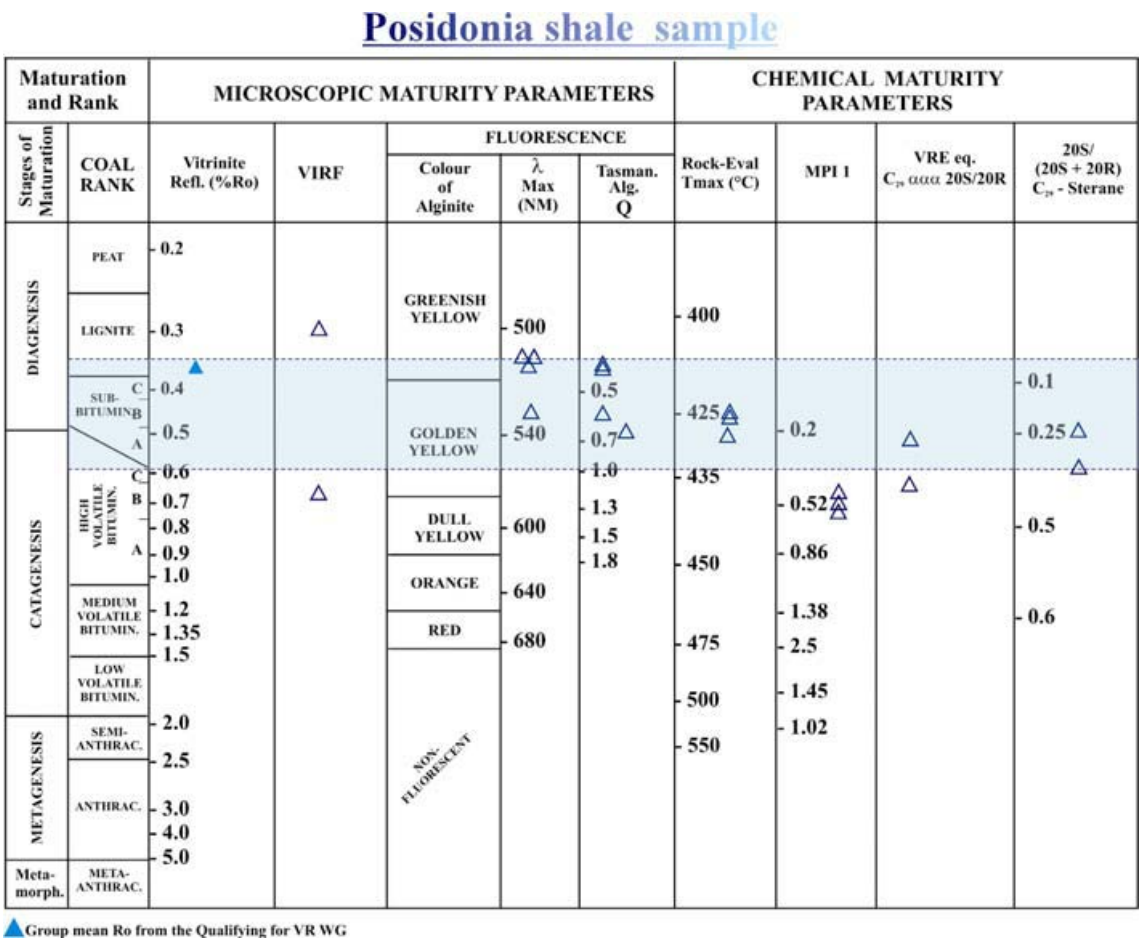


Figure 15: Correlation of microscopic and chemical maturation parameters chart from Posidonia shale sample (modified from Mukhopadhyay, 1994)

ICCP Classifieds

A free service to ICCP members. Send your 'For Sale', 'Wanted to Buy', 'To Give Away' etc. to the editor.

WANTED TO BUY

- Objective: Leitz 50/0.85 P oil , Infinity/0
  Dave Pearson
  mailto:dpearson@coalpetrography.com
- Point counter stage only
  Peter Crosdale
  mailto:peter.crosdale@energyrc.com.au
- ICCP Handbook 1st and 2nd Editions; Proceedings 1st, 2nd and 3rd ICCP Meetings
  Peter Crosdale
  mailto:peter.crosdale@energyrc.com.au
- Rotating Polarizer for Vertical-Pol Illuminator, Leitz Orthoplan
  Paul Hackley
  mailto:phackley@usgs.gov

Know Your Coal Petrologist #20

Two eminent members of ICCP are out enjoying an evening river cruise at the 2003 Utrecht meeting. The same cruise was also the location of the photos for KYCP #18 and #19. Answer page 39.

Measurement of Permeability with Gas/Liquid Whole Core Permeameter and Porosimeter in Coalbed Methane Exploration

Atul Kumar Varma[1], Vinod Atmaram Mendhe[2] and Ajay Kumar Singh[2]

[1]Coal Geology and Organic Peterology Lab., Department of Applied Geology,
Indian School of Mines, Dhanbad-826004, India
[2]Emission and Degasification Department, Central Mining Research Institute,
Barwa Road, Dhanbad-826001, India

The permeability and effective porosity of coal / lignite samples are important parameters in coalbed / lignitebed methane exploration. The modelling of change in permeability under confining pressure is becoming important in predicting production trends in coalbed/ ligbitebed methane. The gas / liquid whole core permeameter and porosimeter (Temco, USA make) is equipment (Fig. 1) with highly accurate, rapid and non-destructive measurement of permeability and effective porosity of coal/ lignite samples. Data is automatically acquired and processed by computer. In this equipment, switching core holder internal parts can easily accommodate test core of varying diameters. Maximum confining (overburden) pressure and maximum flow (pore) pressures are 10000 psia (68.9 MPa) and 2500 psia (17.2 MPa) respectively at room temperature. In this instrument porosity is also measured with the low pressure (100 psia full scale) inlet pressure transducer following Boyle's law. The single-phase gas permeability is determined with steady state method. Helium, nitrogen / any inert gas, methane, carbon dioxide, water, oil or liquid is injected in the core of lignite/ coal sample through a pressure reducing gas regulator and a metering valve.

The length of core samples should be 150-200mm (or 6-8 inches). The diameter of the core samples may be 36, 46, 48, 64 or 154 mm.The core holder and confining pressure pump are applied to have uniform pressure on the sample. The pressure gauge transducer exhibits inlet pressure to the core sample. The pressure drop across the core sample is determined with one of three calibrated mass flow meters, which have voltage output signals. The ambient temperature (flowing temperature) of the gas meters is recorded with a thermocouple. The permeability of the core sample is calculated with computer software automatically using the differential pressure, gas flow rate, gas viscosity, core dimensions and temperatures. In permeability measurement, Darcy's equation is applied taking into consideration of core diameter and length, pressure drop across the core, the gas flow rate at that flow and the flowing gas temperature. This steady state permeameter is designed to determine permeability range of 1 md (millidarcy) to 10 d (darcys).

Experiments were carried out with lignite core samples and permeability was measured at different confining pressures with the help of this instrument. An empirical equation " Petrographic permeability index (PPI)" is proposed taking into consideration of microscopic-pore diameter, micro-cleat aperture and depth. PPI requires its test for application on other coal/lignite samples from various lignite/coal basins. This equipment (Fig. 1) system also includes a pulse-decay unsteady permeameter that operates separately as an independent instrument (with its own software and hardware) capable of measuring permeability in the range of 1 millidarcy (md) to 10 nanodarcies (10 nd).

This equipment system (Fig. 1) can be also used for determination of porosity. Porosity measurement is carried with calibration of the inlet transducer, which is simple, quick and has accurate calibration feature. The porosity measurement with this equipment does not take consideration of differential pressures, flow rate or the temperature. The volumes of different section of the plumbing system and of the reference chambers are determined by calibrating them against the known pore volumes of the calibration test plugs. The core sample is placed in the core holder and the reference chambers and transducer plumbing (both of known volume) are pressurized to approximately 100 psia (0.69 MPa absolute). Opening of the core holder inlet valve releases some of the gas into the core and core holder plumbing dead volume. After reaching equilibrium pressure, it is measured. Helium (He) is preferred for porosity testing because it has minimum adsorption on the grain surfaces.

Fig.1 Gas/ liquid whole core permeameter and porosimeter

ICCP 58th Annual Meeting
3 - 9 September 2006
Bandung, Indonesia

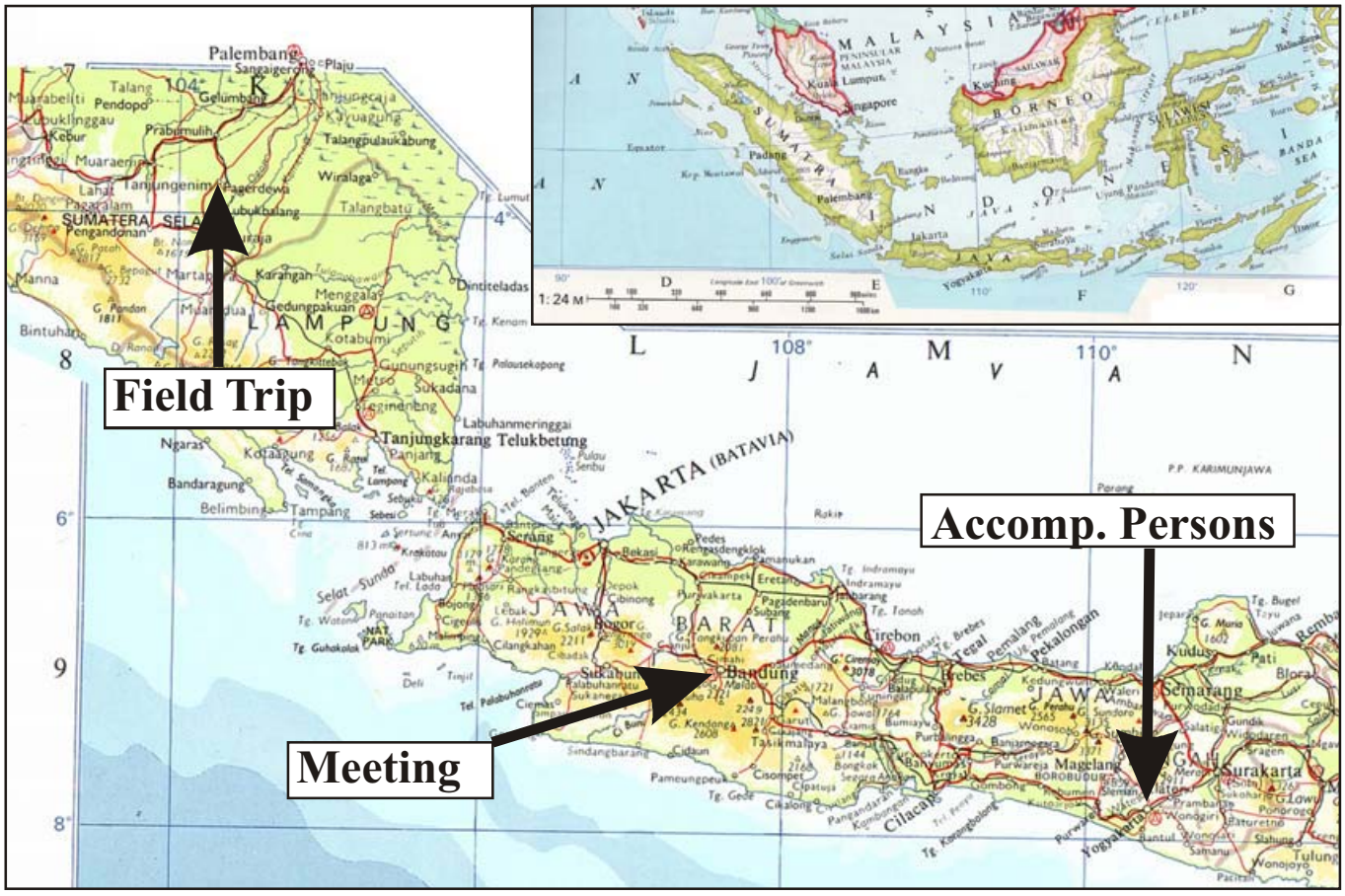
including a two day symposium

Lower Rank Coals: Integrating Lower Rank Coals with Industrialization in the 21st Century

Provisional Programme - Venue Horison Hotel

	Sunday Sept. 3	Monday Sept. 4	Tuesday Sept. 5	Wednesday Sept. 6	Thursday Sept. 7	Friday Sept. 8	Saturday Sept. 9	Sunday - Monday Sept. 10-11
Time		09:00-17:00	09:00-17:00	08:00 - 17:00	08:00 - 17:00	09:00-17:00	09:00-17:00	04:30 start
Morning		ICCP Plenary Session	ICCP Commission	Conference Lower Rank Coals - invited papers	Conference Lower Rank Coals - invited papers	ICCP Commission	ICCP Commission	Field Trip - Coal mines at Tanjung Enim, S. Sumatera
		break	break	break	break	break	break	
		ICCP Plenary Session	ICCP Commission	Conference Lower Rank Coals - invited papers	Conference Lower Rank Coals - invited papers	ICCP Commission	ICCP Commission	
		LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
Afternoon	Council Meeting Bidadari Room Horison Hotel 13:30-17:00	ICCP Commission	ICCP Commission	Conference Lower Rank Coals - invited papers	Conference Lower Rank Coals - invited papers	ICCP Commission	ICCP Plenary Session	
		break	break	break	break	break	break	
		ICCP Commission	ICCP Commission	Conference Lower Rank Coals - invited papers	Conference Lower Rank Coals - invited papers	ICCP Commission	ICCP Plenary Session	
Evening	Ice Breaker 17:00 onwards				Conference Dinner			

Note: the ICCP Sessions will be held in the Galunggung Room and, if necessary, the Tangkuban Perahu Room
the Lower Rank Coals Symposium will be held in the Krakatau Ballroom



1. Registration Fee

US$150,- per person

Registration includes:

- ICCP Meeting and the Lower rank Coal Symposium
- Lunch + coffee breaks (2x) on 4, 5, 8 and 9th (ICCP Meeting)
- Dinner on the 7th of September 2006. Dinner will be held either in Gedung Sate (preferably) or Horison Hotel + entertainment (cultural performance)
- Symposium on Lower Rank Coals
  6, 7th September

2. Excursion to Coal Mines at Tanjung Enim, S Sumatera

Estimated cost $US225. Meeting point at Horison Hotel on Sunday the 10th September, 2006. Depart at 04:30 am by bus to Jakarta (there is no direct flight from Bandung to Palembang) to catch the 08:25 am flight (direct flight Jarkarta - Palembang using Lion Air). Jarkarta to Palembang flight is ± 1 hr. At about 09:30 am travel to Tanjung Enim (approx 3.5 hrs). Stay at PTBA's guest house. At about 14:00 pm visit Muara Tiga Coal Field - close to where the participants stay.

Monday 11th, breakfast. Further visits in the PTBA Coal Field. Field visits finish about 11:00 am. At 12:00 pm depart Tanjung Enim to Palembang to catch 16:25 pm flight to Jakarta (Lion Air). Catching a later flight at 19:20 pm (Garuda) is possible. Costs are based in Rp. (see note below on Rp:USD exchange rates)

	Rp per person
Bandung - Jakarta (return)	300.000,-
Jarkarta - Palembang (return)	1.000.000,-
Palembang - Tanjung Enim (return)	300.000,-
Accommodation	100.000,-
Meal (6 x Rp. 50,000.-)	300.000,-
Total	2.000.000,- (±US$225*)

* US$ rate used is Rp. 10.000,- = 1USD but at the end of March the rate is Rp. 9.135,- The flight ticket is a maximum cost. The air fare for September is not known and the fare used is an estimate based on the current fare of Rp. 500.000,-

3. Travel from Jakarta to Bandung

Main Option

Participants will be met at a stated meeting point in Jakarta Sukarno-Hatta Airport (CGK) and driven to Bandung. There will ve 2 periods when particiapants will be met. This will depend on the time of flights from abroad to Indonesia (Jakarta Sukarno-Hatta Airport). The exact times of the meeting will be announced when travel information is available from the participants.

Fly from Jakarta to Bandung

Flights from Jakarta to Bandung depart from Halim Perdana Kusumah Airport. A taxi should be taken from the international airport (CGK).

FLIGHT SCHEDULES

Daily flight Jakarta (Halim Perdana Kusumah Airport) – Bandung (Husen Sastranegara Airport) by Merpati airlines :

1. 07:15 – 07:55
2. 11:00 – 11:40
3. 17:00 – 17:40

Daily flight Bandung – Jakarta (Halim Perdana Kusumah) by Merpati Airlines :

1. 06:30 – 07:10 (daily except Saturday and Sunday)
2. 08:00 – 08:40 (Saturday and Sunday)
3. 08:10 – 08:50 (daily except Saturday and Sunday)
4. 13:00 – 13:40 (Saturday and Sunday)
5. 15:30 – 16:10 (Saturday and Sunday)
6. 16:00 – 16:40 (daily except Saturday and Sunday)

Jakarta (Halim Perdana Kusumah) – Bandung by Deraya Airlines :

1. 06:45 – 07:30
2. 09:00 – 09:55
3. 14:30 – 15:25

Bandung – Jakarta (Halim Perdana Kusumah) by Deraya Airlines :

1. 10:00 – 11:00
2. 12:00 – 12:55
3. 15:30 – 16:25

Train from Jakarta to Bandung

Take a taxi from Jakarta airport to Gambir station appox. Travel time approx.40 mins.

TRAIN SCHEDULES

Daily Jakarta (Gambir Station) – Bandung by 'Argogede' Train: All Executive Class: Rp. 85.000,-

1. 06:35 – 09:17
2. 09:30 – 12:13
3. 11:15 – 14:03
4. 12:30 – 15:16
5. 13:40 – 16:19
6. 15:30 – 18:08
7. 17:45 – 20:26
8. 19:30 – 21:57
9. 09:00 – 11:42 (on Fridays - Saturdays - Sundays - Mondays)

Daily Bandung – Jakarta by 'Argogede' Train : All Executive Class: Rp. 85.000,-

1. 06:25 – 09:07
2. 07:30 – 10:10
3. 09:15 – 11:55
4. 10:25 – 13:07
5. 12:10 – 14:52
6. 14:25 – 17:10
7. 16:20 – 19:00
8. 18:05 – 20:45
9. 05:30 – 08:10 (on Fridays - Saturdays - Sundays - Mondays)

Daily Jakarta (Gambir Station) – Bandung by 'Parahyangan' Train: Business Class: Rp. 45.000,-; Excecutive Class: Rp. 65.000,-

1. 05:30 – 08:37
2. 08:20 – 11:15
3. 10:25 – 13:42
4. 11:45 – 14:51
5. 14:30 – 17:30
6. 16:30 – 19:33
7. 17:15 – 20:04
8. 18:35 – 21:35
9. 20:20 – 23:16
10. 05:00 – 08:20 (on Mondays and after holidays)

Daily Bandung – Jakarta (Gambir Station) by 'Parahyangan' Train: Business Class : Rp. 45.000,-; Excecutive Class: Rp. 65.000,-

1. 05:00 – 08:05
2. 06:05 – 09:11
3. 08:20 – 11:30
4. 11:15 – 14:24
5. 12:45 – 16:02
6. 15:00 – 17:54
7. 17:00 – 20:00
8. 19:10 – 22:23
9. 20:25 – 23:37 (on Sundays and after holidays)
10. 04:00 – 06:55 (on Mondays and after holidays)

Taxis and Chartered Cabs to Bandung

Cipaganti rent-a-car and Taxi Service
1. Jakarta Sukarno-Hatta Airport Gate 1a + 2e
   phone : (021) 559 4242 or 559 4343
2. Bandung – Jakarta Airport
   phone : (022) 731 9498

a. Chartered Cab Jakarta Airport – Bandung
   Rp. 945.000,- (US $ 100.00)
   One way (drop only) – available for 24 hours
b. Taxi Jakarta Sukarno - Hatta Airport – Bandung
   Rp. 135.000,- (US$ 15.00)/per person
   One way (drop only) – 7 passengers in a minibus, available for 24 hours
c. Chartered Cab Bandung – Jakarta Sukarno - Hatta Airport
   Rp. 945.000,- (US$ 100.00)
   One way (drop only) – available for 24 hours
d. Taxi Bandung – Jakarta Sukarno-Hatta Airport
   Rp. 135.000,- (US$ 15.00)/per person
   One way (drop only) – 7 passengers in a minibus, available for 24 hours

4. Accommodation

a. Horison Hotel

Address : Jl. Pelajar Pejuang 45 No. 121
Check in : 2 September
Check out : 9 September

Type of Room	ICCP Rate (Rp. nett/rn)	
	Weekday	Weekend
Standard sgl/dbl	465.600,-	543.200,-
Deluxe sgl/dbl	510.000,-	595.000,-
Executive	852.000,-	994.000,-

The above rates are include buffet breakfast, welcome drink and welcome fruit plate.

b. Alternative Accomodation

Benua Hotel (ex Patradisa)
Address : Jl. Pelajar Pejuang 45 No. 111
Located approximately three blocks NNE of Horison Hotel

Executive	Rp. 290.000,-
Superior	Rp. 235.000,-
Deluxe Plus	Rp. 200.000,-
Deluxe	Rp. 175.000,-
Standard (non AC)	Rp. 125.000,-

All rooms have hot water, bathtub (Exec. & Sup.),shower, AC, TV unless noted. All rates are included 21% service, tax and breakfast

Sunday to Thursday	Discount 20%
Friday	Discount 15%
Saturday	Discount 10%

Narapati Indah Hotel
Address : Jl. Pelajar Pejuang 45 No. 35
Approximately 10 minutes walking distance from Horison Hotel

Room Type	Weekday Rates	Weekend Rates
Superior	Rp. 210.000,-	Rp. 225.000,-
De Luxe	Rp. 259.000,-	Rp. 276.000,-
Suite :		
Purwaditra	Rp. 315.500,-	Rp. 339.000,-
Pinandita	Rp. 339.000,-	Rp. 350.000,-
Pitaloka	Rp. 375.000,-	Rp. 390.000,-
Family	Rp. 365.000,-	Rp. 380.000,-
Extra Bed	Rp. 71.500,-	Rp. 81.500,-

Facilities : AC, TV, Hot and Cold Water, bathtub and shower, refrigerator, mini-bar, phone
All prices incl. Service and Tax

5. Accompanying persons Program

JOGYAKARTA TOUR, 3 days 2 nights

Day 1 : Bandung – Jogyakarta.
In the morning leave Bandung direct to Jogyakarta by bus. Lunch en route.
Afternoon arrive in Jogyakarta, dinner will be provided at a local restaurant.
Day 2 : Jogyakarta Tour
Breakfast in the hotel the starting for Jogya City Tour, visiting 'Kraton' (Palace), Water Castil, Silver Smith, Batik Painting. After lunch proceed to Prambanan Temple (Hindu).

Day 3 : Jogyakarta – Bandung
After breakfast, check out hotel, the continue the tour to Bandung. On the way visiting Borobudur (Budha) and Mendut Temple. Lunch will be provided en route. Evening arrive in Bandung.

Price per person
Half Twin: Rp. 850.000,- (Surabaya Plaza Hotel);
Rp. 775.000,- (Jayakarta Hotel)
Single Supplement + Rp. 350.000,-/pax
Price includes : - Airconditioned bus, accommodation for 2 nights at chosen hotel, breakfast, lunch, dinner as above itinerary. Entrance fee as above itinerary. Tour Guide and Local Guide.

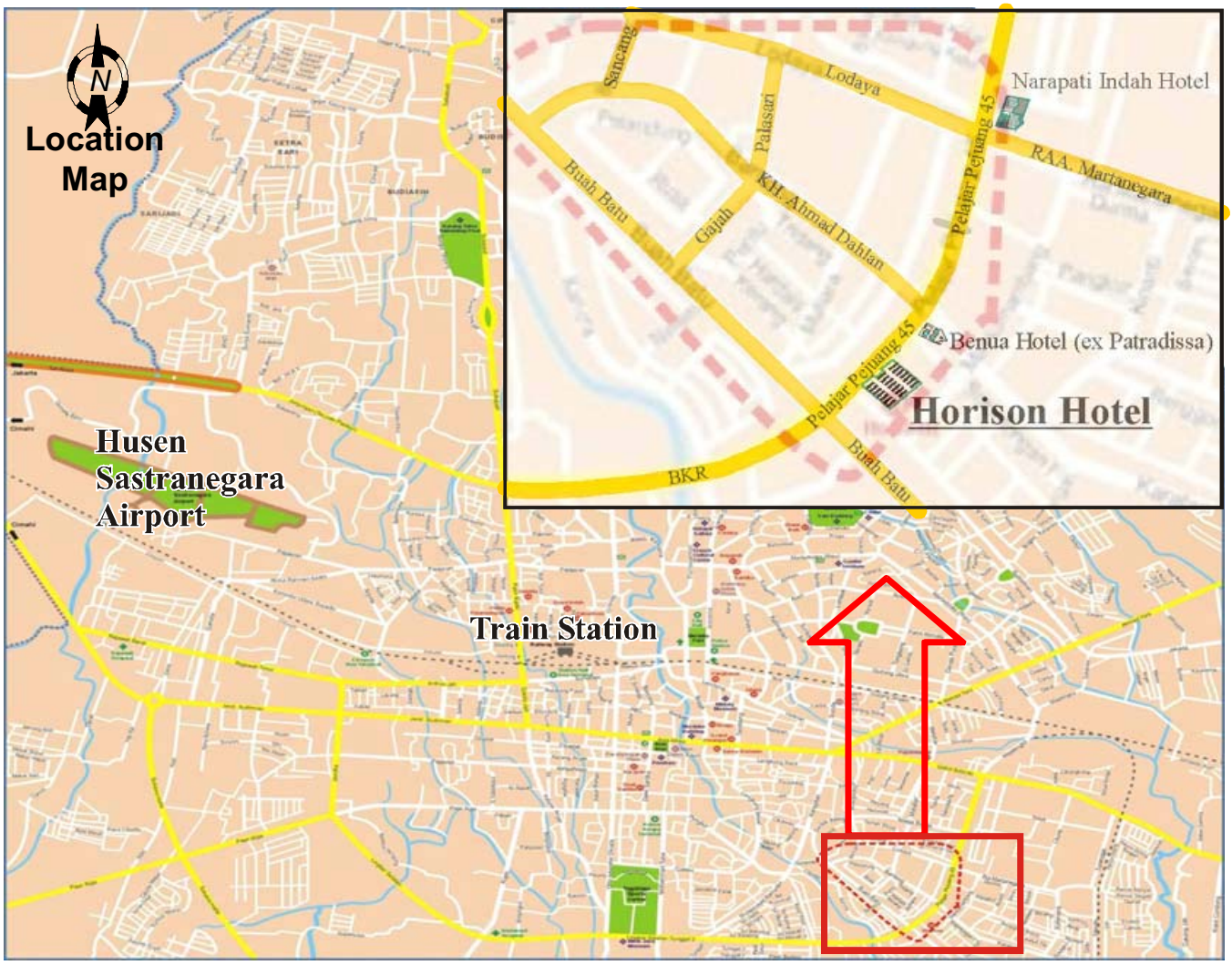
6. More information

More information concerning the ICCP Annual Meeting and Lower Rank Coals Symposium can be accessed through internet (http://www.dim.esdm.go.id) or from:

Ir. Herudiyanto MSc
58th ICCP Secretariat
Direktorat Inventarisasi Sumber Daya Mineral
Laboratory Building, 3rd Floor
Jl. Soekarno Hatta No. 444
Bandung 41254,
JABAR, Indonesia
Tel : + 62 (22) 5231860
: + 62 (22) 5205572
Fax : + 62 (22) 5226263

7. Payment

Payment for registration, accommodation and accompanying persons program can be made through
Bank Mandiri – KCP Bdg. BINACITRA (c/q. Nani Sumarni SE)
Acc. No. 130-00-0484254-1 for Foreign Currency and
Acc. No. 130-00-0484254-1 for Rupiah (Indonesian Currency)



Membership Matters

A summary of amendments to members' contact details during the period 15 November 2005 to 20 March 2006 is given below. Minor alterations (e.g. renaming of affiliation, changes of title, homepages etc.) are not considered.

During the period seven new members from Australia, Bulgaria, Egypt, Germany, South Africa and the United States have been admitted.

R M Schwab
Honorary Treasurer ICCP
20 March 2006
mailto:rudi.schwab@btinternet.com

Directory Updates
November 2005 - March 2006

Boris **Alpern** - *E-mail address:*
The listed e-mail address
~~<boris.alpern@wanadoo.fr>~~
is inactive. Please provide new address.

Gerd **Bieg** - *Membership status changed:*
Retired
Advancement to full membership

Ms. Gisela **Bieg** - *New member:*
Ms. Gisela Bieg (A 1,3)
Mikroskopische Untersuchungen
Hirschgraben 2
45721 Haltern am See
GERMANY
Tel.: +49-2364-968966
mailto:mikro-un@onlinehome.de

Mgr. Nader Ahmed **Edress** - *New Member:*
Temporary address until end 2006:
Mgr. Nader Ahmed Edress (A 1,2)
Zvonícková 3, Hvezda III, (P. A3/37a)
162 08 Praha 6
CZECH REPUBLIC
mailto:nedress@hotmail.com
http://www.helwan.edu.eg
http://123freehost.co.uk/sites/nader
Permanent address from 2007:
Mgr. Nader Ahmed Edress
Geology Department
Helwan University
11795 Ain Helwan, Cairo
EGYPT

Heike **Eickhoff** - *E-mail address:*
mailto:heike.eickhoff@thyssenkrupp.com

Bronislawa **Hanak** - *E-mail address:*
c/o joanna.komorek@polsl.pl

Kuili **Jin** - *E-mail address:*
The listed e-mail address
~~<res@cumtb.edu.cn>~~
is inactive. Please provide new address.

Anna **Jurczak-Drabek**- *E-mail address:*
The listed e-mail address
~~<roig@pigog.com.pl>~~
is inactive. Please provide new address.

Johan **Joubert** - *New Member:*
Mr. Johan Joubert (A 1,3)
Syngas and Coal Technologies
Sasol Technology R&D
1 Klasie Hevenga Street
Sasolburg, 1947
SOUTH AFRICA
Tel.: +27-16-960-2555
Fax: +27-11-522-3852
mailto:johan.joubert1@sasol.com

Irena **Kostova** - *New Member:*
Assistant Prof. Dr. Irena Kostova (A 1,2)
Sofia University “St. Kl. Ohridski”
Department of Geology and Palaeontology
15, Tzar Osvoboditel Blvd.
Sofia 1000
BULGARIA
Tel.: +359-2-93 08 276
Fax: +359-2-94 46 487
mailto:irenko@gea.uni-sofia.bg
http://uni-sofia.bg

Luis Manuel **Martinez Flotte** - *E-mail address:*
mailto:lflotte@msn.com

Tim **Moore** - *Street address:*
2 Show Place (replaces 151 Kilmore Street)

Jennifer M.K. **O'Keefe** - *New member:*
Ms. Jennifer M.K. O'Keefe (A 1)
Department of Physcial Sciences
Morehead State University
123 Lappin Hall
Morehead, KY 40351
U.S.A.
Tel. +1-606-783-2349
Fax: +1-606-783-5002
mailto:j.okeefe@moreheadstate.edu
http://www.moreheadstate.edu

Cornelia **Panaitescu** - *Postcode:*
011061 Bucharest

Padmasiri [Paddy] **Ranasinghe** - *E-mail address:*
mailto:paddy_ranasinghe@hotmail.co

Adrian **Reifenstein** - *Resigned*
Adrian has taken up a more management focused role in his company (ACIRL). We wish Adrian all the best in his new and challenging position.

Cristina F.A. **Rodrigues** - *New contact details:*
Rua de S. Tomé e Príncipe 412, 3º DF
4430-028 Mafamude
PORTUGAL
mailto:cfrodrig@gmail.com

Raymond J. **Smith** - *Postal address, Tel., Fax:*
Industry Development Mining and Petroleum
Department of Natural Resources, Mines and Water
Level 3, Mineral House
41 George Steet
Brisbane, QLD 4000
AUSTRALIA
Tel./Fax: +61-7-3237 1480

Sharon M. **Swanson** - *New member:*
Ms. Sharon M. Swanson (A 1,2,3)
Eastern Energy Resources Team
U.S. Geological Survey
National Center MS 956
12201 Sunrise Valley Drive
Reston VA 20192
U.S.A.
Tel.: +1-703-648 6453
Fax: +1-703-648 6419
mailto:smswanson@usgs.gov

Matthew **Todd** - *New member:*
Mr. Matthew Todd (A 1,2,3)
Coal & Organic Petrology Services Pty Ltd
PO Box 174
Sans Souci, NSW 2219
AUSTRALIA
Tel.: +61-2-9524 0403
Fax: +61-2-9526 7083
mailto:mattodd80@hotmail.com
http://www.organicpetrology.com

Maria A. **Tomica** - *E-mail address:*
The listed e-mail address
~~<matomica@nrcan.gc.ca >~~
is inactive. Please provide new address.

Marian **Wagner** - *Alternative e-mail:*
mailto:mwagner5@autocom.pl

Summary of inactive e-mail addresses

Will the following members please provide their new e-mail addresses:
Boris **Alpern**
Kuili **Jin**
Anna **Jurczak-Drabek**
Maria A. **Tomica**

Welcome to ICCP!

Although the year is still young, a number of applications for Associate Membership of ICCP have already been received. Council has accepted the applications and they are subject to formal acceptance at the next meeting of the General Assembly in the Plenary Session.

We look forward to the active participation of the new members in the different working groups of ICCP and hope to be able to meet the new members at future meetings.

Gisela Bieg, Germany

In the course of her studies and her job as a food chemist in an industrial laboratory, Gisela Bieg has gained experience in the field of microscopy by investigating defined products and microbiologic samples. In the past 25 years she has attended and supported the professional work of her husband Gerd Bieg and hence, acquired remarkable knowledge in the field of coal petrography. In October 2005 Gisela started a business and now offers coal petrographic and microscopic analyses to power producers, coal mining and trading industries.

Application supported by Gerd Bieg (Germany)

Nader Ahmed Ahmed Edries (Edress), Egypt

Nader Edries studied Geology at the Department of Geology,Faculty of Science, Helwan University, Egypt. He graduated in 2000. The title of his master thesis is Geological and Organic Geochemical Studies on The Bituminous Rocks in West Central Sinai, Egypt. In 2001 he followed a training course in coal petrology under the supervision of Ivana Sýkorová and since 2002 he is doing a PhD thesis at the institute of Rock Structure and Mechaniscs of the Academy of Sciences of the Czech Republic in Prague. Subject of the study is: Coal Petrology of the overlying coal seams numbers from 9 to 12 of Žacléø coal group, Žacléø area, IntraSudic Basin, Czech Republic. from October 2002 in Charles University in Prague, Czech Republic.

His application is supported by Ivana Sýkorová (Czech Republic).

Johan Joubert, South Africa

Johan Joubert has been working in the Sasol coal research environment as a research assistant since 1998. The research scope varied from basic coal preparation and beneficiation to laboratory setup and pilot plant workup. He has been undergoing training in coal and carbon petrography for the passed 3 years, and earlier this year received his first ICCP accreditation. Johan has received most of his training from Nikki Wagner,as well as Vivien du Cann (SABS Coal Petrography Laboratory).

Johan is currently responsible for the petrographic laboratory within Sasol, conducting in-house analyses primarily for research and academic purposes, with some routine work. He has worked on a range of coal and carbon samples, including coals from overseas and chars from gasification.

Application supported by Nikki Wagner (South Africa) and Petra David (Netherlands)

Irena Kostova, Bulgaria

Dr. Irena Kostova is an Assistant Professor at the Department of Geology and Paleontology, Faculty of Geology and Geography, Sofia University "St. Kliment Ohridski". She teaches courses on Organic Petrology, Applied Organic Petrology, Regional Coal Geology and General Geology.

She was granted her PhD on 1999 in Geology and Research on sulphur in Bulgarian coals, “Mineralogy and Geochemistry of Sulphur in coals from Maritza East, Pernik and Balkan basins, Bulgaria”, from the Institute of Applied Mineralogy - Bulgarian Academy of Sciences, Sofia, Bulgaria. Dr. Irena Kostova has carried out research on mineralogy and geochemistry of coal, sulphur in coal, trace elements in coal and waste products, transformations and behaviour of S-bearing minerals during coal combustions and their environmental impact.

Her scientific results have been presented in many papers published in various scientific magazines.

Her application is supported by Kimon Christanis and Stephanos Papazisimou (Greece).

Jennifer O'Keefe, USA

Jennifer O'Keefe is a PhD student, working at the Geological Sciences, University of Kentucky, Lexington, KY. Her dissertation project are the "Paleogene mirelands of the Upper Mississippi Embayment, Kentucky and extreme Northern Tennessee". Her dissertation topic involves the petrology and palynology of Eocene lignites in western Kentucky. She had become is very competent in the petrographic analysis of low-rank coals and and has in addition some working experience in organic petrology with a variety of materials. She is currently working as Instructor at the Morehead State University / Department of Physical Sciences.

Her application is supported by Jim Hower (USA) and Isabel Suárez Ruiz (Spain).

Matt Todd, Australia

Matt Todd graduated in Geology from the University of Wollongong in 2005 (BSc). The topic of his thesis was Amino-acid racemisation of the Roe Calcarenite, within the Eucla Basin, southern Australia & its neo-tectonic implications. Matt has been working full time at Coal and Organic Petrology Services P/L since 15 month after he handed in his thesis at Wollongong University. He had been a casual before that time working on average two days a week in our lab for about one year. He received special training in organic petrology . Matt's work includes maceral and reflectance analysis of coal, analysis of environmental samples, work with the automated reflectance system and occasionally, at times of larger lots of samples coming in, sample preparation.

His application is supported by Walter Pickel (Australia).

Back to ICCP!

Sharon Swanson, USA

I am also very glad about the 're-joining' of Sharon M Swanson to ICCP. Sharon had been a member of ICCP in previous years under the name of Sharon Crowley. After working in different fields for a number of years, she is now back to the field of coal petrology and informed me that she would like to continue with her previous membership.

.....

If applicable please update your contact details with the General Secretary (who is responsible for membership) and the Honorary Treasurer (who administers the ICCP membership database).

Dr. Petra David
ICCP General Secretary
TNO Built Environment and Geosciences
Division of Geo-energy
P.O. Box 80015
3508 TA Utrecht
THE NETHERLANDS
Ph. +31 30 256 4648
Fax +31 30 256 4605
mailto:petra.david@tno.nl

R M Schwab
Honorary Treasurer ICCP
Sustainable Energy C.B.
3 Manor Close, Great Barrow
Chester, England CH3 7LP
United Kingdom
Ph. +44-1829-740 239
Fax +49-1212 666 500 500
mailto:rudi.schwab@btinternet.com

ICCP Awards and Calls for Nominations

ICCP offers a number of awards to recognise outstanding achievements in coal and organic petrology at various stages of career development. Awards available and a brief summary are given below. Full details on the nature of the award, its terms and conditions and how to apply can be found on the ICCP home page a t http://www.iccop.org or by contacting the chair of the award committee (see inside front cover).

.....

Young Scientist Award Call for Nominations

For recent higher degree graduates under 35 years of age who have potential to make outstanding contributions in the field of coal and organic petrology during their career. The award consists of:

- $500US cash
- 3 years of ICCP Membership
- a certificate

Although applications are called for annually, the award is only made from time to time. Awardees are expected to publish the results of their research in ICCP News.

Applications close on **December 31** of each year and should be sent to:

Dr A.C. Cook
Chair ICCP Young Scientist Award Committee
Keiraville Konsultants Pty Ltd
7 Dallas Street
Keiraville, NSW 2500
Australia

Organic Petrology Award

The Organic Petrology Award recognises outstanding contributions by coal and organic petrologists at an intermediate stage of their career. It is limited to applicants under 50 years of age. The award consists of a bronze medal and a certificate. Awards are made from time to time but applications are called for every 2 years. Nominations close on **APRIL 30th 2006** and should be sent to:

Dr R. M. Bustin
Chair, Organic Petrology Award Committee
Department of Earth and Ocean Sciences
The University of British Columbia
6339 Stores Road
Vancouver, B.C. V6T 2B4
Canada
mailto:mbustin@eos.ubc.ca

Thiessen Medal

This is the highest award offered by ICCP. It recognises a lifetime of achievement and outstanding contributions in the fields of coal and organic petrology. The award consists of a bronze medal. Awards are made from time to time but applications are called for every 2 years. The next call will be in 2007.

ICCP Services

★ ICCP Reflectance Standard

For more information contact the Commission I chair Dr. Walter Pickel:
Director - Organic Petrology
Coal & Organic Petrology Services Pty Ltd
P.O. Box 174
Sans Souci, NSW 2229
Australia
Phone: +61-2-9524 0403 / Fax +61-2-9526 7083
mailto:walter.pickel@organicpetrology.com

★ Accreditation Programs

- Maceral Group Analysis of Coals
  convenor: Dr Kimon Christanis
  Department of Geology
  University of Patras
  26500 Rio-Patras
  Greece
  Phone +30-2610-99 7568/Fax+30-2610-99 1900

- Vitrinite Reflectance of Coals
  convenor: Dr Kimon Christanis

- Vitrinite Reflectance of Dispersed Organic Matter
  convenor: Dr Alan Cook
  7 Dallas St
  Keiraville
  NSW 2500
  Australia
  Phone +61-2-42 299 843 / Fax +61-2 4229 9624
  mailto:alanccook@iccopozemail.com.au
  Note: 'iccop' should be removed from ISP name to use this address

- Coal Blend Analysis
  convenor: Dr Isabel Suárez Ruiz
  Instituto Nacional del Carbón - CSIC
  Apartado 73
  33080 Oviedo
  SPAIN
  Phone +34-98-511 9090 / Fax: +34-98-529 7662
  mailto:isruiz@incar.csic.es

For more information, contact the convenors of the programs

Answer to Know Your Coal Petrologist #18, #19 & #20

The unlikely combination of ***Prof. Dr Duncan Murchison*** (#18), ***Dr Dirk Prinz*** (#19) and ***Prof. Dr hab. inz Barbara Kwiecinska*** (left, #20) and ***Prof. Dr Krystyna Kruszewska*** (right, #20) form our 'rogues gallery' of coal petrologists in this issue. The only known link between these photos is that they were all collected during the Utrecht meeting in 2003 and all pictured exhibited a suitable range of dancing skills during the evening.

2007 Joint Annual Meeting of The International Committee for Coal and Organic Petrology (ICCP, 59th Annual), The Society for Organic Petrology (TSOP, 24th Annual) and the Canadian Society for Coal and Organic Petrology (CSCOP, 31st Annual)

Victoria, British Columbia, Canada
August 19-25, 2007

Tentative Schedule

Time	Sunday August 18	Monday August 19	Tuesday August 20	Wednesday August 21	Thursday August 22	Friday August 23	Saturday-Sunday August 24-25
08:00-08:30		ICCP Plenary Session	ICCP Commission	TSOP Technical Session Session 1	TSOP-CSCOP Dr. Goodarzi Tribute Session III	ICCP Commission	Field Trip - To be announced Possible trips: 1. Fraser River Delta 2. Intermontaine Coal basins 3. Geology of North Vancouver to Whistler
08:30-09:00							
09:00-09:30							
09:30-10:00							
10:00-10:30		break	break	break	break	break	
10:30-11:00	Council Meetings	ICCP Commission	ICCP Commission	TSOP Technical Session Session II	TSOP-CSCOP Dr. Goodarzi Tribute Session IV	ICCP Commission	
11:00-11:30							
11:30-12:00							
12:00-13:00		LUNCH	LUNCH	TSOP Business Lunch	LUNCH	LUNCH	
13:30-14:00		ICCP Commission	ICCP Commission		ICCP-TSOP-CSCOP ?Co-sponsors "Applied" Technical Session	ICCP Commission	
14:00-14:30				TSOP-CSCOP Dr. Goodarzi Tribute Session I			
14:30-15:00							
15:00-15:30		break	break		break	break	
15:30-16:00		ICCP Commission	ICCP Commission	break	ICCP-TSOP-CSCOP ?Co-sponsors "Applied" Technical Session	ICCP Commission	
16:00-16:30				TSOP-CSCOP Dr. Goodarzi Tribute Session I			
16:30-17:00							
17:00-17:30						ICCP Plenary session Session	
17:30-18:00				TSOP-ICCP Posters I	TSOP-ICCP Posters II		
18:30-19:00	Ice Breaker & Council Meetings				Conference Dinner		
19:00-19:30							
19:30-20:00							
20:00-20:30		Council Meetings	Council Meetings	Council Meetings			
20:30-21:00							
21:00-23:00							

Venue: University of Victoria, Campus Convention Center;

Accommodation: University of Victoria Residence; Queen Victoria Hotel; Shamrock Suites on the Park; Helms Inn at Beacon Hill Park

Organizing Committee co-chairs: Lavern Stasiuk (Geological Survey of Canada; mailto:lstasiuk@nrcan.gc.ca) and Andrew Beaton (Alberta Geological Survey; mailto:Andrew.Beaton@gov.ab.ca).

Financial: Judith Potter (JP Petrographics, mailto:JPP@sitogeo.com) and Jennifer Pearson (Pearson and Associates; mailto:jen@coalpetrography.com

Field Trips: Tom Gentzis (CDX Canada Ltd., mailto:tgentzis@cdxcanada.com), Willem Langenberg (Alberta Geological Survey, mailto:Willem.Langenberg@gov.ab.ca)

Social: David Marchioni (PetroLogic; mailto:cbm@shaw.ca), Jennifer Pearson, Lavern Stasiuk, Judith Potter, Michelle Hawke (BP)

Technical Session on "Back to Coal" chairs (TSOP-CSCOP-ICCP): Drs. David Marchioni, Wolfgang Kalkreuth (Universidade Federal do Rio Grande do Sol, mailto:00009881@ufrgs.b) and Fari Goodarzi (mailto:fgoodarz@nrcan.gc.ca)

Thesis Summaries
Coordinated by Prof. Dr. Cornelia Panaitescu

Some Aspects of Carbopetrograpy in Romania (Part II)

Dr. Gabriela Pleşa

Correlations: coal blends composition - coke structure

The research was developed based on the fact that coke behaviour inside the blast furnace depends on its structure and composition, which determines its properties.

The concept of "coke structure" was used in order to find out the best relationship between both terms of the correlation. It was best assessed in terms of petrographic characteristics as:

Coke Structure = Coke Substance + Porosity (including fissures)

where: Coke Substance = Coke Matrix (formed during coking process from fusible components) + Inclusions (organic and mineral).

In order to establish representative correlations for a wide choice of blend components, the charges were studied to determine rank and petrographic composition. Additionally, physical-chemical and mechanical characteristics were determined for coke obtained from stamped charges on constant technological parameters.

The first step was to carbonise single coals, well characterised by rank and petrographic composition (Fig. 1), and then to add coals one by one, making blends of two, three and four components.

Step two was to determine the main coal characteristics which influence the coking behaviour and the interaction during carbonisation. The study was carried out on laboratory scale, followed by industrial trials

(boxes coked on the bottom of the coke oven).

The coking process and coke quality were controlled by determination of the coke petrographic composition and its texture (Fig. 2), reactivity and strength.

The best correlations were obtained when coals having almost the same rank but different petrographic composition were used. These were:

- inertinite content - coal charge fluidity;
- inertinite content - coal dilatation;
- reactive semifusinite - inertinite coke;
- anisotropic to isotropic matrix ratio - CRI and CSR;
- rank of coal - matrix type and porosity.

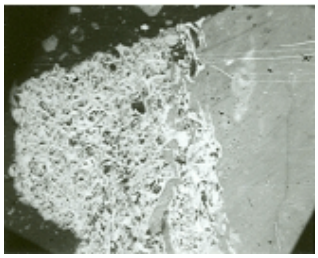


Fig.1. Coal grain with mixed composition: gelinite (right) and semifusinite (left), RL, oil immersion, 375x

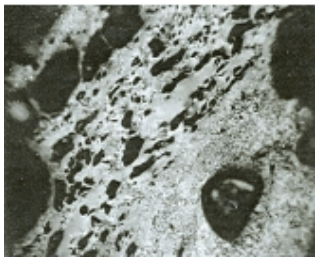


Fig.2. Coke grain with mixed structure and texture: fine granular anisotropic matrix (bottom, right side) and weakly anisotropic semifusinite (left side), PL, oil immersion, 375x

PhD student Charlotte Toma

Complex characterization of the Romanian Valea Jiului coals

Coals and their ashes from the largest Romanian coal-bearing deposit were studied from geochemical, petrographical and technological points of view, with the aim of establishing the best way of utilisation.

The geological age (Chattian-Acvitanian) could suggest the coals from Valea Jiului would be "brown coals"; however their chemical - technological characteristics correspond to high volatile bituminous ranks, a fact discussed in terms of "chemical age".

Relationships between rank (%RmVi) and facies position into the coal basin were established. The basin has suffered significant and specific dynamo - metamorphic phenomena.

The influence of the particular petrographic composition on geochemical parameters was also revealed (high liptinite in coal structure and lack of inertinite, Fig. 3) and that the volatile matter content cannot be used in this case a good rank parameter.

An extensive study of coals' sulphur-rich ashes (high pyrite proportion, Fig. 4) has completed information referring to the present possible uses of Valea Jiului coals.

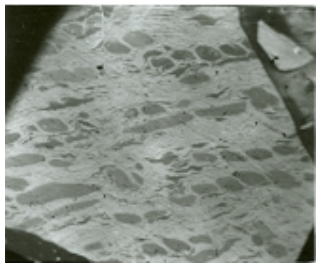


Fig.3. Cellular telinite with resinite, RL, oil immersion, 375x

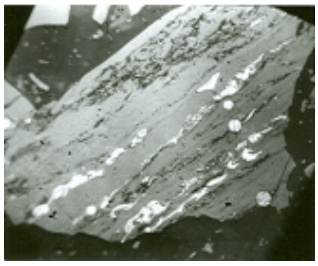


Fig.4. Carbominerite grain: gelinite with clay minerals (top side) and pyrite (bottom, right side), RL, oil immersion, 375x

Georgeta Predeanu
20.03.2006

News from TSOP

http://www.tsop.org

2006 TSOP Midyear Council Meeting

On March 10, 2005, TSOP officers and committee chairs met via teleconference for the mid-year business meeting. Representatives from four continents and five countries were among the teleconference participants. Significant results of the meeting include Council's approval of proposed changes to the TSOP Bylaws, approval of funding for two Spackman student awards for this year, and approval of a proposal from the American Association of Petroleum Geologists (AAPG) to include past TSOP abstract volumes in AAPG's on-line Datapages.

2005-2005 TSOP officers are as follows:

President - Peter Warwick
Vice President - Wolfgang Kalkreuth
President-Elect - Jeff Quick
Secretary/Treasurer - Mike Avery
Editor - David Glick
Councilors - Tim Pratt and Joe Curiale

Changes to the TSOP Bylaws

The TSOP Council has approved a proposed change to the TSOP Bylaws to extend the term of office for the President and Vice President to two years (they currently hold one-year terms of office). The proposed revisions to the Bylaws are available on the Society's website: http://www.tsop.org. Membership approval will be by ballot which will be included in the March Newsletter. TSOP Council urges TSOP members to approve the proposed Bylaw changes.

2006 Student Grant Program, The Spackman Award

TSOP invites applications for graduate student research grants, the Spackman Award. The purpose of the grants is to foster research in organic petrology (which includes coal petrology, kerogen petrology, organic geochemistry, and related disciplines) by providing support to graduate students from around the world who demonstrate the application of organic petrology concepts to research problems. Monetary awards up to a maximum of $1,000.00 USD will be granted. TSOP also will provide Merit Awards, in the form of certificates redeemable for TSOP publications, to top-ranking applicants not receiving grants. The program awards a maximum of two grants each year. All applicants are invited to enjoy a one-year free student membership in TSOP. Completed applications must be postmarked or faxed by May 1, 2006. See http://www.tsop.org/grants.htm for more details.

TSOP abstract volumes in AAPG's on-line Datapages

TSOP Council has accepted a proposal from the AAPG to incorporate twenty-two years of past TSOP annual meeting abstracts volumes in the searchable on-line AAPG Datapages database. Datapages is a fee-based internet database containing geology and energy-related research papers and abstracts. In return, TSOP will receive digital copies of the meeting abstracts volumes and a portion of the proceeds from AAPG's Datapages. The complete process of digitizing the abstract volumes and posting them on-line will take about a year to complete. For additional information about Datapages see: http://www.aapg.org/datasystems

2006 TSOP Meeting, Beijing, China, September 15 - 22

The 23rd Annual Meeting of TSOP will be held at the Xijiao Hotel, in the western part of Beijing. It is adjacent to many universities, including China University of Mining and Technology (Beijing) (CUMT), which will be the host organization and sponsor the meeting. For additional information, see the Beijing meeting web site: http://www.cumtb.edu.cn/frameset/tsop/index.htm, which also may be accessed from the TSOP web site: http://www.tsop.org

Key Conference Themes

1. Organic petrology and geochemistry of non-marine source rocks;
2. Coal-derived hydrocarbons (coal-derived oil, unconventional natural gas and coalbed methane) exploration and development;
3. Coal petrology, coal-measure sedimentology, and hazardous elements in coal related to the environment and human health;
4. Organic petrology in coal mine safety and coal utilization: mine fires, coal-gas outbursts, coal slurry, and other unconventional utilization technologies;
5. New techniques in organic petrology/ geochemistry.

Short course: Petrology and geochemistry of coal and nonmarine source rocks.
Pre-meeting field trip: Geology of Western Beijing Jurassic and Permo-Carboniferous Coal Basin.
Post-meeting field trip: Shanxi area: Datong natural and historic sites and the Permo-Carboniferous Antaibao surface coal mine.

Call for Papers
Abstracts should be submitted by April 30, 2006. See the meeting web site: http://www.cumtb.edu.cn/frameset/tsop/index.htm for details.

2007 ICCP-TSOP-CSCOP Meeting, Victoria, B.C., August 19 - 25, 2007

TSOP looks forward to the joint ICCP-TSOP-CSCOP meeting which will be held in Canada in 2007. Drs. Lavern Stasiuk and Andrew Beaton are co-chairs of the organizing committee. The technical session organizers will be Drs. Kalkreuth (ICCP), Marchioni (TSOP) and Goodarzi (CSCOP). This will provide a great forum for the three organizations to share ideas and to work together to expand the horizons of organic petrology.

Interaction with the Energy Mineral Division of the American Association of Petroleum Geologists

In collaboration with the Energy Minerals Division (EMD) of the AAPG, Linda Stalker and Malcolm Bocking have orginized a Coalbed Gas technical session for the next International AAPG meeting, which will be held in Perth, Australia, November 5-8, 2006. Colin Ward (representing TSOP) helped to organize this session. For more information about the Coalbed Gas session, please contact the meeting organizers at:

mailto:Linda.Stalker@csiro.au
mailto:malcolm.bocking@bacbm.com
mailto:c.ward@unsw.edu.au

or go to the Perth meeting website (given below). In addition, Richard Sykes, Chris Boreham, and Simon George are organizing a technical session called Oil from Coal at the Perth meeting. More information on this proposed session can be found on the EMD website at: http://emd.aapg.org/Callforabstracts_OilfromCoalv2.pdf Information about the Perth meeting can be found at the following web address:
http://www.aapg.org/perth/index.cfm

Peter Warwick
TSOP President

WHAT'S HAPPENING

16 - 21 July 2006
Carbon 2006, Aberdeen, Scotland.
http://www.carbon2006.org/

3 - 9 September 2006
58th ICCP Meeting, Bandung, Indonesia
Contact: Ir. Herudiyanto MSc
See pages 30 - 34 of this issue

15 - 22 September 2006
23rd Annual TSOP Meeting, Beijing, China. See page 43 of this issue
http://www.tsop.org

5 - 8 November 2006
AAPG Meeting, Perth, Australia
mailto:r.sykes@gns.cri.nz

5 - 9 November 2006
10th ALAGO Meeting, Bahia, Brazil
See page 16 of this issue
http://www.alago.org/

5 - 9 November 2006
International Conference on Changing Scenario in Palaeobotany, Lucknow, India
See page 16 of this issue
http://www.bsip.res.in

7 - 11 May 2007
WOCA - World of Coal Ash, Covington KY, USA (directly across the Ohio River from Cincinnati, Ohio)
Contact: Jim Hower
mailto:hower@caer.uky.edu
http://www.worldofcoalash.org/

18 - 25 August 2007
ICCP / TSOP / CSPC, Victoria, Canada.
Contact: Vern Stasiuk
mailto:lstasiuk@nrcan.gc.ca
See pages 40 -41 of this issue

Planned Future ICCP Meetings

2008	Oviedo, Spain
2009	Porto Alegre, Brazil
2010	Belgrad, Serbia and Montenegro

ICCP Publications

ICCP Handbook

★ *International Handbook of Coal Petrography 2nd Edition (1963)* (in English) as CD ROM
PC and Mac Compatible
Requires Adobe Acrobat Reader Ver. 4 or above
ICCP / TSOP member - $25US (including postage)
ICCP non-member - $50US (including postage)

★ *International Handbook of Coal Petrography, supplement to the 2nd edition*, second print (in English) 1985 US$30

★ *International Handbook of Coal Petrography, 2nd supplement to the 2nd edition* (in English) 1986 US$10

★ *International Handbook of Coal Petrography, 3rd supplement to the 2nd edition* (in English) 1993 US$20

Prices do not include shipping unless stated (approx US$15 in Europe and outside Europe US$23 per item) or cost of money transfer.

Orders to
Dr Petra David
TNO Built Environment and Geosciences
Division of Geo-energy
P.O. Box 80015
3508 TA Utrecht
THE NETHERLANDS

Ph. +31 30 256 4648
Fax +31 30 256 4605
mailto:petra.david@tno.nl

Payment to
Dr. Rudolf M. Schwab
ICCP Treasurer
3 Manor Close, Great Barrow
Chester, England CH3 7LP
UNITED KINGDOM

Tel.: +44-1829-740 239
Fax: +49-1212-666 500 500
mailto:rudi.schwab@btinternet.com
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If undeliverable return to :
Dr P. Crosdale, Editor, ICCP
Energy Resources Consulting Pty Ltd
PO Box 54
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