

NEWS OF THE INTERNATIONAL COMMITTEE FOR COAL AND ORGANIC PETROLOGY

No. 21 May 2000 Aachen

Letter of the Resigning Editor

Dear member of the ICCP, dear colleague,

this will be the last number of the ICCP news edited by myself. I think that this is an occasion for a short retrospective view because many of today's members will no more know the origin of our small information brochure.

It was during the 41' meeting of the ICCP 1988 at Aachen that it was decided to issue ICCP News twice a year. The first Editor-in-Chief was Evamarie Wolff-Fischer, assisted by Hans W. Hagemann who was responsible for the layout. The first issues were rather simple, only some typed and pinned sheets with a self outlined letter head. But the content was fixed from the beginning as it is until now. One issue, following directly a meeting, should contain a short version of the minutes of the last meeting. The following issue should give information about the next meeting. Also information of common interest about congresses, publications etc. were asked for. The first number of the News came out at March 1988, and the team of Evamarie and Hans worked together until number 4 was published in February 1991. In consequence of Evamarie's retirement I took over the editorship and produced together with Hans Hagemann number 5 of the ICCP news, published December 1991. Starting with number 6 (November 1992) 1 was responsible for the news by myself. This number was the last one in the old self-made style.

Number 7, printed March 1993, was the first small booklet in the outfit as it is until now. Starting with this issue, regional coordinators were introduced who should help to collect interesting information from everywhere in the world. Alan Davis, the President of the ICCP in those days, had written a short preface explaining "that the subject matter covered by its (meant is the ICCP) newsletter would be expanded to include items of information and short articles of technical interest to our membership". He wrote also "I encourage members to support the ICCP News ... by making a special effort to get the new newsletter off to a good start". Since No. 18, printed January 1999, the ICCP News contain the official version of the minutes of each meeting which is a revalorization of the News.

Looking back after nearly nine years of activity, I have to say that the support which Alan Davis had asked for was not very remarkable, neither from the regional coordinators nor from the membership at the whole. And when the members get the newest issue of the News, do they read it? Depending on inquiries I got from time to time or on the missing response to requests published in the News I have some doubts.

My successor will be Peter Crosdale. He will start with the preparation of No. 22 containing the minutes of the meeting in Rio de Janeiro. I assume that with the new editor new ideas will be realized, and I wish Peter Crosdale much success!

Monika Wolf

52nd Meeting of the ICCP

The President of the ICCP has the honour to invite all members to the 52nd meeting to be held in Rio de Janeiro,

Brazil,

13th – 18th August 2000

Organizing Committee of the 52nd ICCP Meeting

Carla Viviane Araujo (PETROBRAS Research and Development Center)
Valéria Cerqueira Condé (PETROBRAS Research and Development Center)
João Graciano Mendonça Filho (Department of Geology - Federal University of Rio de Janeiro)

General Information

- The meeting will be organized by the Center of Excellence in Organic Geochemistry (CEGEQ) of the Petrobras Research and Development Center.
- The meeting will be held at PETROBRAS Research and Development Center at the following address: Cidade Universitiária, Quadra 7, CEP 21949-900 - Ilha do Fundão, Rio de Janeiro.
- Due to the tropical climate it is difficult to say when it is spring, summer, fall or winter in Rio de Janeiro. August in Rio is wintertime with temperatures ranging from 16'C to 28 'C.

Tentative Schedule

The general tentative schedule is as follows:

Sunday, 13:

Afternoon: Registration/Icebreaker Party and Meeting of the ICCP Council

Monday, 14:

Morning: Opening Session/General Assembly

/Meetings of Commissions

Afternoon: Meetings of Commissions

Tuesday, 15:

Meetings of Commissions (all day)

Wednesday, 16:

Morning: Meetings of Commissions Afternoon (since 1:30 PM): Sightseeing Tour

Thursday, 17:

Morning: Meetings of Commissions Afternoon: Meetings of Commissions Evening: Conference Dinner

Friday, 18:

Morning: Meetings of Commissions Afternoon: Meetings of Commissions Afternoon: General Assembly and Closing

Session.

Meeting Fees

The following fees have been fixed to participants for 52nd ICCP Meeting

Registration US\$ 50Conference Dinner US\$ 35

The registration fees will include the icebreaker party, meeting material, lunches, coffee breaks and transportation hotel/meeting site/hotel.

Hotel Reservation

The hotels occupancy rates will be very high in this period due to the 31" International Geological Congress. Hotel reservation should be done directly with: RENTANUR Turismo. (Please contact the Organizing Committee in order to obtain all information about hotel reservation).

Registration and Icebreaker Party

The Council Meeting, Registration, and Icebreaker Party will be held on the Rio Othon Palace Hotel in Copacabana on Sunday 13th

Registration: from 6:00pm to 8:00pm

(Tropical Room)

Icebreaker Party: from 7:00pm to 9:00pm

(Tropical Room)

Registration will continue on Monday 14th at CENPES.

Registration

If you intend to attend this meeting please contact the Organizing Committee by the following e-mail, fax or phone:

carla@cenpes.petrobras.com.br

Fax:+55 21 865 6799, addressed to Carla

Viviane Araujo.

Phone: +55 21 865 6459

Working groups\topics of Commission I

The foundation of a new working group dealing with the review of new <u>technologies</u> in <u>organic petrology</u> will be discussed and hopefully set up. Suggestions are very welcome.

We will try to get a <u>microscopy session</u> scheduled. Everybody please feel free to bring your favourite "problem" in addition to the ones we are going to bring.

Proposals for the microscopy session will be very welcome and we would like to remind you, that you will not very frequently have such a group of petrologists available to discuss your petrographical problems.

Members of Commission I wishing to contribute to or participate in one of the groups are requested to contact the corresponding chairperson or the chairman/secretary of the commission. Note: comments are very welcome especially if you will not be able to be at the Rio Meeting.

Preliminary programme topics:

- Review of status of working groups
- Accreditation
 Standardization
- Handbook editorial:
 - Liptinite
 - Huminite
 - Carbominerites
 - Lithotypes (hard coals)
 - Bitumens
 - · Zooclasts
 - Graphites, semigraphites, natural coke, pyrolytic carbon
 - Oxidation
 - Automation
 - Radiation Damage
 - Temporal variations of coals
- New Working group: Review of new technology in organic petrology

Walter Pickel (Chair Com. 1)

Agenda for Commission 2

Review of current status of Commission 2 and future directions

W. Kalkreuth / A. G6mez Borrego

The status of the following working groups and activities will be discussed:

Environmental Applications of Organic Petrology (A. Depers)

Presentation of preliminary results from a Round Robin Exercise on 2 samples. Additions to the nomenclature may also be suggested.

Coal Facies (M. Himor-Vid6 and G. Nowak) Status of the white paper publication on coal facies.

Thermal Indices (C. Araujo)

The results of a round robin exercise involving two Australian Boghead coals will be presented and discussed.

Classification of DOM (A. Hutton, L. Stasiuk and J. Burgess)

The DOM classification will be discussed for a final time before the commission prior to sending it out to all participants of the ICCP and TSOP for discussion and approval. Progress in the draft and development of a DOM cd rom will also be discussed.

Coalbed Methane (P. Crosdale)
Discussion on development of an international standard for the determination of methane adsorption isotherms of coals.

Pseudovitrinite (L. Gurba and C. Ward) The main topic to discuss are i) Progress report on white paper on pseudovitrinite. ii) botanical structure of pseudovitrinite as revealed by etching and in thin sections. Problems associated with determination of vitrinite reflectance anisotropy.

Alginite Sheets Publication (A. Cook)

Reflectance Data Qualifying System (J. Koch)

Agenda for Commission 3

Coal Blends (I. Suárez): Results from 2000 Round Robin Exercise and others (coal blends sheets); 45 min.

Automation (P. David), 45 min, and Carbonisation (R. Javier), 45 min.

Combustion (E. Lester and D. Alvarez): Presentation "The thermal changes of coal particles in a boiler" and discussion of results from 2000 Round Robin Exercise; 2 h.

Inertinite in Combustion (A. Gómez): Discussion of results from 2000 Round Robin Exercise; 1.5 h.

ACCREDITED PETROGRAPHERS

The Accreditation Committee is proud to announce that the following petrographers have been awarded Full Accreditation status in the ICCP's Accreditation Programme. Congratulations are extended to:

Gerd Bieg Alan Davis Hans Drießen Mária Hámor-Vidó Carsten Guvad Pirkko Karvosenoja Joachim Koch Kenneth W. G. Loudon Neil R. Manery Gareth D. Mitchell Axel Nelles Saija Nisumaa Henrik I. Petersen Harold W. Read Martin Reinhardt Richard Sykes

The 2000 Exercise begins in April - if you would like to register in the scheme or obtain additional information, then please contact the Co-ordinator as soon as possible.

A comprehensive list of accredited petrographers can be found on the ICCP's Website: http://www.iccop.org

This is the official list and it will be kept upto-date as exercises progress. The site also contains valuable information regarding the operation of the scheme and a detailed description of the statistical evaluation of submitted petrographic data.

If you do not have access to the ICCP's Website, then please contact the Co-ordinator for this information:

Aivars Depers School of Geosciences University of Wollongong Northfields Avenue Wollongong, N. S.W. 2522 AUSTRALIA. Tel: +61-2-4221 3423 Fax: +61-2-4221 5703 E-mail: aivars-depers@uow.edu.au

Aivars Depers
Walter Picket
ACCREDITATION COMMITTEE

Apology

No. 20 of the ICCP-News contains an unpardonable mistake: Just in the call for nominations for the Reinhardt Thiessen Medal, the e-mail address of the Chairman of the Thiessen Award Committee, **Dr. Geoff Taylor**, was printed incomplete. The correct address is: **ghtaylor@dynamite.com.au.** I hope that still everybody who wished to propose a candidate was able to contact Dr. Taylor.

The Editor

Meetings

TSOP

September 17-20, 2000 the 17thnnual Meeting of The Society for Organic Petrology (TSOP) takes place at Bloomington, Indiana USA. Information: Dr Maria Geological Indiana Mastalerz. Survey. Indiana University, 611 North Walnut Grove, Bloomington, Indiana 47405 USA; Phone: (812) 855-9416; Fax: (812) 855-2862; E-mail: mmastale@indiana.edu. Further details: http://adamite.igs.indiana.edu/tsop.

September 19-20: Oral and poster sessions (general sessions plus special sessions on surface expressions of hydrocarbons and the sedimentology of organic matter-rich sequences). Pre-meeting short course: In-situ analysis of organic matter. One day post-meeting field trip: Organic-rich rocks in the U.S. Eastern Interior Basin.

ALAGO

7th LATIN-AMERICA-N CONGRESS ON ORGANIC GEOCHEMISTRY

MABU THERMAS & RESORT FOZ DO IGUACU BRAZIL OCTOBER 22 - 26, YEAR 2000

NEWPERSPECTIVES ON ORGANIC GEOCREMISTRY FOR THE THIRD MILLENNIUM

7th ALAGO Congress Secretariat PE-IROBRAS/CENPES/DIVEX/CEGEQ http://www.alago.com.br e-mail: alago@cenpes.petrobras.com.br

Scatter of Vitrinite Reflectance Values of Coals - Remarks on the Comparability of Arithmetic Mean Reflectance Data with increasing Rank

Joachim Koch

Searching for a measure of the potential range of reflectance values of rank-typical particulate vitrinite contained in mineral sediments, the scatter of vitrinite reflectance readings of coals was investigated using range, standard deviation and the variation coefficient as statistical parameters for the scatter of random (Rr %) and maximum (Rmax %) reflectance. Altogether data from 175 coal samples with Rr ranging between 0. 17 % and 5.17 % were available. The evaluations for Rmax are based on 63 samples.

Range and standard deviation of Rr do not increase linearly with increasing coalification. For both the parameters best fitting trendlines are third-degree polynomial functions with the constraint (0,O). Up to about 2 % to 2.5 % Rr the relationship is approximately linear.

A parameter of special interest concerning the scatter of measurements is the variation coefficient which allows a comparison to be made of different arithmetic means with regard to the scatter even if the means have different orders of magnitude (like coals of increasing rank), so that the standard deviation inevitably varies. Unfortunately it turned out that the variation coefficient is not independent of the level of the random reflectance. It is constant up to 2.5 % Rr with an average of about 7.5 %. A variation coefficient of <10 % can be a useful value for the assessment and comparison of random reflectance measurements on coal samples up to 2.5 % Rr. Above 2.5 % Rr it is not a suitable parameter for comparing the scatter of determinations of different orders of magnitude.

For maximum reflectance (Rmax) a linear relationship exists between the range or the standard deviation with increasing Rmax. However, the scatter of the data is very broad, The variation coefficient increases slightly with Rmax - if at all. For this measuring method it is well suited as a parameter of the scatter of measuring data throughout the total range of coal ranks. On average the variation coefficient amounts to 4 %. A variation coefficient of \leq 7 % could be used for the evaluation of the quality of measurements on coal samples.

Concerning the Rr-determinations, for most of the coal technological applications and for oil exploration the field up to a maximum of 2.5 % Rr which is well comparable using the variation coefficient as a measure of the scatter, would be sufficient. But measurements for gas exploration, for geological and tectonic questions as well as for research on ore deposits reach much higher degrees of coalification and Rmax measurements are advisable.

Altogether according to the results presented measuring only Rmax for rank determinations would be useful. In this way conversions could also be avoided for which the equations are not yet robust enough. Problem: Time needed is substantial especially for measurements on dispersed vitrinite and the method is nearly impracticable on very tiny particles.

PRECAUTIONARY NOTE ON IMMERSION OILLS

Early this year I became aware that an epoxy resin-based immersion oil, sold by Leica, had been the alleged cause of a variety of health problems for users and was allegedly giving decreased reflectance values during routine analysis. One ICCP member has posted a cautionary note on the ICCP's WWWBoard and I have posted two additional notes about this immersion oil (http://www.iccop.org). My final posting contains a table showing the effects of this oil on operators' health and reflectance anomalies as reported by 6 laboratories worldwide. Some of this information is summarized below.

In early 1997, Leica withdrew its PCB-free oil, that had been available for 22 years, as it contained chloroparaffins, chemicals that are thought to be a potential health hazard. An epoxy resin-based immersion oil was sold between early 1997 and March, 1999. The epoxy resin-based oil bottles may have warning stickers on the label (Reizend Irritand = irritant) and may have been sent with Material Safety Data Sheets (MSDS). Note that catalogue numbers for both oils are the same, viz., (I 1)513 787 (IOML bottle), (11)513 522 (100 mL) and (11)513 788 (500 mL). If you are not sure which oil you are currently using, then please contact your nearest Leica agency or Dr. Ahrberg for clarification (contact details below).

Leica issued a new, adipic acid ester-based immersion oil, without autofluorescence, from March, 1999 and it is made by Zeiss. It complies fully with ISO/DIN specifications. MSDS and technical information are available from Leica agencies. Known catalogue number is 11513 859 (10 mL) - Leica have indicated that 100 mL and 250 mL bottles will be released soon.

Leica advise that the epoxy resin-based immersion oil has been officially re-called. If you were not contacted by Leica in early 1999, then please contact your nearest Leica agency or distributor to return this oil.

Comprehensive information can be obtained from:

Dr. Heiner Ahrberg Leica Microsystems Wetzlar GmbH Ernst-Leitz-Strasse 17-37 D-35578 Wetzlar GERMANY.

Tel: +49-6441-29 2286 Fax: +49-6441-29 2464

E-mail: <u>Heiner.Ahrberg@lmw.leica.com</u>

If you do not have access to the ICCP's Website, then please contact me for additional information.

Aivars Depers

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Dead line for the next issue of the ICCP NEWS is October 31, 2000!