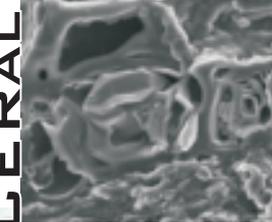


COKE



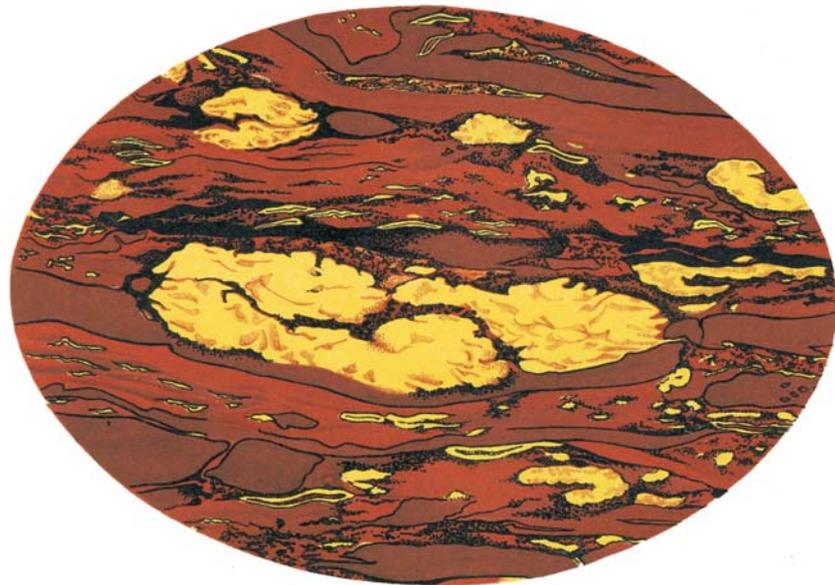
Reflectance  
Fluorescence

Kerogen



**inside  
this  
issue**

"Vertical section of bituminous coal from Collie Weston (sic), Australia, showing bodies which have been wrongly interpreted as Algae, embedded in a mass composed of modified wood. X500."



from Jeffrey, E.C. (1924) The origin and organization of coal. Memoirs of the American Academy of Arts and Sciences, Vol. 15, No. 1, 53 pp. Plate 10, Fig 55

<b>3</b> ed. / pres. / gen. sec.	<b>15</b> OMCWG report
<b>4</b> accreditation	<b>29</b> an eruption of fire (1748)
<b>6</b> Belgrade 2010	<b>30</b> ICCP training course
<b>12</b> Belgrade registration	<b>35</b> ICCP services

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

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Email : ..... mailto:angeles@incar.csic.es  
**OR** visit our web site ..... <http://www.iccop.org>

## From the Editor

the front cover of this issue of ICCP News shows a (hand drawn and coloured) image of a coal thin section from the Permian Collie Coal Measures of Western Australia. It is interesting to note that the bodies which would be clearly assigned to alginite today, were, in 1924, thought to be definitely non-algal. It is unclear as to what the author thought they would be. The lesson here is that times change, interpretations change and on-going training is the only way to keep up to abreast of the latest developments. So if you or your colleagues are new to the sciences of coal, oil, gas and coal petrology, then the ICCP coal petrology course is a must:

### **2<sup>nd</sup> ICCP Course in Organic Petrology**

Held at Geolab  
Helmholtz Centre Potsdam  
German Research Centre for Geosciences - GFZ  
Potsdam, Germany  
<http://www.iccop.org/index.php?id=126>

**June 14 - 18, 2010**

The course is centred on the petrology of coals with a particular emphasis on extending familiarity with a wider range of coals and dispersed organic matter. Practical applications and technological importance will be stressed.

*Peter*

### **Institutional Members of ICCP**



<http://www.tatasteel.com>

Dr P.K. Banerjee / Dr A.K. Singh  
Research & Development Division  
The Tata Iron & Steel Company Limited  
Jamshedpur - 831 007  
India  
[pkbanerjee@tatasteel.com](mailto:pkbanerjee@tatasteel.com) / [alokk.singh@tatasteel.com](mailto:alokk.singh@tatasteel.com)

## From the President

Dear colleagues,

a few days ago, I received the sad message that John Vleeskens, a dear colleague and Honorary member of ICCP, has suddenly died on 21 April 2010 at the age of 81. Although John was retired from ECN since many years, he was still very much interested in ICCP activities and attended almost every meeting. I met him a number of times during the years in Utrecht, where we had dinner and enjoyed very much discussing with him. John was also planning to attend the Belgrade meeting, as he told me when we met last October. John will be missed!

Through the years we have lost a number of dear colleagues and with them a lot of experience and knowledge. Experience and knowledge in organic petrology is the base for ICCP work and I think that it is important to keep as much as possible available for future scientists. There are probably many ways to do this. The training course program, recently started by ICCP can also contribute to this. The great expertise of the two teachers of the last training course was very much appreciated by the participants as I was told.

Preparations are ongoing for a second ICCP Training course in Potsdam to be held in June 2010. Based on the comments of the participants of the first course, the practical sessions will be intensified. There are still places available. More information can be found at <http://www.iccop.org/index.php?id=126>.

Our dear colleagues in Belgrade are busy preparing the meeting in Belgrade. You can find more information about the meeting in this newsletter and also at the ICCP website. Detailed information will be published in the next issue of the ICCP news.

With best regards  
Petra David  
<mailto:petra.david@tno.nl>

## From the General Secretary

The ICCP encourages the dissemination of the results and achievements of its commissions and working groups through the publication of their results both in this Newsletter and in the

appropriate scientific journals. Relevant results obtained during the years by the Combustion WG in Commission III were published in the International Journal of Coal Geology (vol. 81, 2010, pp 201-392). The paper is entitled "The procedure used to develop a coal char classification-Commission III Combustion Working Group of the International Committee for Coal and Organic Petrology" authored by Lester et al. I would like to take this opportunity to thank the convener, Ed Lester, for preparing the manuscript and all the participants for providing results over the years in which the paper is based. I also would like to remember the conveners that the ICCP has an agreement with Elsevier to sign a non-exclusive licence for copyright transfer. This allows the ICCP to keep rights to reproduce and use the material included in the publications, a very important issue

for our institution. I would like therefore to ask any convener willing to prepare a publication with the results of a working group to contact the General Secretary at any moment during the preparation of the manuscript and latest once the manuscript has been accepted and before signing the copyright transfer form on behalf of the co-authors in order to follow the specific procedures to sign the appropriate form. The agreement worked once more in the above mentioned manuscript and I would like to thank Ed Lester again for having followed all the required steps in the benefit of the ICCP.

Angeles G. Borrego  
ICCP General Secretary  
mailto:angeles@incarc.csic.es

## Call for Participation in the ICCP Accreditation Programs (Round 2010-2011)

The International Committee for Coal and Organic Petrology (ICCP) is pleased to invite you to participate in the next Accreditation round. At present the ICCP has three Accreditation Programs:

● **Single Coal Accreditation Program (SCAP)**  
for both maceral group and vitrinite random reflectance analyses. In this program the ability of an analyst to identify and quantify the maceral groups and to identify and measure the vitrinite reflectance of a coal sample according to ISO standards is tested.

**Organizer: Kimon Christanis**  
mailto:christan@upatras.gr

● **Dispersed Organic Matter Vitrinite Reflectance Accreditation Program (DOMVR)**  
In this program the ability of an analyst to identify and measure the reflectance of vitrinite occurring as dispersed vitrinite in rocks such as carbonaceous shales or hydrocarbon source rocks is tested.

**Organizer: Alan Cook**  
mailto:alanccook@ozemail.com.au

● **Coal Blends Accreditation Program (CBAP)**  
In this program the ability of an analyst to identify the number of coals in a blend and their petrographic characteristics such as vitrinite

reflectance and maceral group composition according to ISO standards is tested. Organic petrology is the only technique able to yield information of the individual component coals within a coal blend.

**Organizer: Isabel Suárez-Ruiz**  
mailto:isruiz@incarc.csic.es

The ICCP offers discounts for those participating in more than one accreditation program and has established a procedure to facilitate payments in which a single invoice will be produced. This requires that you contact the organizers of the programs before the **end of April** in order to expedite the procedures. In addition the timing of the exercises has been spaced to reasonably distribute the analytical load of the participants along the year. The expected timing is summarized in Table 1.

Different number of samples are to be analysed in the programs depending on your previous participation. Participants entering SCAP or DOMVR programs or having lapsed for a round, have to analyse six samples, whereas continuation in the program requires the analysis of two samples. For CBAP, new entrants are expected to analyse two samples and continuation requires the analysis of a single sample.

Table 1. General Schedule Proposed for 2010-2011 ICCP Accreditation exercises

	SCAP	DOMVR	CBAP
Announcement, call for participants and invoicing	February to May 2010	February to May 2010	February to May 2010
Sample distribution	April to June 2010	June to August 2010	December 2010
Reception of results	July to September 2010	September to November 2010	January to March 2011
Evaluation, Certificates and Web	October to December 2010	December 2010	April to June 2011
Certificates Validity	01.01.2011 to 31.12.2012	01.01.2011 to 31.12.2012	01.07.2011 to 30.06.2013

Table 2. Fees for the current ICCP Accreditation Programs

	SCAP		DOMVR		CBAP	
	Entry	Continuation	Entry	Continuation	Entry	Continuation
Non-Members, €	126	84	100	66	200	168
Members, €	63	42	50	33	100	84

No participation of automatic systems will be allowed in this round.

The samples for the exercises will be distributed once the organizer has been informed by the treasurer about the reception of the corresponding fee. The fees for the next Accreditation Round are summarised in Table 2. In addition, for participation in two ICCP accreditation programs a 10% discount will be applied in the two of them and for participation in the three accreditation programs a 20% discount will be applied in the three of them.

Further details on the Accreditation programs, evaluation procedures and screening method to limit outliers in the accreditation database can be found at the ICCP website ([www.iccop.org](http://www.iccop.org)) and can be also received by contacting the respective program organizers.

The ICCP accreditation programs have grown up and consolidated over the years and are now an efficient instrument for checking the ability and method of an analyst for petrographic analysis. If you are interested in joining the programs, please contact the corresponding organizers.

Deolinda Flores  
Chair of the Accreditation Subcommittee

## Know Your Coal Petrologist #40



*Jeff Quick (left, KYCP #38) seems to have a certain effect on even the most abstemious. Who is it that would have otherwise been a model of sobriety? Answer page 35.*



**62<sup>nd</sup> Meeting of the International  
Committee for Coal and Organic Petrology (ICCP)  
September 26<sup>th</sup> – October 2<sup>nd</sup> 2010  
Second Announcement – 01/03/2010**

Hosts: Serbian Academy of Sciences and Arts (SASA) and  
University of Belgrade, Faculty of Mining and Geology  
[http://www.sanu.ac.rs/English/62ndICCP\\_SecondAnnouncement.pdf](http://www.sanu.ac.rs/English/62ndICCP_SecondAnnouncement.pdf)  
Contact: [ICCP.erc@sanu.ac.rs](mailto:ICCP.erc@sanu.ac.rs)  
[sasa.international@sanu.ac.rs](mailto:sasa.international@sanu.ac.rs)

Location: Belgrade, Serbia, Knez Mihailova 35 (City Centre)



Fig 1. Serbian Academy of Sciences and Arts

**Organizing Committee**

Academician Marko Ercegovac, Chair, Serbian  
Academy of Sciences and Arts, Belgrade

Dr. Dragana Životić, University of Belgrade,  
Faculty of Mining and Geology, Belgrade

Dr. Aleksandar Kostić, University of Belgrade,  
Faculty of Mining and Geology, Belgrade

Prof. Dr. Vladica Cvetković, University of  
Belgrade, Faculty of Mining and Geology,  
Belgrade

Prof. Dr. Branimir Jovančičević, Faculty of  
Chemistry, University of Belgrade, Belgrade

Prof. Dr. Dragoslava Stojiljković, Faculty of  
Mechanical Engineering, University of  
Belgrade, Belgrade

Dr. Ivan Dulić, Petroleum Industry of Serbia -  
NAFTAGAS, Novi Sad

## Invitation

The President of the International Committee for Coal and Organic petrology (ICCP) Dr. Petra David, the Serbian Academy of Sciences and Arts and the Faculty of Mining and Geology, University of Belgrade, have the honour to invite all the members of the ICCP and interested colleagues to the 62<sup>nd</sup> Annual Meeting of the ICCP in Belgrade. All three Commissions of the ICCP will convene for four days. Post-conference field trip will provide the participants with the opportunity to visit Kostolac soft brown coal deposit and the famous site of Serbian archaeological find - Viminatum.

## Venue

Meeting sessions will be held at the Serbian Academy of Sciences and Arts (Main Hall of SASA, Knez Mihailova 35/II). Belgrade is well known for its cultural, historical and tourist traditions dating back more than a century, for its pleasant climate and for its hospitality. Belgrade hotels guarantee pleasant accommodation, rich gastronomic fare, and are close to excellent entertainment and shopping places. The city has a friendly, lively academic atmosphere, due to the presence of the Belgrade University and its students. The organizers hope participants will enjoy their stay in Belgrade, with its beautiful setting on two major rivers and numerous other attractions. During September the climate is dry with temperatures higher than 25°C.

Belgrade is connected with most world cities (London, Frankfurt, Paris, Madrid, New York, Sydney, Rio de Janeiro etc.). The participants arriving at the Belgrade International Airport "Nikola Tesla" are recommended to take JAT Airways bus to the Bus Air Terminal (Hotel Slavija) or a taxi thereafter. From the International Airport of Belgrade to the Bus Air Terminal, there is a regular bus service every 30 minutes (the fixed drive cost for one direction is 2.5 Euro or 250 Dinars (RSD). From Bus Air Terminal (Hotel Slavija) to the recommended hotels participants can take public traffic (trolleybus line 21, 22, 29, bus line 31) to the centre of the city (about 15 minutes) or taxi (5-10 minutes).

Participants taking taxis from the airport to their hotels are advised to be aware of the distance

involved and it is recommended to ask for approximate fare before hiring a taxi (for distance cca 18 km, the approximate fare is about 15-20 Euros or 1500-2000 RSD; Exchange Rate (02/03/2010): 1 Euro = 100 RSD).

## Conference Themes

Advances in Organic Petrology, and Applied Organic Petrology and Organic Geochemistry.

## Abstracts

We encourage you to take the opportunity to make a presentation, either as an oral presentation or as a poster. The oral presentations on Symposium are scheduled to 20 min., including 5 minutes for questions.

Abstracts for poster presentation up to 2 pages (including figures and references) will be accepted. Leave 2 cm margins on both sides, use 1½ line spacing and a 12-point GC Times Roman (or similar) font. Title of abstract should be in 12-point bold and include names of authors (12-point) and affiliation (10-point). Please send abstracts (Word, Word Perfect) as attachment on e-mail address [mailto:ICCP.erc@sanu.ac.rs](mailto:mailto:ICCP.erc@sanu.ac.rs) or send on CD.

## *Deadline for submission of abstracts is May 31, 2010*

It is planned to publish the papers presented at the Belgrade ICCP Meeting and the Symposium, as a special issue of the International Journal of Coal Geology (Elsevier, Amsterdam).

## Field trip

One-day excursion to the Kostolac basin (Drmno open-pit mine) and Kostolac power-plant, and the remains of Roman castle on the Danube (Viminatum archeological site).

Date: October 2, 2010.

Time: 9-18h

Route: Belgrade - Požarevac - Kostolac - Viminatum - Belgrade

Field trip leaders: Dr Dragana Životić, Dr Aleksandar Kostić

## Preliminary Program

62<sup>nd</sup> ICCP Meeting; September 26 – October 2, 2010

Time	Sunday 26 Sept	Monday 27 Sept	Tuesday 28 Sept	Wednesday 29 Sept	Thursday 30 Sept	Friday 1 Oct	Saturday 2 Oct					
08:30-09:00		<b>Registration</b>	Registration				Field trip					
09:00-09:30		Welcome of the Organizing Committee	ICCP Commission Meetings II	ICCP Commission Meetings III	ICCP Commission Meetings I	Symposium						
09:30-10:00												
10:00-10:30		Fossil fuels of Serbia	Coffee	Coffee	Coffee	Coffee						
10:30-11:00												
11:00-11:30		ICCP General Assembly	CCP Commission Meetings II	ICCP Commission Meetings III	ICCP Commission Meetings I	Symposium						
11:30-12:00												
12:00-12:30												
12:30-13:00		Lunch	Lunch	Lunch	Lunch	Lunch						
13:00-13:30												
13:30-14:00	ICCP Council Meeting	ICCP General Assembly	ICCP Commission Meetings III	ICCP Commission Meetings I	ICCP Commission Meetings I	Symposium						
14:00-14:30												
14:30-15:00												
15:00-15:30												
15:30-16:00								Coffee	Coffee	Coffee	Coffee	Coffee
16:00-16:30								I ICCP Commission Meetings II	ICCP Commission Meetings III	ICCP Commission Meetings I	ICCP General Assembly Closing Plenary Session	Poster Session
16:30-17:00												
17:00-17:30												
17:30-18:00												
18:00-18:30												
18:30-19:00			ICCP Council Meeting									
19:00-19:30	Ice breaker and Registration											
19:30-20:00												
20:00-20:30				Conference Dinner								
20:30-21:00												

## General information

The official conference language is English.

## Registration Fees

ICCP Members and Guests:	
Early registration	150 €
after May 31, 2010	180 €
Students	50 €
Accompanying persons	50 €
Conference Dinner	50 €
Field trip	60 €

Registration fee includes: Ice-Breaker, participation in ICCP Sessions, ICCP Symposium, coffee breaks, 5 light luncheons and Book of Abstracts.

## Payment Options

### A. By Bank Transfer to Euro Account

	SWIFT MESSAGE MT 103
FIELD 32A:	VALUE DATE – CURRENCY - AMOUNT
FIELD 50K:	ORDERING CUSTOMER
FIELD 56A:	DEUTDEFF
/INTERMEDIARY/	
FIELD 57A:	/DE20500700100935930800
/ACC, WITH BANK/	NBSRRSBG
FIELD 59:	/RS35908504100000039084
(BENEFICIARY)	SRPSKA AKADEMIJA NAUKA I UMETNOSTI BEOGRAD
FIELD 70:	DETAILS OF PAYMENT

### B. By Bank Transfer to USD Account

	SWIFT MESSAGE MT 103
FIELD 32A:	VALUE DATE - CURRENCY - AMOUNT
FIELD 50K:	ORDERING CUSTOMER
FIELD 56A:	BKTRUS33
/INTERMEDIARY/	
FIELD 57A:	/04415465
/ACC, WITH BANK/	NBSRRSBG
FIELD 59:	/RS35908504100000039084
(BENEFICIARY)	SRPSKA AKADEMIJA NUKA I UMETNOSTI BEOGRAD
FIELD 70:	DETAILS OF PAYMENT

All fees during the ICCP Meeting have to be paid in cash (RSD – Serbian Currency).

Exchange Rate (March 1, 2010): 1 € = 100 RSD; 1 US\$ = 73 RSD

Money exchange at Belgrade Airport: All required information about the bank and exchange offices at the Belgrade Airport are available at: [http://www.beg.aero/passengers/travel/post\\_office\\_banks\\_at\\_machines\\_and\\_currency\\_exchange\\_machines.277.html](http://www.beg.aero/passengers/travel/post_office_banks_at_machines_and_currency_exchange_machines.277.html)

## Accommodation

Hotels of all categories are available for the participants of ICCP Meeting 2010. The hotel reservations should be made directly with the hotel staff.

Due to some other conferences at the time of the ICCP Meeting it is advisable to book early.

### Hotels in Belgrade

#### 1. Hotel VILLA KALEMEGDAN \*\*\*\*\*

Address: Strahinjića Bana 7,  
Phone: +381 11 263 78 56  
Mailto: [reservation@villakalemegdan.com](mailto:reservation@villakalemegdan.com)  
Homepage: <http://www.villakalemegdan.com/>  
Rates: SGL/DBL: 156 € / 197€

#### 2. Hotel PALACE \*\*\*\*\*

Address: Topličin venac 23 , 11000 Belgrade,  
Phone: +381 11 218 5585, +381 11 263 7222;  
Fax: +381 11 218 4458  
Mailto: [office@palacehotel.co.yu](mailto:office@palacehotel.co.yu)  
<http://www.palacehotel.co.yu/>  
Rates: SGL/DBL: 91 € / 135€

Parking spots; Room for smokers; Possible vegetarian meal

#### 3. Hotel MAJESTIC \*\*\*\*\*

Address: Obilićev venac 28,  
Phone: +381 11 328 57 77; +381 11 328 49 95  
Mailto: [office@majestic.rs](mailto:office@majestic.rs)  
<http://www.majestic.rs/>  
Rates: SGL/DBL: 72 € / 131€

Parking spots

#### 4. Hotel BALKAN \*\*\*\*\*

Address: Prizrenska 2 ,  
Phone: + 381 11 36 36 000  
Fax: + 381 11 26 87 581  
Mailto: [reservations@balkanhotel.net](mailto:reservations@balkanhotel.net)  
<http://www.balkanhotel.rs/>  
Rates: SGL/DBL: 125 € / 140€

Parking spots

## 5. Hotel MOSKVA \*\*\*\*

Address: Terazije 20,  
Phone: +381 11 2686 255,  
Fax: +381 11 2688 389,  
Reservation: +381 11 3642 069,  
Mailto: info@hotelmoskva.rs  
<http://www.hotelmoskva.rs/>  
Rates: SGL/DBL: 118 € / 132€  
Parking spots

## 6. Hotel LE PETIT PIAF \*\*\*

Address: Skadarska 34  
Phone +381 11 30 35 252  
Fax: +381 11 30 35 353  
Reservation: office@petitpiaf.com;  
<http://www.petitpiaf.com/>  
Rates: SGL/DBL: 85€ / €

## 7. Hotel ROYAL \*\*\*

Address: Kralja Petra I 56,  
Phone/Fax: +381 11 263 42 22  
M a i l t o : t o p l i c e @ s c n e t . r s ;  
hotelroyal.rs@gmail.com  
<http://www.hotelroyal.rs/>.  
Rates SGL/DBL: 43 € / 55€

## 8. Hotel UNION \*\*\*

Address: Kosovska 11,  
Phone: +381 11 324 80 22  
Fax: +381 11 324 81 72  
Mailto: reservation@ hotelunionbelgrade.com  
<http://www.hotelunionbelgrade.com/>.  
Rates SGL/DBL: 44 € / 71€  
Parking; Room for smokers; Possible vegetarian meal

## 9. Hotel KASINA \*\*\*

Address: Terazije 25,  
Phone: +381 11 323 55 74  
Mailto: hotelkasina.recepcija@bvcom.net  
<http://www.stari-grad.rs/sgrad/index.php?id=1&ln=sr>  
Rates SGL/DBL: 49 € / 83€

## 10. Hotel PRAG \*\*\*

Address: Kraljice Natalije 27 ,  
Phone: +381 11 361 04 22, + 381 11 321 44 44  
Fax: +381 11 361 26 91  
Mailto: front.office@hotelprag.rs;  
hotelprag@sezampro.yu;  
sales-marketing@hotelprag.rs  
<http://www.hotelprag.co.rs/>  
Rates SGL/DBL: 77 € / 103€  
Room for smokers; Possible vegetarian meal

## 11. Hostel 360°

Address: Knez Mihailova 21, 5th floor  
Phone: +381 11 263 49 57  
Mob: +381 63 351 652

Mailto: boooking@hostel360.com  
<http://www.hostel360.com/>

## 12. Hostel FLASH

Address: Nušićeva 3a  
Phone: +381 11 32 22 778  
Fax: +381 11 32 48 084  
Mailto: info@hostelflash.com  
<http://www.hostelflash.com/>

The locations of the available hotels are shown on map following.

## Passport and Visa Requirements

The Organizing Committee of the 62<sup>nd</sup> ICCP Meeting will issue official invitation letters to the participants who need such a document to raise travel funds or obtain a visa. However, such letters do not oblige 62<sup>nd</sup> ICCP Meeting to provide financial support. Requests for letters of invitation should be sent to the Organizing Committee of 62<sup>nd</sup> ICCP Meeting.

## Correspondence

If you require any further information please contact:

Local Organizing Committee of ICCP-Meeting,  
2010  
C/o Serbian Academy of Sciences and Arts  
Academician Marko Ercegovac  
Knez Mihailova 35  
11000 Belgrade, SERBIA  
Tel.: + 381 11 26-39-008  
Fax: + 381 1120-27-299  
mailto:ICCP.erc@sanu.ac.rs  
mailto:Sasa.international@sanu.ac.rs  
[http://www.sanu.ac.rs/English/62ndICCPMeeting\\_SecondAnnouncement.pdf](http://www.sanu.ac.rs/English/62ndICCPMeeting_SecondAnnouncement.pdf)

## Useful Websites:

Information about Belgrade city:  
<http://www.beograd.co.rs>  
<http://www.beograd.org.rs>  
<http://www.belgrade-serbia.com>  
Tourist information about Serbia:  
<http://www.serbia-turism.org>  
<http://www.serbia.travel>  
<http://www.visitserbia.org>  
Map of Belgrade  
<http://www.planplus.rs>

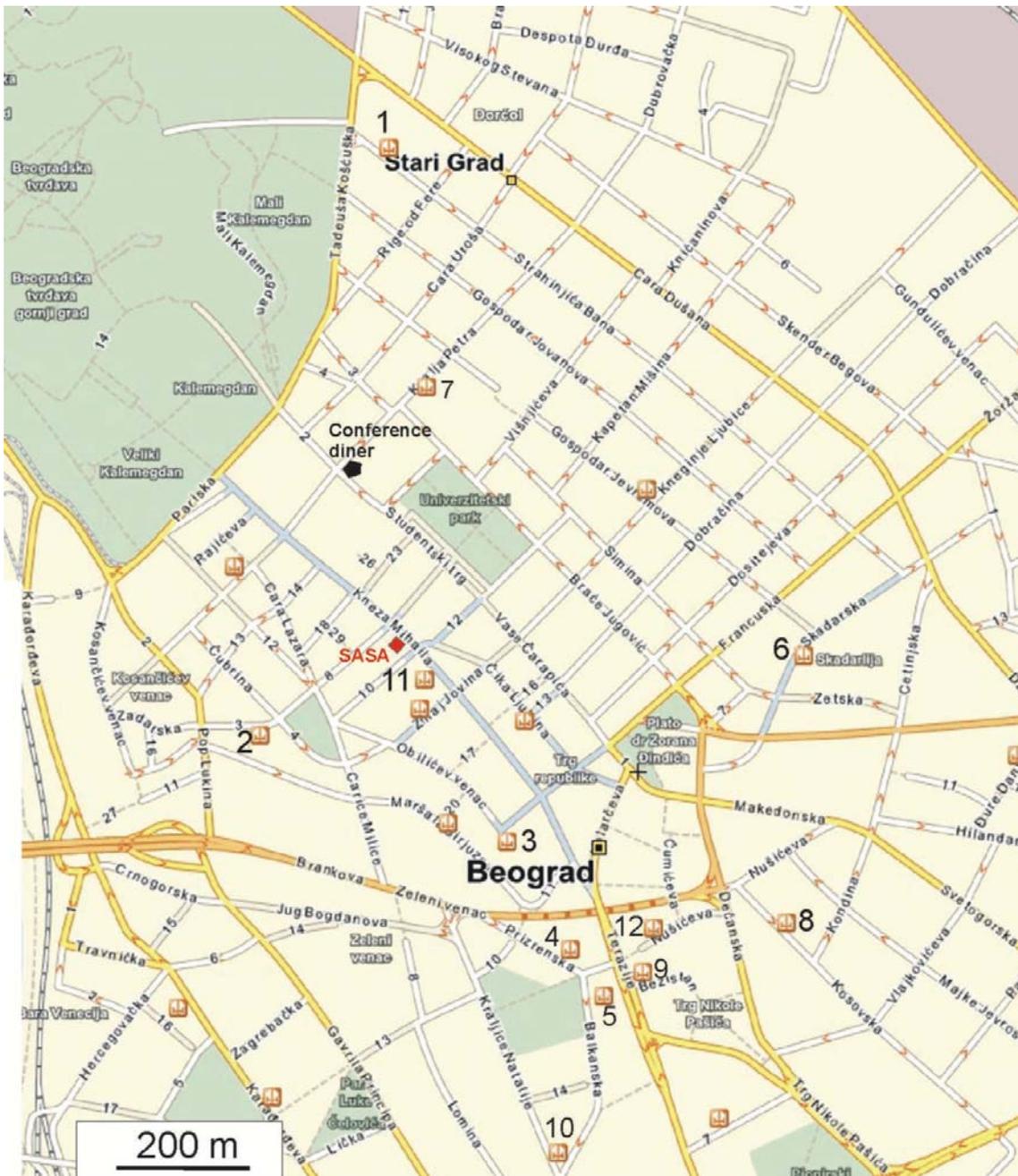


Fig 2. Location of recommended Hotels in Belgrade

SASA - Serbian Academy of Sciences and Arts

1. Hotel VILLA KALEMEGDAN \*\*\*\*\*
2. Hotel PALACE \*\*\*\*
3. Hotel MAJESTIC \*\*\*\*
4. Hotel BALKAN \*\*\*\*
5. Hotel MOSKVA \*\*\*\*
6. Hotel Le Petit Piau \*\*\*
7. Hotel ROYAL \*\*\*
8. Hotel UNION \*\*\*
9. Hotel KASINA \*\*\*
10. Hotel PRAG \*\*\*
11. Hostel 360°
12. Hostel FLASH



**62<sup>nd</sup> Meeting of the International Committee for Coal and Organic Petrology (ICCP)  
September 26<sup>th</sup> – October 2<sup>nd</sup> 2010**

[http://www.sanu.ac.rs/English/62ndICCPMeeting\\_SecondAnnouncement.pdf](http://www.sanu.ac.rs/English/62ndICCPMeeting_SecondAnnouncement.pdf)

**REGISTRATION FORM**

Name:  
Title:  
Institution:  
Address:

City/Postal Code:  
State:  
Phone:  
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## Membership Matters



**please update your contact details**

### member updates

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Heden, 21 april 2010, is vrij plotseling, gesterkt door het Heilige Sacrament der Zieken, op de leeftijd van 81 jaar, van ons heengegaan mijn goede echtgenoot, lieve vader en onze opa

### John Vleeskens

Tineke Vleeskens - Scaf

Marja en Fons  
Damy  
Mischa  
Philo  
Yoni

Breelaan 16 D  
1861 GE Bergen N.H.

De Eucharistieviering bij de uitvaart vindt plaats op maandag 26 april om 15.00 uur in de H.H. Petrus en Pauluskerk, Dorpsstraat 22 te Bergen N.H. Na afloop nodigen wij u uit om met ons een drankje te drinken in het Parkhotel in Bergen N.H.

Gelegenheid tot afscheid nemen en condoleren 15 minuten voor aanvang van de Eucharistieviering.

De crematie zal in besloten kring plaatsvinden.

Some thoughts from Barbara Kwiecinska: John Vleeskens- Honorary member of the ICCP. He was a great Friend of mine. I met him 30 years ago in Ostrava in 1980. It was a pleasure to work with Him, to publish joint papers. John had a tremendous knowledge about coke properties, combustion chars, coal chemistry and other topics. I learned a lot from Him. He had a good sense of humour. He was always smiling. He visited me and my family in Krakow, together with his wife Tineke. They liked this city and vicinities. He invited me to Petten to Netherlands Energy Research Foundation ECN to Fuels Department to give a lecture about Polish coal basins. I remember his great hospitality.

John had fascinating, extremely warm and unusually deep human personality. I am sure that the members of the ICCP who knew John would like to pay homage to this exceptional man and scientist. He will be in my heart for ever.

If applicable please update your contact details with the General Secretary.

**Dr. Ángeles Gómez Borrego**  
 ICCP General Secretary  
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## 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 at <http://www.iccop.org> or by contacting the chair of the award committee (see inside front cover).

### 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. The award committee consists of the five most recent medalists. Awards are made from time to time but applications are called for every 2 years.

No nominations will be called for in 2010. For details of procedures and nominations, contact:

**Dr. Ángeles Gómez Borrego**  
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## 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.

The award committee currently consists of the Thiessen Medal Committee as a transitional arrangement. Eventually, the award committee will consist of the five most recent recipients.

Nominations will be accepted for 2010. Contact:

**Dr. Ángeles Gómez Borrego**  
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TSOP is an international society for scientists and engineers involved with coal petrology, kerogen petrology, organic chemistry and related disciplines

### ANNUAL MEETING ANNOUNCEMENT AND CALL FOR PAPERS

Denver, Colorado, USA  
 Sheraton Denver West Hotel  
 September 12-16, 2010

Conference Theme:

Advances in Organic Petrology

Field trip to western Colorado, Piceance Basin, to see the Green River Oil Shale

TECHNICAL PROGRAM AND ABSTRACTS, GENERAL INQUIRIES AND REGISTRATION  
 Mark Pawlewicz or Paul C. Hackley  
 E-mail: pawlewicz@usgs.gov phackley@usgs.gov

**ABSTRACT SUBMISSION DEADLINE: APRIL 19, 2010**

Meeting and abstract submission details:  
<http://www.tsop.org/2010Denver/>

TSOP: <http://www.tsop.org>

TSOP student research grant  
 (deadline May 15, 2010)

Meeting organized by the U.S. Geological Survey

<http://www.usgs.gov>

# Report on Organic Matter Concentration Working Group (OMCWG 2009)

Convenor: João Graciano Mendonça Filho (UFRJ-Brazil)

Presented at the 61<sup>st</sup> Meeting of the International Committee for Coal and Organic Petrology (ICCP)  
September 19-26, 2009, Gramado, Brazil

## 1. Introduction

The main objective of the Organic Matter Concentration WG was to study the effect of the isolation procedure on the organic matter optical parameters. This second exercise consisted of the analysis of two samples with kerogen type II. The samples studied in this exercise were of low and medium rank and the analyses performed were:

- ◆ Vitrinite reflectance of the whole-rock sample (WR);
- ◆ Vitrinite reflectance of the kerogen concentrate sample (KC);
- ◆ Spectral fluorescence analysis of liptinite in the whole rock sample (WR);
- ◆ Spectral fluorescence analysis of liptinite in the kerogen concentrate sample (KC);

This report includes the results obtained by fourteen participants (Table 1) of the exercise proposed in the last ICCP meeting (Oviedo-Spain) in order to continue with the activities of the Organic Matter Concentration Working Group that began in 2008.

**Table 1:** List of Participants in the OMCWG

Participant	Affiliation	Country
Araujo, Carla V.	Petrobras R&D Center	Brazil
Borrego, Angeles G.	INCAR-CSIC	Spain
Cook, Alan	Keiraville Konsultants Pty. Ltd	Australia
Flores, Deolinda	University of Porto	Portugal
Hackley, Paul	U.S. Geological Survey	USA
Hower, Jim	University of Kentucky	USA
Kern, Marcio L.	Federal University of Rio de Janeiro	Brazil
Kus, Jolanta	Geozentrum Hannover	Germany
Mastalerz, Maria	Indiana University	USA
Mendonça Filho, João G.	Federal University of Rio de Janeiro	Brazil

Mendonça, Joalice O.	Federal University of Rio de Janeiro	Brazil
Menezes, Taíssa R.	Petrobras R&D Center	Brazil
Souza, Igor V. A. F.	Petrobras R&D Center	Brazil
Suarez-Ruiz, Isabel	INCAR-CSIC	Spain

The studied samples from OMCWG 2008 were composed by two outcrop carbonaceous shales (Type III Kerogen): one of them was from Spain (sample OMC1), Montsacro Mine, Asturian Central Coal Basin (Pennsylvanian) and the other one was from Nigeria (sample OMC2), Mamu Formation (Maastrichtian), Benin-Flank Basin. The samples showed that the scatter of the readings was higher in the Whole-Rock sample than in the Kerogen Concentrate sample for most participants in the low ranking samples. These results indicated that it was easier to identify the vitrinites in the Kerogen Concentrate sample than in the Whole-Rock sample for the low rank stage or that the vitrinite reflectance measurements were more reliable without the mineral matrix influence or the mineral matrix may affect the polishing quality (Mendonça Filho et al., 2008).

In this exercise, following the criteria and parameters and in the statistical evaluation system ([www.iccop.org](http://www.iccop.org)), in general excellent results were obtained and the selected samples allowed an accurate study on the effect of the isolation procedure on the organic matter optical parameters.

Now, for the OMCWG 2009, the studied samples were composed by two outcrop carbonaceous marine shales: one of them was from Spain (sample OMC3), Rodiles Formation (medium rank, Type II-kerogen), Asturian Mesozoic Cover and the other one was from Portugal (sample OMC4), Vale das Fontes Formation (low rank, Type II-I kerogen), Lusitanian Basin. The age of two studied samples is Pliensbaquian (Lower Jurassic).

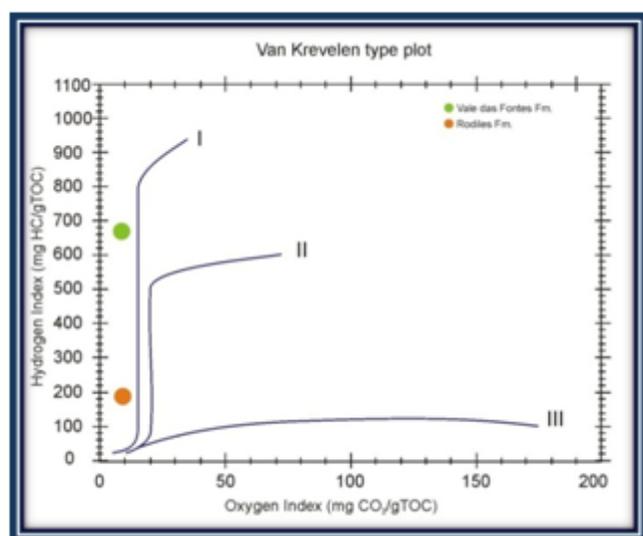
The set of studied samples comprises 4 samples numbered as follows:

**Sample OMC3 (Rodiles Formation - Asturian Mesozoic Cover - Spain):** OMC3A = whole rock and OMC3B = kerogen concentrate

- ▶ Total Organic Carbon (TOC) about 3.5 wt%
- ▶ The Hydrogen Index (HI) is 188 mg HC/g TOC and the Oxygen Index (OI) is 9 mg CO<sub>2</sub>/g TOC. These results from Rodiles Formation are plotted close to origin of the diagram, indicating that they may be in the oil window. (Figure 1).
- ▶ The value from Tmax (445°C) pointing out that this sample was thermally mature (medium rank).
- ▶ The hydrocarbon source potential is depleted, but the value is good (S2 = 6.65 mg HC/ g Rock) pointing out to an original good quality of organic matter for hydrocarbon generation.

**Sample OMC4 (Vale das Fontes Formation - Lusitanian Basin - Portugal):** OMC4A = whole rock and OMC4B = kerogen concentrate

- ▶ Total Organic Carbon (TOC) about 16 wt%;
- ▶ The HI is 667 mg HC/g TOC and the OI is 9 mg CO<sub>2</sub>/g TOC, characterizing type II-I kerogen (Figure 1);
- ▶ Tmax = 415°C pointing out that this sample was thermally immature (low rank);
- ▶ The hydrocarbon source potential is excellent (S2 = 104.81 mg HC/ g Rock).



**Figure 1:** Van Krevelen type plot (Espitalié *et al.*, 1977) showing hydrogen and oxygen indices from studied samples.

## 2. Sample Preparation:

### 2.1. Whole-Rock Preparation Procedure:

The studied samples were ground to approximately 2 mm size and embedded in resin. A single block was prepared for each sample.

### 2.2. Plug of Kerogen Concentrate Preparation Procedure:

The studied samples were ground to approximately 2 mm size. HCl (37%) was added to the sample during 18 hrs. After this procedure the sample was washed with distilled water until the washing water was neutral. In the next step HF (40%) was added during 24hrs, repeating the washing procedures and 37% HCl was added to the sample during 3 hrs to remove the fluorides. The sample washed with water again until neutralization. After this procedure the sample was floated using ZnCl<sub>2</sub> (= 1.9 to 2 g/cm<sup>3</sup>) and centrifuged to separate sulphides. The washing procedures were repeated adding some HCl (10%) drops + distilled water to eliminate the heavy liquid. The isolated kerogen was sieved (20 µm) and embedded in resin (SERIFIX-STRUERS).

### 2.3. Sample Polishing:

The particulate blocks had their surfaces grounded down using progressively finer grades of wet silicon carbide papers; the grinds used were 800, 1200 and 4000 grit wet silicon carbide paper. A single set of samples was sent to each laboratory.

## 3. Statistical Evaluation Criteria and Parameters

**Precision and bias for the analysts:** an evaluation of the suitability of the data for an accreditation program (based on Borrego *et al.* 2006 and <http://www.iccop.org>) was used to interpret data.

This report is based on the rules for ICCP Accreditation Program for Vitrinite Reflectance Measurements on Dispersed Organic Matter described in Borrego *et al.* (2006). According to these authors, one of the objectives of a round robin exercise is to highlight the difficulties that must be taken into account to initiate an accreditation program for vitrinite reflectance assessment on dispersed organic matter. Before initiating this task

there was a need to know how the scatter of results around the calculated group means was.

The system applied is the same one used in the accreditation program for vitrinite reflectance in coal. The criteria used for coal might be too strict for dispersed organic matter but there is no doubt that the precision achieved for coal vitrinite reflectance should be the goal. The parameters considered in the accreditation program are:

**UMSD:** refers to participant's **Unsigned Multiple of the Standard Deviation**, calculated against the group mean and standard deviation data, for each sample analyzed as per the formula below:

$$UMSD = \left( \frac{X_i - \bar{X}}{\sigma} \right)$$

$X_i$  = the participant vitrinite reflectance  
 $\bar{X}$  = the group mean vitrinite reflectance  
 $\sigma$  = the standard deviation of the group

**SMSD:** refers to participant's **Signed Multiple of the Standard Deviation**, calculated against the group mean and standard deviation data, for each sample analyzed.

**AUMSD** and **ASMSD** are the average UMSD and SMSD values respectively for each participant. The AUMSD value is a measure of the participant's **accuracy** and the ASMSD is an indicator of the participant's **measurement bias** in the techniques being assessed.

Once all these parameters are calculated depending on the figures obtained by each participant the information received is the following:

**(A) AUMSD:** dispersion around group mean values, that is, a measure of accuracy.

<1.5	≥ 1.5
Pass	Fail
Your analytical technique is acceptable	You have serious problems with your analytical technique

**(B) ASMSD:** bias of reported results ( $\pm$ ), that is, indicates consistency of an analyst. A negative bias (for example, -1.3061) indicates that your results, on average, are always lower than the group mean values and a positive bias (for example, +1.3061) indicates that your results, on average, are higher than the group mean values. Where the AUMSD and ASMSD values are **exactly the same** indicates

that your results are always below (negative value) or above (positive value) the established group values.

<± 0.5	± 0.5-<±1.0	± 1.0-<± 1.5	≥± 1.5
Minor bias	Medium bias	Significant bias	Extreme bias
Your results are always consistent	Some improvement is required	Examine the method being used	You have serious problems with your analytical technique

The SMSD was calculated for each vitrinite population and also the averaged AUMSD and ASMSD for each participant.

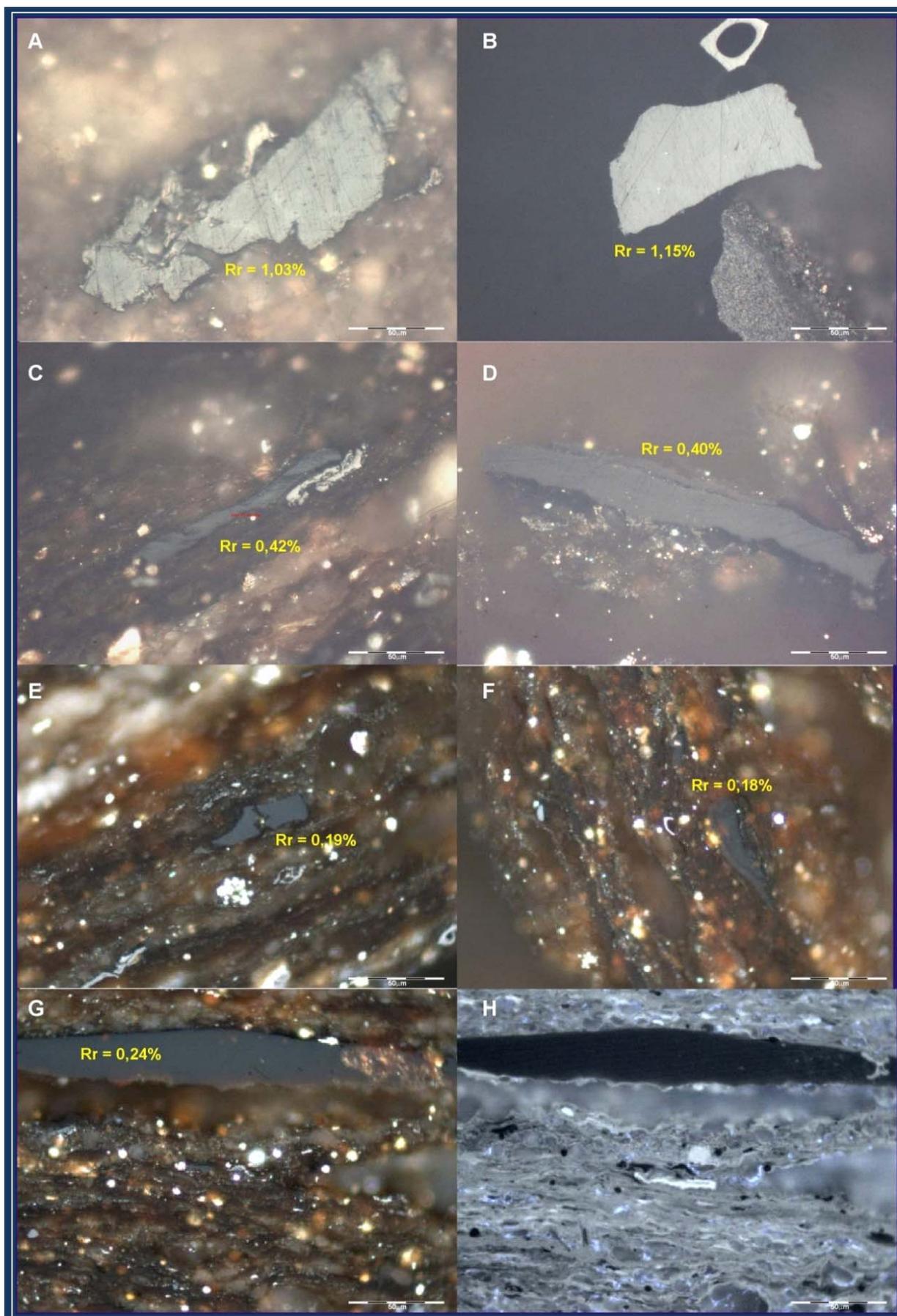
It is worth mentioning that these statistical systems are being used only as a learning tool, giving information on how the participants should proceed in the vitrinite reflectance analysis on dispersed organic matter.

#### 4. Results and Discussion:

The participants are being identified by alphabetic letters (from A to N) in this report. Fourteen participants provided results based on standard vitrinite reflectance, and eight participants provided results based on spectral fluorescence analysis of liptinite.

Table 2 shows the distribution of vitrinite reflectance for the different samples as reported by the participants. The samples from Rodiles Fm. (OMC3A and OMC3B) and Vale das Fontes Fm. (OMC4A and OMC4B) presented an enough amount of measureable vitrinite particles. Furthermore, it was observed a large variation in the number of readings by each participant in both samples. The selected samples allowed the accurate study of the effect of the isolation procedure on the organic matter optical parameters in Type II-kerogen.

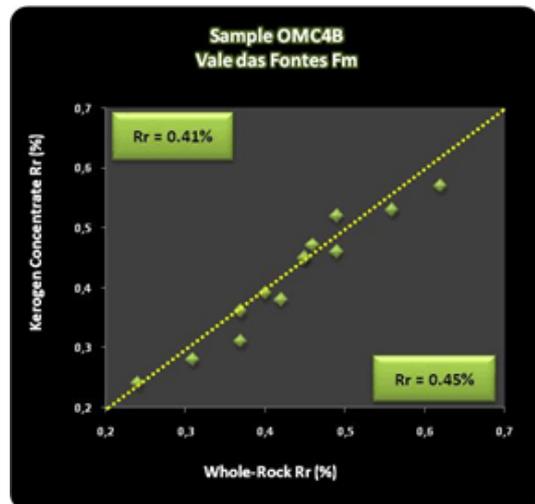
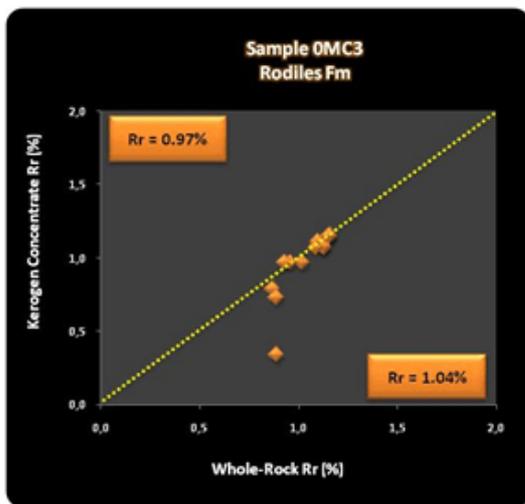
The average of vitrinite reflectance for sample OMC3 of whole-rock was 1.04% and for kerogen concentrate was 0.97%. For sample OMC4, the result was 0.45% for whole-rock and for kerogen concentrate was 0.41% (Plate 1). In general, the Standard Deviation (SD) values in both samples were high.



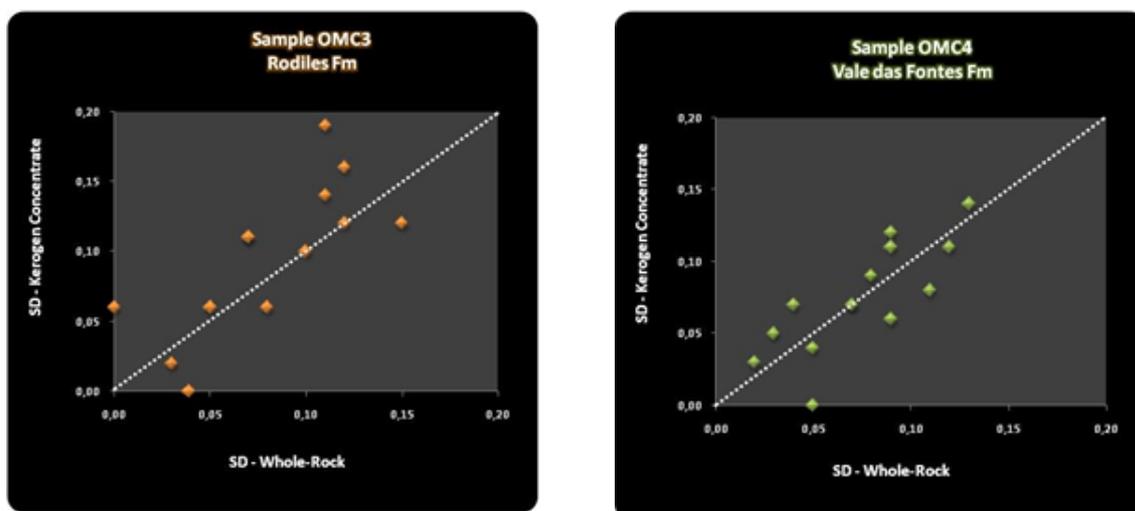
**Plate 1:** Examples of vitrinites. A: Sample OMC3A; B: Sample OMC3B; C: Sample OMC4A; D: Sample OMC4B; E-H: Second vitrinite population identified by some participants (G-H: Phyllovitrinite?). All photomicrographs were taken under white incident light, oil immersion, exception photomicrograph 1H under fluorescence mode.

**Table 2:** Distribution of vitrinite reflectance as reported by the participants.

Participant	Sample 3A			Sample 3B			Sample 4A			Sample 4B		
	Whole-Rock			Kerogen Concentrate			Whole-Rock			Kerogen Concentrate		
	Rr (%)	SD	N	Rr (%)	SD	N	Rr (%)	SD	N	Rr (%)	SD	N
A	1.02	0.10	31	0.97	0.1	48	0.65	0.09	72	0.26	0.06	25
B	0.87	0.11	14	0.79	0.14	14	0.62	0.12	35	0.57	0.11	18
C	1.12	0.15	28	1.09	0.12	26	0.56	0.07	24	0.53	0.07	17
D	1.15	0.03	12	1.14	0.02	13	0.45	0.02	21	0.45	0.03	20
E	0.89	0	1	0.34	0.06	7	0.31	0.05	6	0.28	0.00	1
F	1.13	0.12	9	1.07	0.12	26	0.24	0.07	52	0.24	0.07	18
G	1.16	0.11	25	1.15	0.19	30	0.40	0.11	16	0.39	0.08	14
H	1.10	0.05	18	1.11	0.06	18	0.45	0.05	17	0.45	0.04	21
I	1.13	0.07	31	1.08	0.11	52	0.37	0.09	29	0.36	0.11	12
J	1.16	0.08	20	1.15	0.06	13	0.46	0.03	21	0.47	0.05	16
K	1.09	0.12	44	1.07	0.16	47	0.49	0.08	64	0.46	0.09	20
L	0.96	0.17	16	0.97	0.21	19	0.42	0.13	31	0.38	0.14	29
M	0.93	0.07	50	0.97	0.11	50	0.49	0.04	50	0.52	0.07	30
N	0.89	0.04	3	0.73	0	1	0.37	0.09	32	0.31	0.12	28
Average	1.04			0.97			0.45			0.41		
SD	0.11			0.22			0.11			0.1		



**Figure 2:** Comparison of mean reflectance values between WR and KC



**Figure 3:** Comparison of standard deviation (SD) between WR and KC - Scatter of data in the analysed samples

The graph of kerogen vs whole rock (Figure 2) allowed comparing the results of the whole-rock and the kerogen concentrate samples. If the x and y axes have the same dimensions and the results were equivalent, all the points should be on the median or closer. This happens in the sample OMC3 for the reflectance considering the most of participants, but Participant E presented a very low value for OMC3B (kerogen concentrate). However, in sample OMC4 the reflectance tended to be slightly higher in the whole-rock, where it can be observed clearly that most of the points are below the median, showing that the results for sample OMC4A (whole-rock) were slightly higher than in the sample OMC4B (kerogen concentrate).

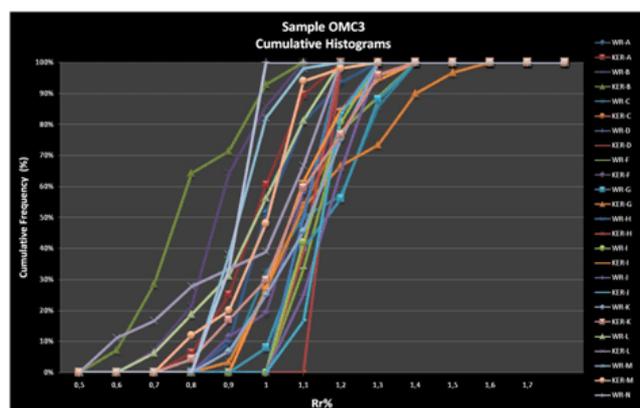
Figure 3 shows the **Standard Deviations** graph, which helped to see if there was more dispersion of data in the kerogen analyses than in those of whole-rock. If the SD values were always higher in one than in the other, this would indicate a bigger difficulty to identify the population.

In general, high values of SD were observed in the two analyzed samples, which indicate a larger scatter of the readings. In the case of the sample OMC3, the SD values tend to be higher in the kerogen concentrate, which could indicate a bigger difficulty to identify the vitrinite particles in kerogen concentrate than whole-rock. In the case of the sample OMC4, the results showed no definite patterns. The readings display a scatter of measurements in the whole-rock for some participants and in the kerogen concentrate for others.

Figures 4 and 5 are representing the Cumulative

Frequency graph, which can be grouped into various families according to the shape of the curves: curves showing a single population of vitrinite; curves showing a bimodal distribution with different proportion of the low reflecting and high reflecting population and curves showing large scatter without modal values.

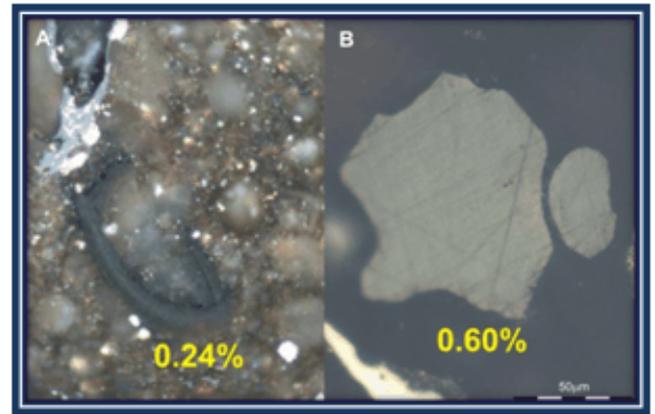
Figure 4 shows the reflectance class distributions of the participants for sample OMC3A and OMC3B (Rodiles Fm.). The shape of the curves indicates that most of the participants identified a single vitrinite population with a rather narrow distribution of reflectance classes. However, the Participants B and L included readings whose values are lower than the group mean in the samples OMC3A and OMC3B. On the other hand, the Participant G included some readings whose values are higher than the average in the sample OMC3B. The results of these participants show a large scatter of readings (high SD values) indicating some problems with the



**Figure 4:** Graph of the Cumulative Frequency Plot (sample OMC3A and OMC3B)

identification of vitrinites. The readings obtained for some participants (Participant E in the WR sample and Participant N in the KC sample) were not enough to show the reflectance class distributions.

Besides this, Participant E indicated different readings for the same sample (OMC3), 0.89%Rr for whole-rock and 0.34%Rr for kerogen concentrate. As the average of reflectance considering all the data was 0.97% for sample OMC3B, this result (0.34% Ro) could indicate the inclusion of readings taken on another component (some participants reported the occurrence of zooclasts with reflectance measurements from 0.20% to 0.35% (Plate 2A). It is worth to mention that if this anomalous value of Rr% (0.34%) be excluded, the group mean would be 1.02% (SD = 0.13, Table 3). Another characteristic found in this sample (OMC3) is that some participants reported the presence of bitumen (Plate 2B). The inclusion of these particles in the readings for some participants could have influenced in the group mean and consequently in the SD value.

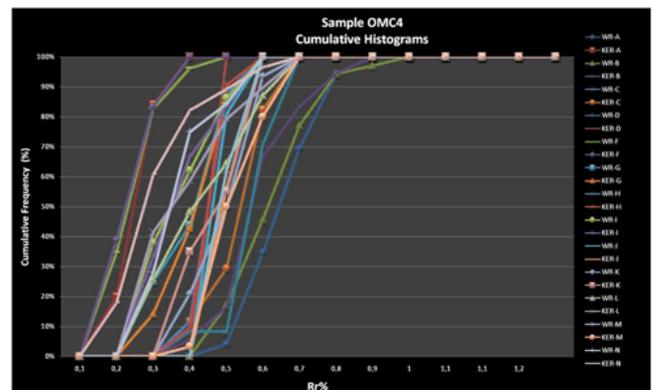


**Plate 2:** A: Sample OMC3A, Zooclast; B: Sample OMC3B, Bitumen. Photomicrographs were taken under white incident light, oil immersion.

**Table 3:** New distribution of vitrinite reflectance excluding the anomalous value.

Participant	WR Rr (%) (OMC3A)		KC Rr (%) (OMC3B)		KC Rr (%) (OMC3B)	
	Rr (%)	SD	Rr (%)	SD	Rr (%)	SD
A	1.02	0.10	0.97	0.1	0.97	0.1
B	0.87	0.11	0.79	0.14	0.79	0.14
C	1.12	0.15	1.09	0.12	1.09	0.12
D	1.15	0.03	1.14	0.02	1.14	0.02
E	0.89	0	0.34	0.06		
F	1.13	0.12	1.07	0.12	1.07	0.12
G	1.16	0.11	1.15	0.19	1.15	0.19
H	1.10	0.05	1.11	0.06	1.11	0.06
I	1.13	0.07	1.08	0.11	1.08	0.11
J	1.16	0.08	1.15	0.06	1.15	0.06
K	1.09	0.12	1.07	0.16	1.07	0.16
L	0.96	0.17	0.97	0.21	0.97	0.21
M	0.93	0.07	0.97	0.11	0.97	0.11
N	0.89	0.04	0.73	0	0.73	0
Average	1.04		0.97		1.02	
SD	0.11		0.22		0.13	

Figure 5 shows the reflectance class distributions of the participants for sample OMC4A and OMC4B (Vale das Fontes Fm). The shape of the curves indicates that some of participants identified two vitrinite populations, one of them showing values lower than the average. However, Participant A, who spread the readings from Rr = 0.46% to Rr = 0.84% to sample OMC4A (whole-rock) and from Rr = 0.12% to Rr = 0.37% to sample OMC4B (kerogen concentrate), characterized two different averages for the same sample (OMC4). Besides Participant A, Participant B also included readings whose values are higher than the group mean in the sample OMC4 indicating the probable inclusion of readings taken on inertinites or re-worked vitrinites. In general, the participants were consistent in the vitrinite population selected. This situation has also been reported for organic-rich samples with abundance of vitrinite particles to be measured (Borrego et al., 2006).

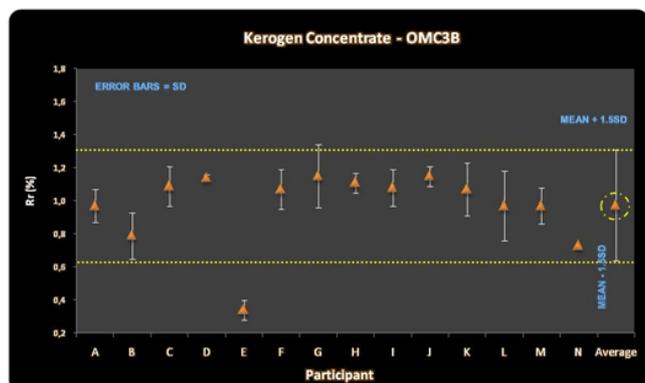
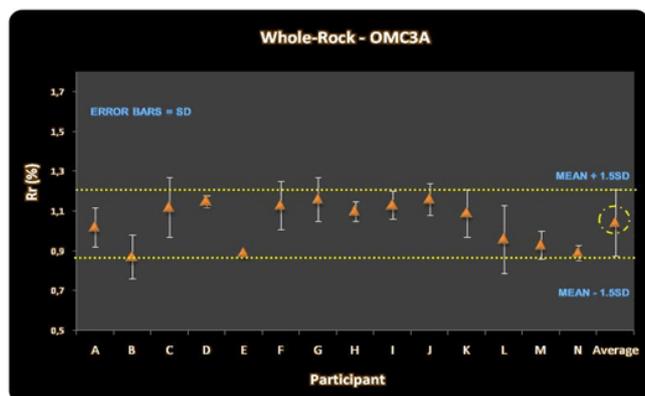


**Figure 5:** Graph of the Cumulative Frequency Plot (sample OMC4A and OMC4B).

The scatter of results is better observed in Figures 6 and 7 where it were plotted the mean

reflectance reported by of each participant with the error bars corresponding to the standard deviation (SD). The scatter of the results was more reasonable and most of the values are within, according to ICCP Accreditation Criteria,  $1.15 \pm 1.5 \times SD^1$  for the low and high reflecting populations.

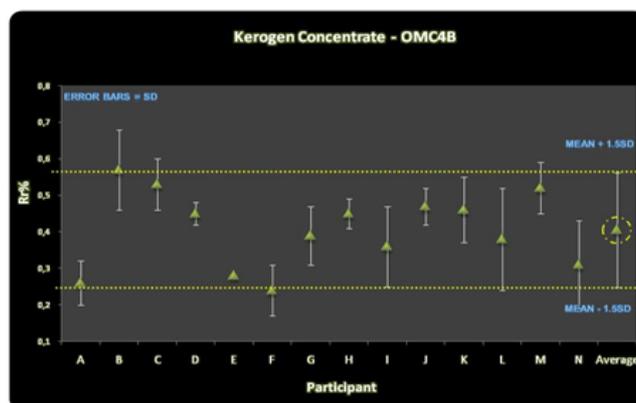
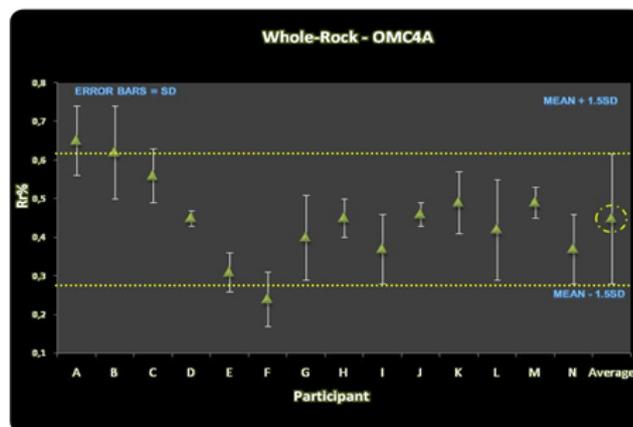
The average of reflectance considering all the data was 1.04% for sample OMC3A (Whole-Rock) and it was 0.97% for sample OMC3B (Kerogen Concentrate). The scatter of results in the sample OMC3B was larger than (high SD values) in the OMC3A sample (Figure 6A), that could indicate some problems with vitrinite identification and/or low quality of particles. Some participants read higher values than the group mean in OMC3A. In the case of the sample OMC3B there was a single result (Participant E) that was outlying (a statistical observation that was markedly different in value from the others of the sample) (Figure 6B).



**Figure 6:** Average Rr (%) values for the low and high reflecting populations in samples OMC3A (WR) and OMC3B (KC).

The group mean considering all the data was 0.45% for the sample OMC4A (Whole-Rock) and 0.41% for the sample OMC4B (Kerogen Concentrate) (Figure 7).

Then, it can be observed a difference in the average of reflectance between sample OMC4A (Whole-Rock) and OMC4B (Kerogen Concentrate). Two participants (A and B) included readings which values are higher than the group mean in the sample OMC4A (WR, Figure 7A), and Participant F included lower value than the group mean in samples OMC4A and OMC4B. However, for sample OMC4B, just Participant B read higher values than the group mean (Figure 7B). Participant A, which included higher values than group mean in sample OMC4A, showed lower values than the group mean for sample OMC4B, indicating different average for the same sample (OMC4).



**Figure 7:** Average Rr (%) values for the low and high reflecting populations in samples OMC2A (WR) and OMC2B (KC).

In Figure 8 it can be observed that in sample OMC3 the UMSD values were higher for the whole-rock due to the large group SD decreases

<sup>1</sup>1.5 x SD = represents 80% of a Gaussian distribution that gives a reasonable percentage of error

this parameter. It can be observed in this sample (OMC3) that two analysts (Participants B and E) presented good data in only one sample (one of them presented a good result to the WR but high value to the KC and the other one presented a good result to the KC but high value to the WR), but in general the results were dispersed reasonably around the median.

Sample OMC4 presented few values over the accepted 1.5SD threshold. Moreover, two analysts (Participant B and F) presented results out of the group mean in both samples (OMC4A and OMC4B), and one analyst (Participant A) presented a good data in only one sample (OMC4B), but in general the results were dispersed more evenly around the median.

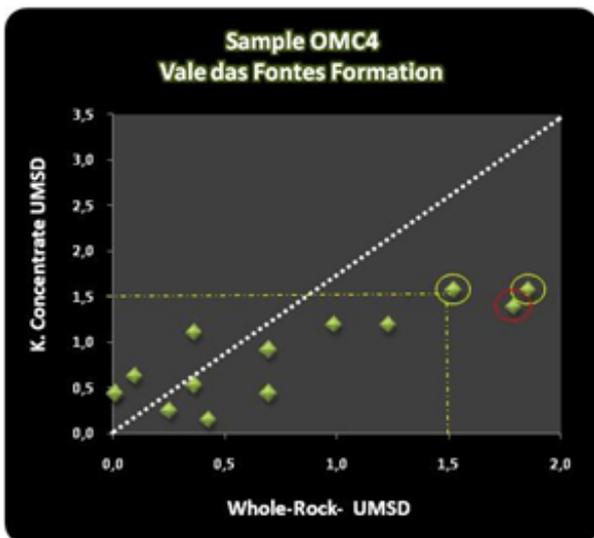
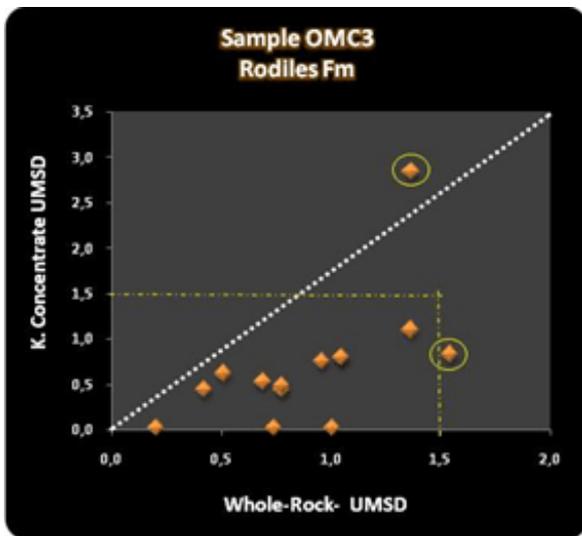


Figure 8: UMSD (Unsigned Multiple of the Standard Deviation)<sup>2</sup>

<sup>2</sup>calculated against the group mean and standard deviation data

Using the criteria and parameters applied for Coal Reflectance Analysis in the existing ICCP accreditation program, www.iccop.org, (Table 4), excellent results were obtained in this exercise (Table 5). Only one participant had an AUMSD value over 1.5, probably related to problems with the vitrinite identification. The majority of participants presented consistent results and their analytical techniques were acceptable.

Table 4: Coal Reflectance Analysis Criteria (ICCP)

Parameters	Precision and bias for the analysts	
ASMSD	< ± 0.5	Low - Your results are always consistent
	± 0.5 < ± 1.0	Medium - Some improvement is required
	± 1.0 < ± 1.5	High - Examine the method being used
	> ± 1.5	Very High - You have serious problems with your analytical technique
AUMSD	< 1.5	Your analytical technique is acceptable
	> 1.5	You have serious problems with your analytical technique

Table 5: Accuracy of results calculated against the group mean and standard deviation data, for each sample analyzed: SMSD (Signed Multiple of the Standard Deviation), AUMSD and ASMSD

Participant	SMSD	AUMSD	ASMSD	Remarks
A	0,19	0,85	0,05	Low
B	0,73	1,37	0,18	Low
C	3,40	0,85	0,85	Medium
D	2,15	0,54	0,54	Medium
E	-6,63	1,66	-1,66	Very High
F	-2,22	1,16	-0,55	Medium
G	1,26	0,60	0,32	Low
H	1,56	0,39	0,39	Low
I	0,13	0,60	0,03	Low
J	2,56	0,64	0,64	Medium
K	1,75	0,44	0,44	Low
L	-1,25	0,31	-0,31	Low
M	0,44	0,62	0,11	Low
N	-4,06	1,02	-1,02	High

**5. Spectral fluorescence analysis:**

Eight 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). Three participants gave spectral curves for liptinites of the Rodiles Fm. (OMC3). One analyst provided results for samples OMC3A and OMC3B and the other two analysts provided results only for the sample OMC3A (whole-rock). The others participants reported a lack of fluorescence in sample OMC3. Eight participants provided results for liptinites of the Vale das Fontes Formation (OMC4).

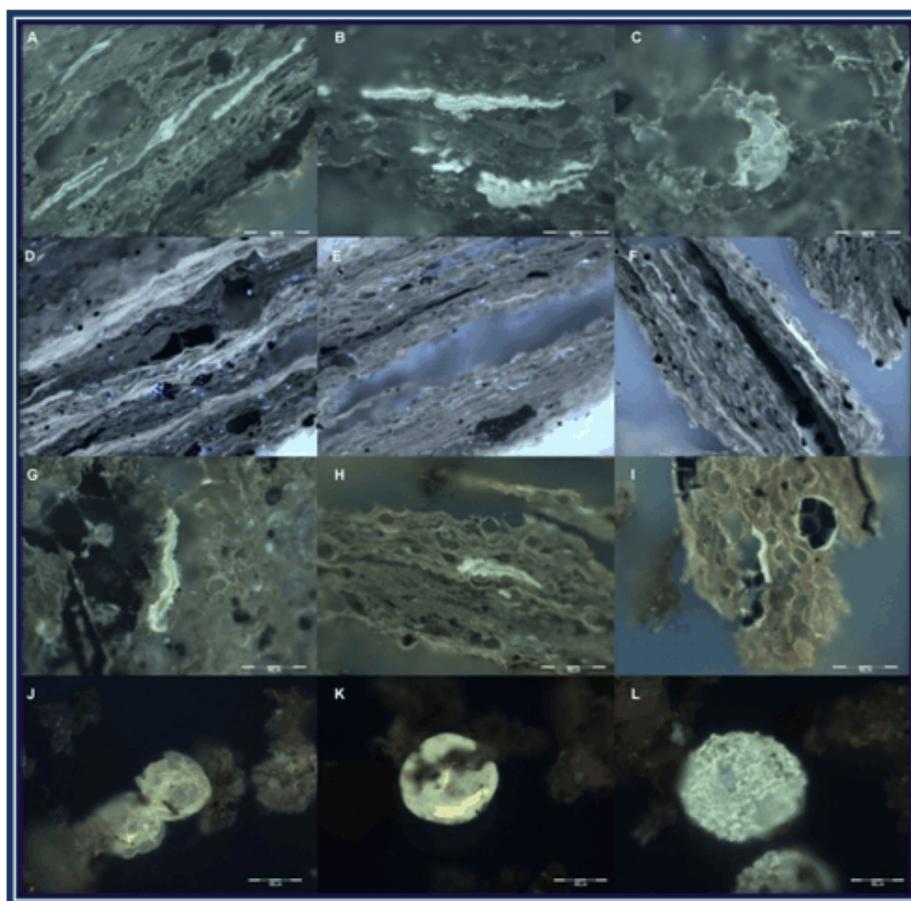
The  $\lambda_{max}$  results for sample OMC3 provided by three participants confirm the medium rank of Rodiles Fm. However, the Participant A provided a low  $\lambda_{max}$  value for the sample OMC3A indicating a low maturity. This feature could be related to the selection of objects for measurements. Table 6 summarizes the fluorescence parameters obtained by the three participants.

**Table 6:**  $\lambda_{max}$  values obtained for Rodiles Fm. sample

Participant	Parameters	Organic Component	Whole-Rock OMC3A	Kerogen Concentrate OMC3B
A	$\lambda_{max}$	Liptinite	414	620
G	$\lambda_{max}$	Liptodetrinite	610	
I	$\lambda_{max}$	Liptodetrinite	610	

For the Vale das Fontes Fm. sample two participants provided curves for liptinite, five participants for alginite and one participant provided curves for bituminite, sporinite and alginite (Table 7, Plate 3, Figure 9).

Plate 3 shows examples of liptinites. The telalginites were observed and identified on strew slides as Prasinophyte algae (genus: *Leiosphaeridia* - Plate 3J and *Tasmanites* - Plate 3K) besides the presence of sporomorphs (Plate 3L).



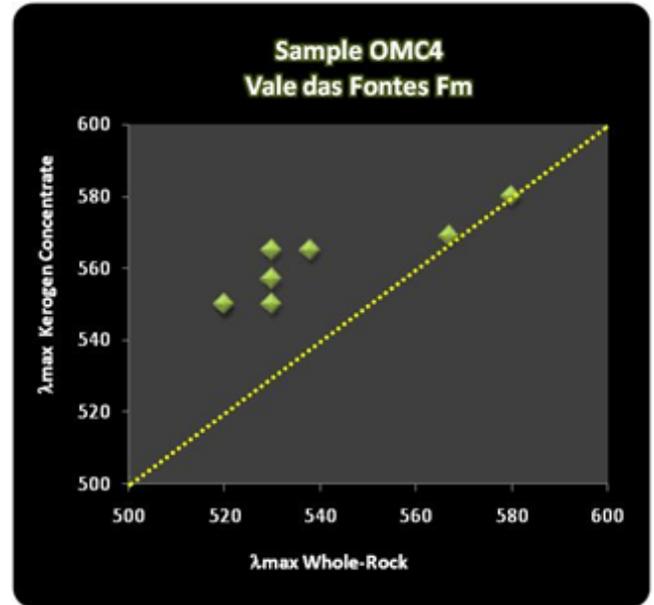
**Plates 3A to 3I:** Examples of Liptinites. A-E: Sample OMC4A; F I: Sample OMC4B; J-K: Sample OMC4 on strew slides (J - *Leiosphaeridia*; K - *Tasmanites*; L - *Sporomorph*). All photomicrographs were taken under fluorescence mode

**Table 7:**  $\lambda_{max}$  values obtained for Vale das Fontes Fm.

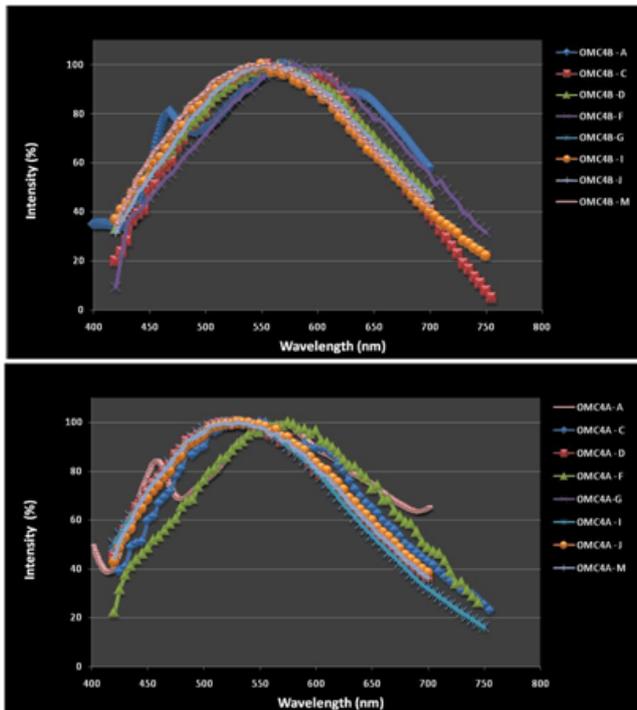
Participant	Parameters	Organic Component	Whole-Rock - OMC4A	Kerogen Concentrate - OMC4B
A	$\lambda_{max}$	Liptinite	567	569
C	$\lambda_{max}$	Telalginite	538	557
D	$\lambda_{max}$	Telalginite	530	565
F	$\lambda_{max}$	Telalginite	586	588
G	$\lambda_{max}$	Alginite	520	550
I	$\lambda_{max}$	Alginite	520	550
J	$\lambda_{max}$	Telalginite	530	565
M	$\lambda_{max}$	Liptinite	530	550

The  $\lambda_{max}$  results for sample OMC4 provided by participants confirm the low rank of Vale das Fontes Fm. Nevertheless, some participants provided results from liptinite and alginite indicating a wide range of  $\lambda_{max}$  values for sample OMC4A. In general, it was observed a shift of the  $\lambda_{max}$  to higher values for sample OMC4B suggesting that the preparation procedures affects fluorescence properties (Table 7, Figure 9).

The graph represented in Figure 10 allowed comparing the results of the  $\lambda_{max}$  values for sample OMC4 in whole-rock and kerogen concentrate. It can be observed in this graph that the  $\lambda_{max}$  values were higher in the kerogen concentrate, where it can be noted clearly that all points are above the median.



**Figure 10:** Comparison of  $\lambda_{max}$  values between OMC4A and OMC4B



**Figure 9:** Spectral curves for alginite of samples OMC4A and OMC4B

Table 8 and Figures 11 and 12 show the  $\lambda_{max}$  values obtained from samples OMC4A and OMC4B and their equivalent vitrinite reflectance values. Table 9 shows the correlation between vitrinite measured (Rr%) and vitrinite equivalent (Rr%eq) for samples OMC4A (whole-rock) and OMC4B (kerogen concentrate). Figure 12 shows the comparison vitrinite equivalent reflectance values (Rr%eq) between for OMC4 in whole-rock and kerogen concentrate. Through these results it can be observed that the equivalent vitrinite reflectance for sample OMC4A presents an excellent correlation with the measured vitrinite reflectance and the values were higher in kerogen concentrate (OMC4B) than whole-rock (OMC4A). For sample OMC4B the misfit between the equivalent vitrinite reflectance and measured vitrinite reflectance should be related to the acid treatment (kerogen isolation procedure) that seems to affect the fluorescence properties.

**Table 8:** Correlation between SF and Rr% parameters for sample OMC4

$\lambda_{\max}$ values OMC4A	Equi-valent Rr OMC4A	Group Mean OMC4A	$\lambda_{\max}$ values OMC4B	Equi-valent Rr OMC4B	Group Mean OMC4A
520	0,38	0,45 SD= 0.11	550	0,53	0,41 SD= 0.11
520	0,38		550	0,53	
530	0,43		550	0,53	
530	0,43		557	0,54	
530	0,43		565	0,57	
538	0,49		565	0,57	
567	0,58		569	0,59	
580	0,65		580	0,65	
Mean	0,47		Mean	0,57	
SD	0,10		SD	0,06	

**6. Conclusions:**

Based on the proposed objectives and results obtained, it is concluded that the Type II kerogen yield a low amount of vitrinite than Type III kerogen (OMCWG 2008) and its identification was more difficult for medium rank sample than for low rank sample.

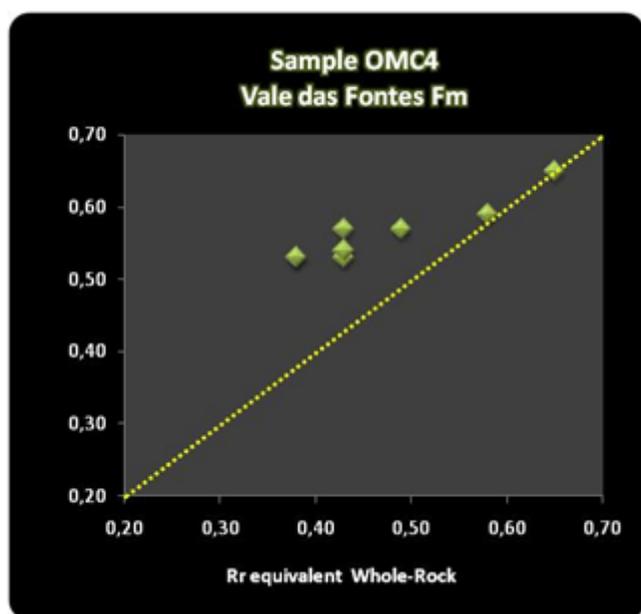
Samples OMC3A and OMC3B (Rodiles Fm.) and OMC4A and OMC4B (Vale das Fontes Fm.) showed an enough amount of measureable vitrinite particles. Furthermore, it was observed a large variation in the number of readings by each participant in both samples.

The statistical evaluation system applied in this exercise is the same one used in the accreditation program for vitrinite reflectance in coal. However, these statistical systems are being used only as a learning tool, giving information on how the participants should proceed in the vitrinite reflectance analysis on dispersed organic matter.

The average of reflectance considering all the data was 1.04% for sample OMC3A (whole-rock) and 0.97% for sample OMC3B (kerogen concentrate) and the group mean considering all the data was 0.45% for sample OMC4A (Whole-Rock) and 0.41% for sample OMC4B (Kerogen Concentrate). These results suggest no influence of the kerogen isolation procedures (acid treatment) on vitrinite reflectance.

In general, the Standard Deviation (SD) values in both samples were high and they could indicate some problems with vitrinite identification and/or low quality of particles. In the case of sample OMC3, the participants identified a single vitrinite population. Regarding sample OMC4 the results indicate some participants identified two vitrinite populations, one of them showing values lower than the group mean. Besides this, some participants included readings of vitrinite reflectance which values are lower or higher than the average, indicating the probable inclusion of readings taken on inertinites or re-worked vitrinites and liptinites in the data set.

The scatter of the readings was large in the two analyzed samples. In the case of sample OMC3, the SD values tend to be higher in the kerogen concentrate, which could indicate a higher difficulty to identify the vitrinite particles in kerogen concentrate than whole-rock. On the other hand, in sample OMC4 the results showed no definite patterns. The readings display a scatter of



**Figure 11:** Comparison of Rr<sub>eq</sub> values between OMC4A and OMC4B

**Table 9:** Correlation between vitrinite measured (Rr) and equivalent (Rr<sub>eq</sub>) for OMC4

Results	OMC4A - WR	OMC4B-KC
Rr (%)	0.45	0.41
Rr <sub>eq</sub> (%)	0.49	0.58

Maturation and Rank		Microscopic Maturity Parameters			Zones of HC Generation
Stage of Maturation	COAL RANK	Vitrinite Refle. (%Ro)	Fluorescence		
			Colour of Alginite	$\lambda$ MAX (nm)	
DIAGENESIS	PEATS	0.2	GREENISH YELLOW	500	Biogenic Methane, Heavy Oil and Early Condensate
	LIGNITE	0.3			
	CATAGENESIS	SUB-BETUMIN.	C 0.4	GOLDEN YELLOW	
B 0.5			530		
A 0.6			540		
HIGH VOLATILE BITUMIN.		C 0.6	DULL YELLOW	550	
		B 0.7		565	
		B 0.8		590	
		A 0.9		600	
MEDIUM VOLATILE BITUMIN.		1.0	ORANGE	640	
		1.2			
		1.35			
LOW VOLATILE BITUMIN.	1.5	RED	680		
	2.0				
METAGENESIS	SEMI-ANTHRAC.	2.5	NON-FLUORESCENT	Wet Gas Dry Gas Dry Gas	
	ANTHRAC.	3.0			
		4.0			
Meta-morph.	META-ANTHRAC.	5.0			

- Sample OMC4A
- Sample OMC4B
- Sample OMC3A
- Sample OMC3B

Based on Mukhopadhyay (1994)

Figure 12: Correlation of microscopic parameters from Rodiles Fm. and Vale das Fontes carbonaceous shale (based on Mukhopadhyay, 1994)

measurements in the whole-rock for some participants and in the kerogen concentrate for others.

The spectral fluorescence results showed that  $\lambda_{\max}$  values for sample OMC3 and OMC4 confirm a medium rank for sample from Rodiles Fm. and a low rank for sample Vale das Fontes Fm., respectively.

It was observed that the equivalent vitrinite reflectance ( $R_{r_{eq}}$ ) for sample OMC4A (WR) presents an excellent correlation with the measured vitrinite reflectance ( $R_r$ ). However, it was observed a misfit between the equivalent vitrinite reflectance ( $R_{r_{eq}}$ ) and measured vitrinite reflectance ( $R_r$ ) for sample OMC4B (KC).

Considering the spectral fluorescence results, it was observed that the  $\lambda_{\max}$  presents a shift to higher wavelengths in sample OMC4B (KC) in comparison to sample OMC4A (WR), thus revealing an influence of preparation methods (acid treatment) on fluorescence properties.

In summary, following the criteria and parameters described in the statistical evaluation system ([www.iccop.org](http://www.iccop.org)), in general excellent results were obtained and the selected samples allowed an accurate study on the effect of the isolation procedure on the organic matter optical parameters in Type II-kerogen.

## 7. References:

- Baranger, R.; Martinez, L.; Pittion, J-I and Pouleau, J. (1990). A new calibration procedure for fluorescence measurements of sedimentary organic matter. *Organic Geochemistry*, **17**, 467-475.
- Borrego, A.G.; Araujo C.V.; Balke A.; Cardott B; Cook, A.C.; David, P.; Flores, D.; Hámor-Vidó, M.; Hiltmann, W.; Kalkreuth W.; Koch J.; Kommeren, K.; Kus, J.; Ligouis, B. ; Marques, M. ; Mendonça Filho, J.G.; Misz M.; Oliveira; L.; Pickel, W.; Reimer, K.; Rhanasinghe; P.; Suárez-Ruiz, I.; Vieth, A. (2006) 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. *International Journal of Coal Geology*, **68**, p.151 - 170.

<http://www.iccop.org>

Mendonça Filho, J. G.; Araujo, C. V.; Borrego, A. G.; Cook, A.; Flores, D.; Hackley, P.; Hower, J.; Kern, M. L.; Kommeren, K.; Mendonça, J. O.; Menezes, T. R.; Newman, J.; Ranasinghe, P.; Souza, I. V. A. F.; Suarez-Ruiz, I.; Ujiié, Y. (2008) Report on Organic Matter Concentration Working Group (OMCWG 2008). *ICCP News*, **45**, p. 43-51.

Mukhopadhyay, P.K. (1994) Vitrinite Reflectance as Maturity Parameter. Petrographic and Molecular Characterization and its Applications to Basin Modeling. *In: Mukhopadhyay and Dow (eds.) Vitrinite Reflectance as a Maturity Parameter. Applications and Limitations.* American Chemical Society, Washington. p 1-24.

## 8. Acknowledgments:

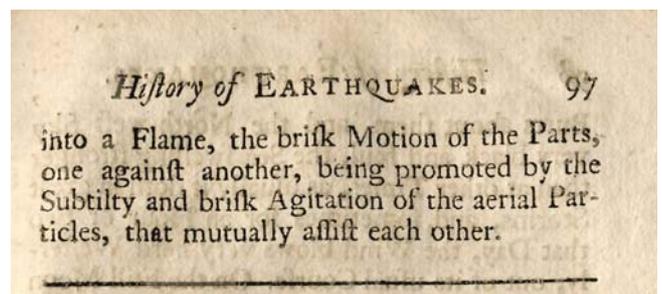
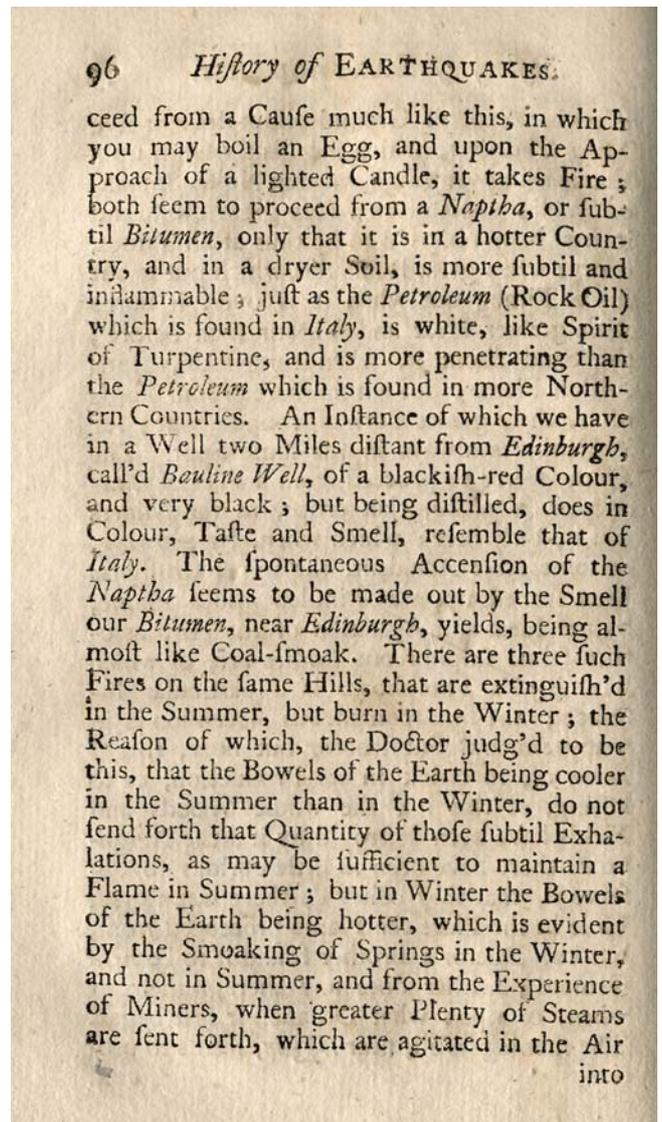
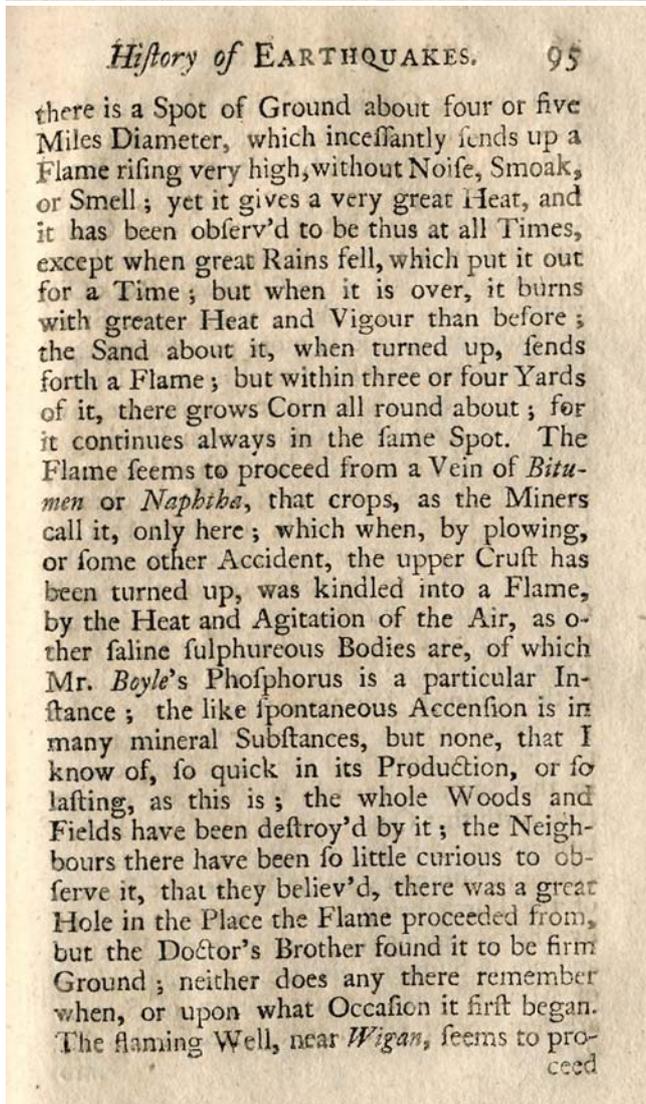
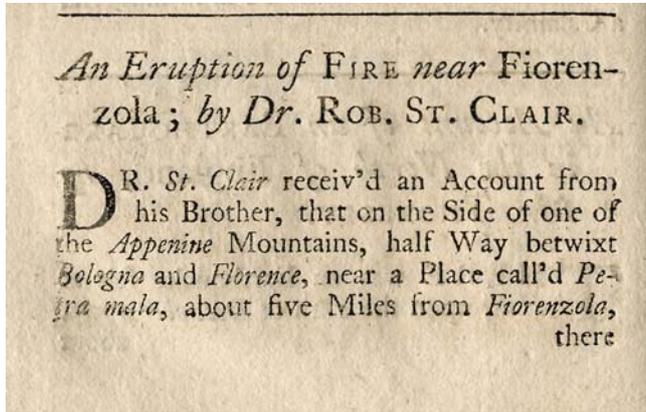
- ★ The sample from Vale das Fontes Formation was provided by Dr. Luis Victor Duarte (University of Coimbra).
- ★ The sample from Rodiles Formation was provided by Dr. José Carlos Martínez Garcia-Ramos (Scientific Director of the Jurassic Museum of Asturias - MUJA).
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- ★ Special thanks to Angeles G. Borrego for her help with the statistical treatment and encouragement of the creation of the OMCWG.

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**DEADLINE FOR NEXT  
ICCP NEWS :  
30<sup>TH</sup> JULY 2010**

## An Eruption of Fire (1748)

(Ed. note: in many printed documents prior to about 1800, the letter "s" may appear similar to the letter "f" except that the short stroke across the middle only extends to the left hand side, e.g. the word "first" :frst)



from Philotheus (1748) A True and Particular History of Earthquakes. Printed for the Author and sold by the Booksellers in Town and Country, London. 176pp.

Contemporary definitions of bitumen, naphtha and petroleum can be found in: Bailey, N. (1733) An Universal Etymological English Dictionary. 6<sup>th</sup> Edition. J.J. and P. Knapton and 12 others, London. unpaginated.

*Bitumen*: a kind of fat clay or slime, clammy like pitch, and in smell somewhat like brimstone.

*Naphtha*: Babylonith bitumen, a kind of chalky clay which takes fire more easily than bitumen, but is harder to be quenched.

*Petroleum*: rock oil, a certain liquor that flows out of rock.

## ICCP Training Course on Organic Petrology

GeoLab, Helmholtz Centre Potsdam  
German Research Centre for Geosciences - GFZ Potsdam, Germany

Trainers: Dr. Alan Cook, Australia  
Prof. Claus Diessel, Australia

### Evaluation of the Training Course by the Participants

By Lopo Vasconcelos  
(Co-ordinator of the Training Course)

#### 1. Introduction

As know by all, the ICCP organized in November 2009 a training course on Organic Petrology, which was held at GFZ-Potsdam, Germany, and given by Prof. Claus Diessel and Dr. Allan Cook, both from Australia.

The course had the duration of 5 days, including one day field work and 1 day practical classes. It was attended by 23 people from 15 countries.

In order to evaluate the interest of this course, the organizers prepared a small questionnaire to be filled by the participants, which is presented below, covering a range of topics considered relevant for the organisation of future courses.

Of the 23 participants, we received 14 responses, whose results are summarized ahead on a graphical way.

**Table 1.** Questionnaire presented to the participants

	-				+
	1	2	3	4	5
Did the course meet your expectations?					
Are you satisfied with:					
- Topics selected					
- Duration of the course					
- Ratio between theoretical/practical instructions					
- Training Materials					
-Number and duration of breaks					
- Catering					
- Dinner					
- Organisation					

- Venue					
- Teachers					
Did the field trip meet your expectations?					

Please indicate on a scale from 1 – 5

Would you like to communicate any ideas or suggestions? If yes, please let us know!

Further Comments:

Are you interested in specialised courses (e.g. Dispersed Organic Matter, Coke Petrography etc)?

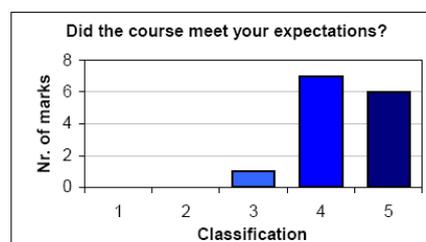
YES NO

If YES, what is the topic of your interest?

#### 2. Results

The graphical evaluation presented ahead gives the number of answers that fit in each of the 5 categories, where 1 is (-) and 5 is (+).

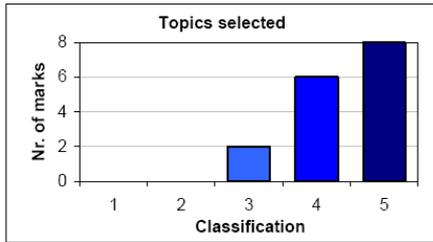
##### 2.1. Did the course meet your expectations?



As the graphic shows, the course met in general the expectations of the participants, with 50% of them giving the mark 4 and 43% the mark 5. One participant had his expectations not fully met.

**Average:** 4.36

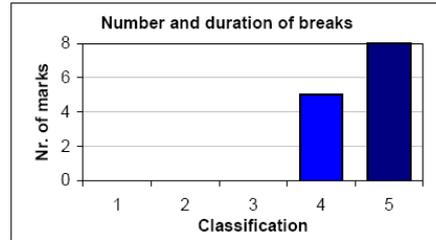
**2.2. Are you satisfied with the Topics selected?**



The majority of the responding participants were satisfied, with 8 of them attributing the mark 5 and 6 the mark 6. Two of them were not fully satisfied.

**Average:** 4,38

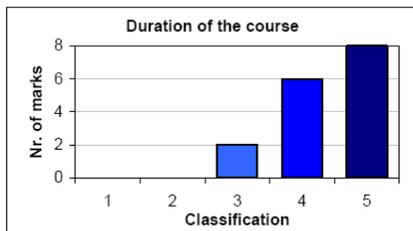
**2.6. Are you satisfied with the Number & Duration of Breaks?**



As the graphic shows, participants are happy with the number and duration of breaks.

**Average:** 4,62

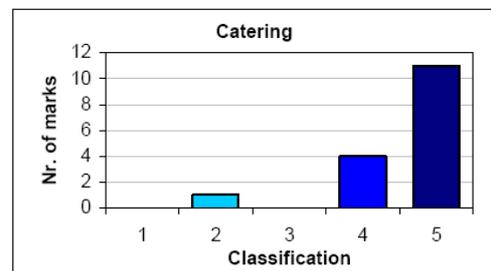
**2.3. Are you satisfied with the Duration of the Course?**



The majority of the responding participants were satisfied, with 8 of them attributing the mark 5 and 6 the mark 6. Two of them were not fully satisfied (same marks as 2.2)

**Average:** 4,38

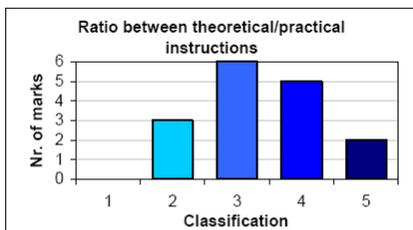
**2.7. Are you satisfied with the Catering?**



As the graphic shows, participants are happy with the Catering. Only one was not satisfied.

**Average:** 4,56

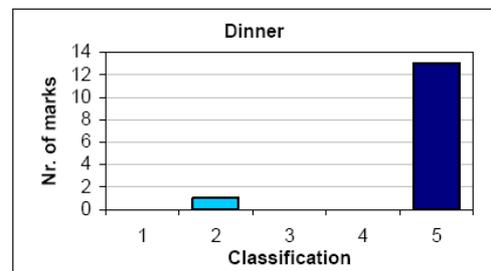
**2.4. Are you satisfied with the Ratio between theoretical/practical instructions?**



The majority of the responding participants was not satisfied, with 9 of them attributing marks  $\leq 3$  and 7 marks  $\geq 4$ . Three of them were not satisfied.

**Average:** 3,38

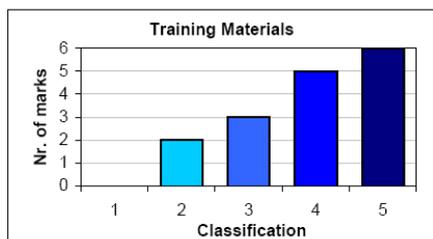
**2.8. Are you satisfied with the Dinner?**



As the graphic shows, participants are happy with the Dinner. Only one was not satisfied.

**Average:** 4,79

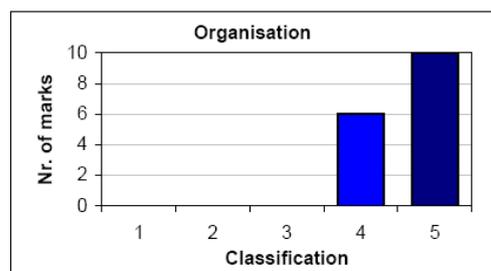
**2.5. Are you satisfied with the Training Materials?**



The majority of the responding participants is satisfied, with 11 of them attributing marks  $\geq 4$ . Two of them were not satisfied.

**Average:** 3,94

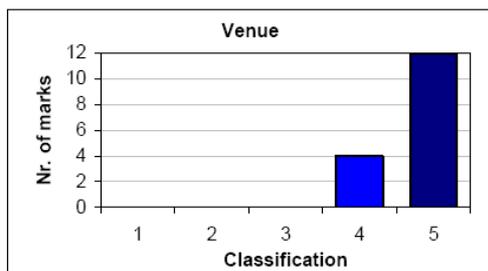
**2.9. Are you satisfied with the Organization?**



As the graphic shows, participants are happy with the Organisation.

**Average:** 4,63

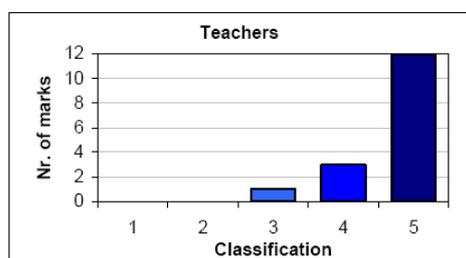
**2.10. Are you satisfied with the Venue?**



As the graphic shows, participants are happy with the Venue.

**Average:** 4,75

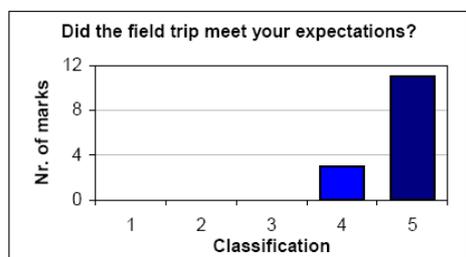
**2.11. Are you satisfied with the Teachers?**



As the graphic shows, participants are happy with the Teachers, except for one who was not much impressed.

**Average:** 4,69

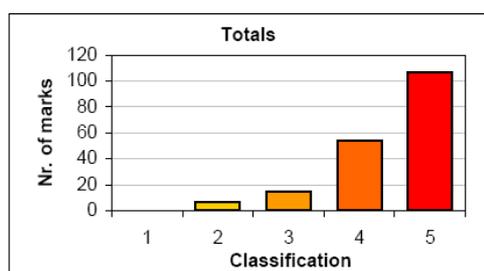
**2.12. Did the field trip meet your expectations?**



As the graphic shows, participants are happy with the Field Trip.

**Average:** 4,79

**2.13. GLOBAL EVALUATION**



Generally speaking, participants were much satisfied with the course.

**Average:** 4,43

**3. Other Comments**

From the questionnaires received from the participants, some comments and suggestions were done in order to improve future courses. Below a list of these comments/suggestions is presented:

3.1. Field Trip:

- It is suggested that the field trip should happen in the middle of the course.

3.2. Theoretical Classes

- More information about applications of petrology,
- Update of database regarding coke quality and coking techniques.

3.3. Practical Session

- 1 entire practical day
- "Hands-on" microscope work, sample preparation (hints & tips);
- Everyone brings a sample of his interest and observed together;
- Microscopic session with increasing duration, at 2 stages: 1: typical aspects, 2) samples with not easily identifiable macerals;
- More hours in microscopic characteristics of main macerals;
- To use the room next door for sample discussion via projector;
- More practical sessions with discussion;
- Not clear what the goal of practical sessions was;
- More equipment (e.g. fluorescence or polarization);
- More samples for practice, almost anybody couldn't handle the "Hilgers equipment".

3.4. Other Issues

- Breaks: 30 min too long; 10 min enough;
- Good range of topics covered in the lectures;
- Look for funds from major oil companies;
- Materials must be distributed at first day of the course;
- Organize 1 day workshop prior to the course for people to show the teachers their samples and ask questions;
- participants should introduce themselves;
- Training in June or September;
- Tuition increased (Professional E1350; Students E500).

### 3.5. Other Courses

All participants were clear in stating that there is a need for more courses like this one, and covering other topics, listed below, with the percentage of suggestions:

Item	%
Dispersed Organic Matter	24,1
Coke Petrography	13,8
Maceral analysis	10,3
Fluorescence Microscopy	6,9
Basin Modeling	3,4
Biomarkers	3,4
CBM	3,4
Char Petrography	3,4
Coal Blends	3,4
ECBM	3,4
Fly ash petrography	3,4
Oil to Oil correlations	3,4
PCI	3,4
Pyrolysis	3,4
Rock Mechanics/Coal petrography	3,4
V <sub>rmax</sub> and V <sub>rrandom</sub> measurements	3,4
What can go wrong during V measurements	3,4

### 4. Conclusion

It is clear to us that the course was a success and that in general it met the expectations of the participants.

Suggestions are made to organise more courses like this and also covering other topics.

### 5. Acknowledgements

Thanks to

- **Petra David**, President of the ICCP for being able to be present in Potsdam and helping in solving lots of problems;
- **Nikki Wagner**, Convenor of the Working Group;
- **Claus Diessel** and **Alan Cook**, for being available to teach the course so efficiently
- **Antje Treutler** and **Andreas Küppers**, from GFZ-Potsdam, for their incredible help in setting up the facilities;
- **Jen Pearson**, for sorting out the financial problems;

- **Carl Hilgers** for having made the microscope available for the practical session;
- **GFZ-Potsdam** for the offer to host the first ICCP Training Course.

Maputo, 11<sup>th</sup> February, 2010.

Lopo Vasconcelos

Course Coordinator

*Some images of the course provided by Alan Cook*



### Know Your Coal Petrologist #41



*As further evidence of Jeff Quick's (left) abilities (see also KYCP #40), another of our member is forced to succumb. Answer page 35.*

## **The 27th International Pittsburgh Coal Conference**

<http://www.engr.pitt.edu/pcc>  
11-14 October 2010 at the Istanbul Hilton,  
Istanbul, Turkey.

Programs topics of interest, but not limited to, include Underground Coal Gasification, Coal Chemistry and Geoscience, Post-combustion Carbon Management, Coal-derived Products, and Sustainability and the Environment. Abstracts must be submitted by 1 March 2010. Please forward paper title, intended topic area, authors, affiliations, contact information with valid email address and a one-page abstract to the Conference Secretary <mailto:ipcc@pitt.edu>.

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## **8th European Coal Conference**

part of GeoDarmstadt 2010  
October 10-13, 2010  
Darmstadt, Germany

Everyone interested in participating as lecturer or poster presenter in the 8<sup>th</sup> European Coal Conference is invited to contribute a short version of the abstracts by April 16, 2010.

Please submit your abstract to Susanne Lange: [info@geodarmstadt2010.de](mailto:info@geodarmstadt2010.de) This e-mail address is being protected from spambots. You need JavaScript enabled to view it regarding the guidelines in <http://www.geodarmstadt2010.de/>

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## **TSOP 2010 Graduate Student Grant Program Spackman Award**

The Society for Organic Petrology (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.

### Size of the Spackman Award:

Monetary awards up to a maximum of \$1,000.00 US will be granted. TSOP will also 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 apply for a year's free Student Membership in TSOP.

### Use of the Spackman Award:

Grants are to be applied to expenses directly related to the student's thesis program, such as fieldwork, laboratory analyses, etc. A portion (not to exceed 25%) of the funds may be used to attend TSOP Annual Meetings. Funds should not be used to purchase capital equipment, to pay salaries, tuition, room, or board during the academic year.

Funds must be spent by the end of the calendar year following granting of the award, and an account of expenditure with copies of receipts should be provided by the end of that year (December 31, 2011 for awards granted in 2010).

### Review and Ranking of Applications:

A committee of at least three TSOP members (and/or external experts when needed) will review the pool of applications. The reviewers will be drawn from people having no association with the host institution of any applicant. Each reviewer will independently rank each proposal according to established merit criteria, using the Application Evaluation Form included in the application packet. The cumulative score from all of the reviewers will be used to determine the final ranking of the applications. Winners will be notified prior to the 2010 Annual Meeting, and all applicants will be informed by e-mail of the final status of their applications.

### Application Deadline:

TSOP Spackman Award application deadline is May 15, 2010. Grants will be awarded in September, 2010.

Detailed information and an application form are on the TSOP web site: [www.tsop.org/grants.htm](http://www.tsop.org/grants.htm) or applications may be obtained from:

Prof Colin Ward  
Chair, TSOP Research Committee  
School of Biological, Earth and Environmental  
Sciences  
University of New South Wales  
Sydney, NSW, 2052  
Australia  
<mailto:c.ward@unsw.edu.au>

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Canada  
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mailto:dpearson@coalpetrography.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  
mailto:christan@upatras.gr
- Vitrinite Reflectance of Coals  
convenor: Dr Kimon Christanis
- Coal Blend Analysis  
convenor: Dr Isabel Suárez-Ruiz  
Instituto Nacional del Carbón - CSIC  
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mailto:isruiz@incar.csic.es
- Vitrinite Reflectance of Dispersed Organic Matter  
convenor: Dr Alan Cook  
7 Dallas St  
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Phone +61-2-42 299 843 Fax +61-2 4229 9624  
mailto:alancook@ozemail.com.au

## Answers to Know Your Coal Petrologist #40 and 41

Colin Ward (KYCP#40) and Johan Joubert (KYCP#41) are the petrologists who have given over to Jeff's influence. However, I feel that Jeff may not be solely responsible for their actions.

## WHAT'S HAPPENING

### 11 - 16 July 2010

**The Annual World Conference on Carbon**, Clemson, South Carolina, USA.  
<http://www.carbon2010.org/>

### 12 - 15 Sept 2010

**AAPG International Conference and Exhibition**, Calgary, Canada.  
<http://www.aapg.org/meetings/>

### 12 - 17 Sept 2010

**TSOP**, Denver, Colorado, USA.  
<http://www.tsop.org/2010Denver/index.htm>

### 26 Sept - 2 Oct 2010

**ICCP**, Belgrade, Serbia.  
Contact: Dragana Životić  
mailto:sasa.international@sanu.ac.rs

### 6 - 8 Oct 2010

**2020 Bowen Basin Symposium**, Mackay, Australia.  
<http://content.cqu.edu.au/FCWVViewer/view.do?sitem=258>

### 10 - 13 Oct 2010

**8<sup>th</sup> European Coal Conference**, Darmstadt, Germany.  
<http://www.geodarmstadt2010.de>  
mailto:juch@gd.nrw.de

### 11 - 15 Oct 2010

**27<sup>th</sup> International Pittsburgh Coal Conference**, Istanbul, Turkey.  
<http://www.engr.pitt.edu/pcc>  
mailto:ipcc@pitt.edu

**10 - 13 April 2011**

**AAPG Annual Convention and Exhibition**, Houston, Texas, USA.  
<http://www.aapg.org/meetings/>

**9 - 12 May 2011**

**World of Coal Ash**, Denver, Colorado, USA.  
<http://www.worldofcoalah.org/>

**July 2011**

**TSOP Annual Meeting**, Halifax, Canada.  
<http://www.tsop.org/annmtg.htm>

**24 - 29 July 2011**

**Carbon 2011**, Shanghai, China.  
<http://www.americancarbonsociety.org/calendar.html>

**Planned Future ICCP Meetings**

2011	Porto, Portugal
2012	Beijing, P.R. China (joint TSOP)

**ICCP Publications and Training Materials**

ICCP publications are available by ordering from the editor. **DO NOT SEND PAYMENT** - an invoice will be issued for payment.

**Orders to**

Dr Peter Crosdale  
 ICCP Editor  
 PO Box 54, Coorparoo, Qld 415, Australia  
<mailto:peter.crosdale@energyrc.com.au>

**ICCP Handbook**

- ★ *International Handbook of Coal Petrography 2<sup>nd</sup> Edition (1963)* (in English) as CD ROM  
 PC and Mac Compatible  
 Requires Adobe Acrobat Reader Ver. 4 or above  
 ICCP / TSOP member - **20€** (including postage)  
 ICCP non-member - **40€**(including postage)
- ★ *International Handbook of Coal Petrography, supplement to the 2<sup>nd</sup> edition*, second print (in English) 1985 - **24€**
- ★ *International Handbook of Coal Petrography, 2<sup>nd</sup> supplement to the 2<sup>nd</sup> edition* (in English) 1986 - **8€**

- ★ *International Handbook of Coal Petrography, 3<sup>rd</sup> supplement to the 2<sup>nd</sup> edition* (in English) 1993 - **16€**

Prices do not include shipping unless stated or cost of money transfer.

**Atlas of Anthropogenic Particles**

A digital atlas of anthropogenic particles largely derived from fossil fuel sources. The atlas contains 543 images grouped by source and by site of occurrence. For details, see ICCP News No. 39, November 2006 pp 55 - 56.  
 Cost: **16€**including postage

**ICCP Training Material on Vitrinite Reflectance Measurements in Dispersed Organic Matter**

A CD and set of 4 polished grain mounts to be used as training material for learning about the appearance of dispersed vitrinite in rocks and about the measurement of its reflectance. Only a limited number of grain mounts are available. CDs can be purchased separately. For details, see ICCP News No. 39, November 2006 pp 53 - 54.

**Cost:**

- CD + polished sample set **40€**including postage (ICCP / TSOP member)
- CD + polished sample set **120€**including postage (non-members)
- CD only **16€**

**ICCP Training kit for spectral fluorescence measurements in Dispersed Organic Matter**

The set contains two polished blocks with samples from Posidonia and Irati shales and the excel sheet with the results of the round robin exercises performed on these samples.

**Cost:**

- samples + excel sheet **30 €** including postage (ICCP/ TSOP member)
- samples + excel sheet **90 €**including postage (non members)

**If undeliverable return to :**

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 Energy Resources Consulting Pty Ltd  
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