

MINUTES OF COMMISSION I

55th ICCP MEETING, Utrecht, 14 and 15/08/2003

Chair: Walter Pickel, Acting Secretary: Regina Schäfer

Opening remarks

The commission I meeting was held on Thursday and Friday and attended by 37 ICCP members of whom 26 were members of commission 1. The Chairman outlined the programme for the sessions and presented the opening remarks.

The Minutes of the previous meeting were accepted as published in the ICCP Newsletter.

Summary of Commission 1 activities over the previous years – Walter Pickel

The activities of the commission were presented in the following order

Working Group activities

Editorial Groups - Handbook Editorial Group activities

Services

Working Groups:

Temporal Variations in coal – Lopo Vasconcelos

This WG was proposed by Lopo Vasconcelos, based on a published paper on Palaeozoic Coals, in which temporal variations were studied by statistical means. The objective of this WG is to study the petrographic variations of coals world-wide with regard to age and environment.

Sample Preparation Techniques – David Pearson

Founded in the Rio meeting, this WG started its activities in Copenhagen when Dave gave a presentation describing the procedures on sample preparation techniques using Lucite, which permit to prepare pellets in 20 minutes. The activities proposed for this WG is a comparison with the current sample preparation techniques and determine if significant differences in reflectance and maceral composition could be achieved.

Degradinite Working Group – Peter Crosdale

This WG was founded in the Maputo meeting to assess and possibly redefine the term degradinite. A first round robin was undertaken in 2003.

Review of New Methodologies and Techniques in Organic Petrology – Lila Gurba

This WG was established in the Rio meeting following a request by Alan Cook. Within this WG a white paper was prepared and presented in the Copenhagen meeting by Lila Gurba. The white paper dedicated to the memory of Marlies Teichmüller and Alex Cameron, included extended abstracts (7 abstracts) of the presentations given by invited speakers in the Rio and Copenhagen meetings. The white paper was published in a CD and is available in the ICCP web site.

Standardization Working Group – H. Read

The objectives of this WG are: i) verification of the new maceral classifications (reproducibility); ii) assist ISO in the revision of the ISO standard methods (ISO 7404, parts 1,2,3,4). The first exercise RIC 2000 round robin highlighted the problem of the distinction between fusinite and semifusinite. A new exercise started and a report on the 2002 round robin was presented in Maputo. Maceral groups and vitrinite reflectance were considered satisfactory, with generally fair to good reproducibility. However there was very poor agreement regarding what is fusinite and semifusinite, as well as telo- detrovitrinite and macrinite & inertodetrinite.

Handbook Editorial Groups – Petra David, Angeles Borrego, Walter Pickel

The present situation of the editorial groups is as follows:

Vitrinite published in Fuel (1998)

Inertinite published in Fuel (2000) Liptinite

prepared for publication

Huminite	prepared for publication
Graphite, semi-graphite,	submitted for publication
Natural coke	submitted for publication
Natural char	submitted for publication Microolithotypes ready and approved by ICCP – small editorial changes, photomicrographs needed
Carbonimerites	ready and approved by ICCP– small editorial changes, photomicrographs needed.
Hard Coal Lithotypes	in progress
Pyrolytic carbon	in progress
Bitumens	in progress
Oxidation	in progress
Sample preparation	in progress
New methodologies	in progress

Services

A more detailed section on the services available will be published in the following Newsletter.

ICCP Reflectance Standard – Dave Pearson, Walter Pickel
This WG started in 1997. The objective of the exercise was to measure the random and maximum reflectance of 3 glass standards against the standards used in the participating labs. The final results were presented in 2000. Also in 2000, two reflectance standards were purchased (Klein & Becker, YAG, R=0.89) and calibrated against the results of the standard round robin. They are available to interested laboratories (USD 50 and free for ICCP members). During this year, the Sydney standard was used to calibrate standards of 10 laboratories.

Accreditation Programme - Aivars Depers

1999 Exercise: 23 petrographers (13 labs), 15 Full accreditations, 8 provisional accreditations

2000 Exercise: 50 petrographers (2 automated or image analysis systems), 19 Re-accreditations, 17 accreditations, 14 Provisional Accreditations

2002 Exercise: 55 petrographers (35 labs from 15 countries), 55 Accreditations.

The chair thanked all members of commission 1, who made this progress possible. Special thanks went to Monika Wolf, whose enormous effort as editor initiated what is now a very diverse editorial group.

Activities at the 2003 Meeting:

Accreditation Programme - Aivars Depers

A report on behalf of Aivars Depers was read by the chair:

- * 2002 EXERCISE COMPLETED IN JULY, 2003
- * NO APPEALS WERE RECEIVED
- * 57 PETROGRAPHERS FROM 31 LABORATORIES IN 13 COUNTRIES PARTICIPATED
- * 4 PETROGRAPHERS WERE DENIED ACCREDITATION FOR THE MACERAL CONTENT METHOD
- * LIST OF ACCREDITED PETROGRAPHERS WAS UPDATED AND PLACED ON THE ICCOP WEBSITE IN JUNE, 2003
- * A BANK ACCOUNT WAS ESTABLISHED IN WOLLONGONG TO RECEIVE AND DISPERSE FUNDS
- * THE COAL BANK COALS WERE REDUCED IN VOLUME AND STORED IN 4 KG POLYPROPYLENE CONTAINERS — THERE ARE MORE THAN 40 COALS,

ALTHOUGH NOT ALL OF THEM ARE SUITABLE FOR ACCREDITATION EXERCISES

- * A 30 PAGE COMPREHENSIVE SUMMARY AND SELF-REVIEW POSITION PAPER WAS COMPLETED — TO BE PRESENTED TO COUNCIL AHEAD OF THE PROPOSED REVIEW OF THE ACCREDITATION PROGRAMME

ACCREDITATION PROGRAMME, 2003-2004

- * 4 PETROGRAPHERS ARE BEING RE-TESTED FOR THE MACERAL CONTENT METHOD
- * TESTING OF NEW PETROGRAPHERS HAS COMMENCED — 5 WILL BE ASSESSED
- * THERE IS NO FEE FOR THE INITIAL TEST
- * ONE PREVIOUSLY ACCREDITED PETROGRAPHER, WHO HAS RECENTLY RE-JOINED THE WORK FORCE, IS ALSO BEING TESTED — EXISTING FEES BEING PAID
- * ADDITIONAL COALS FOR THE COAL BANK ARE BEING INVESTIGATED — DONATIONS OF COALS ARE WELCOMED + SOME COALS WILL MOST LIKELY BE PURCHASED FROM OVERSEAS COAL BANKS
- * A MAJOR PROJECT WILL BE THE ARCHIVING OF RELEVANT FILES AND DATA
- * A CLEAR TIMETABLE FOR THE 2004 EXERCISE HAS BEEN PRODUCED

The 2004 Exercise timetable is:

- (1) Organiser contacts individuals/laboratories Nov.-Dec. 2003. “New” petrographers are welcome to join, but they will need to contact the Organiser;
- (2) invoices dispatched Dec. 2003. Payment to be made before 31st January, 2004;
- (3) samples and instructions to be mailed out in Feb. 2004;
- (4) all data must be received by 31st August, 2004. No excuses for late receipt will be accepted after this date;
- (5) Preliminary Assessments e-mailed to participants during September, 2004. Participants to check their evaluations and results against the Group Mean and Group Standard Deviation values;
- (6) all mounted coal blocks must be returned by 16th October, 2004. Non-receipt of samples may lead to the Organiser withholding the dispatch of the Final Assessment and accreditation certificate;
- (7) all Final Assessments dispatched by the end of October, 2004. Any appeals against assessments must be received before 30th November, 2004;
- (8) certificates dispatched to successful participants in mid-December, 2004;
- (9) ICCOP website “List of Accredited Petrographers” updated in early January, 2005; and
- (10) appeals finalised. Re-testing and initial testing of petrographers during 2005.

In the subsequent discussion started with the question, what happened to participants, who had for various reasons missed out on one round of the programme. Whereas in general these should be treated like new participants (starting the process with an initial set of six samples) many argued that this be not necessary. The rules however will remain unchanged but the question will be given special consideration in the forthcoming review of the Accreditation Programme. The two actual cases of petrographers, who had failed to continue in the programme but wished to continue without repeating the initial analyses will be presented to and discussed with the convenor Aivars Depers to find a solution. Both are expected to send details of their cases to the chair. This process was agreed on by the commission.

A following discussion on the appropriate length of the period of accreditation had suggestions ranging from renewals every year to every 4 years. The existing 2 years period was finally not changed.

A proposal from last year's meeting that the term 'Re-accreditation' be used internally only and be reserved for members who either have dropped out for a period, or who have failed at some stage and need to commence again. The term will not appear on public lists of Accredited petrologists. Consideration will be given to appending a date to Accredited petrologists to show the date of first Accreditation, or where Re-accreditation in the sense of the previous motion has occurred, the date of Re-accreditation. The proposal was accepted with 19 in favour and nobody against.

Further discussions dealt mainly with the necessity to stronger advertise the Accreditation Programme in the non-ICCP world with a special focus on the Asian world.

The History of the ICCP – Duncan Murchison

Duncan Murchison gave a very informative and entertaining presentation on the history of the ICCP. It is hoped that we can convince Duncan to supply us with the material of his presentation to be published in one of the following Newsletters.

ISO Classification – Manuel Lemos de Sousa

Manuel Lemos de Sousa gave a short summary on progress of the ISO Coal Classification. He noted a problem in the draft classification with regard to the boundary between low rank and medium rank coals. His argument that reflectivity alone is often not a sufficient to define the range of sub-bituminous coals was discussed. Thus SI, CV daf and CV maf are included. The Mequinenza coals of Eastern Spain were used as an example of a coal, which did not fit into the draft classification properly. The problem was discussed and Alan Cook seemed to be able to offer a satisfactory solution by suggesting a slight a shift of the boundary parameters.

Microlithotypes Round Robin – Ed Lester

Ed presented the results of a microlithotype round robin he had organised with images of various microlithotypes. The results were good. The cds he had circulated also ran a little programme that measured the time it took the analyst to make a decision about what microlithotype he/she was looking at. Interestingly the chances to identify a mirolithotype wrongly were greater the longer it took to make a decision.

In the following discussion suggestions were made to have a Koetter ocular added to the image and to increase the rank variations..

Ed has also a strong interested in the educational/training aspect of these round robins and he asked for permission to possibly publish this aspect of the round robins in related journals. The request was met by some strong resistance of participants, They insisted that according to ICCP rules every participant should be listed as a co-author of such a paper. The topic will be submitted to council for further discussion by the chair.

New ICCP Reflectance Standard – Walter Pickel and Dave Pearson

Walter Pickel reported that two reflectance standards ($R=0.89$) were purchased and calibrated against the results of the standard round robin. The standards are made available to interested laboratories. One standard will be sent out on request, the convenors will keep the other and analysts/laboratories are asked to send one of their standards in to get them calibrated.

Both services, due to a decision already made in Copenhagen, are available for US-\$ 50 (+ a US-\$ 500 bond + postage, if the standard is mailed to the lab). However, for ICCP member, this service is free of charge.

During the previous 8 months, 11 laboratories had their standards tested against the ICCP standards. The need for more advertisement applies to this service as well as to the accreditation programme and the convenors will enforce several advertisement efforts.

A proposal to purchase two more standards of a higher reflectance to include an instrumental linearity check was rejected by the commission with 8 votes against and 7 votes in favour.

Review of new methodologies and techniques in Organic Petrology – Lila Gurba

Lila Gurba presented a summary report of the group's activities. The main objective of the WG is to review new methods and techniques related to Coal and Organic Petrology.

The first version of a White Paper, with a description of several methods and techniques, was presented at the ICCP meeting in Copenhagen. A copy is available from the ICCP web-site. The White Paper is open to further contributions. It will be updated twice a year. The next update is due by end of January 2004. The Convenors wishes to encourage everybody who is working on or developing something new related to organic petrology, to submit an extended abstract, short communication or paper as a contribution to the White Paper. Interested members should send the abstract to Lila Gurba or the chair/secretary of commission I.

Sample Preparation Techniques – Dave Pearson

Dave demonstrated the advantages of the Lucite binder method. He is able to reduce the empty space in polished blocks significantly as opposed to the 'classical' methods. This is especially of advantage for the application of image analysis. He offered to support with the sample preparation for round robin and accreditation exercises. He also demonstrated advantages of adding colour to the binder.

Temporal variation of coal – Lopo Vasconcelos

Lopo reported on the progress of the Working group and the expected future development. To meet the objective of the group (to study variations of the VLI composition of coals worldwide to see if there are differences to be seen with regard to the origin and/or the age of the coals. So far, 6000 datasets have been included into the database. Activities for the next year will include the homogenisation of the data tables layout, complete blank fields of data tables collected until now, find more participants to join the working group and start working with the data and trying to define some patterns.

Key Problems of Interpretation of Thermal Maturity Data in the Upper Silesian Coal Basin (Poland) - Adam Kotas

The Friday morning session started very pleasantly with this vivid and clear presentation by Adam Kotas on the survey of maturity data in the Upper Silesian Coal Basin. An abstract of this presentation can be found in the 'Programme and Abstracts' volume of the meeting.

MICROSCOPE SESSIONS:

Two microscope sessions were planned to be held Thursday evening and Friday morning. Unfortunately the lack of electricity in the room provided resulted in a poor illumination and the Thursday evening 'dark field session' was thus cancelled. The 'bright field session' on Friday morning however was very successful. It hosted the 'Working Group To Investigate The Status of Degradinite and the 'Standardization WG.

The session was very vivid and discussions around the two available microscopes were extensive. All involved working groups had plenty of opportunity to demonstrate their objectives and discuss them over a large variety of samples.

Working Group to Investigate the Status of Degradinite – Peter Crosdale

Peter Crosdale presented the answers to his questionnaire, which had been circulated before the meeting. The answers were of great variance. To narrow down the problem, Peter had brought

several samples. All of them contained what could match the definition of degradinite. A general summary of comments given at the session suggests that most participating petrologists classified the material as either resinite, liptodetrinite, bituminite or a mixture of these. Further discussions dealt with problems of point counting this material, if it is a blend, as the single components are very small and if there should be a minimum size for macerals. The chair suggested to include bituminite into the working group's schedule.

Standardization Working Group –Harold Read

In the absence of Harold Read, Elvira Barcelona presented the working group. It was suggested that a new round robin should check on the applicability of the new huminite classification. Various samples from Greece and Germany were looked at and discussed at the microscope session and the group from the University of Patras offered to supply Harold Read with a sample of weakly gelified lignite, which would suite the objectives of the round robin well.. The round robin will be held over the next year.

New Working Group Peat – Kimon Christanis

Kimon suggested to form a new working group on peat petrology with the objectives to test the applicability of the new huminite classification on peat and if either some additions would be needed to meet the special requirements of peat petrology or a completely different classification would be preferable. The working group will also deal with sample preparation issues.

The foundation of this new working group was welcomed by the commission and 11 commission members joined the group. Members, who did not join the meeting but wish to join, please contact Kimon Christanis or the chair/secretary of commission 1

New Handbook Editorial Group – Petra David, Angeles Gomez, Walter Pickel.

The technicalities of how to organise the new handbook edition were discussed in this meeting in detail. The state of the progress as listed in the chair's review above was reviewed and further activities planned. Detailed discussions were held about what of the existing material of the ICCP can be used for the new edition without or with minor changes, the handbook format, how to keep the edition 'open' for recent and future ICCP activities.

As a result of the discussions, a glossary will be prepared, the old handbook editions will all be scanned and made available on cd and a draft version of a new handbook will be prepared for further discussions at the next meeting.

The addresses of all conveners are available from the ICCP directory. However, you can send any request or material to the chair/secretary of commission 1.

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