

# Letter from the Editors

During the 43rd meeting of the ICCP, held in Porto Alegre September 15-20, 1991 the Editor-in-Chief, Evamarie Wolff-Fischer has resigned. This issue of the ICCP News will be edited provisionally by Monika Wolf and - as in the past - by Hans W. Hagemann.

Any member wishing to contribute to the ICCP News may submit material to Prof. Dr. Monika Wolf, Lehr-stuhl für Geologie, Geochemie und Lagerstätten des Erdöls und der Kohle der RWTH Aachen, Lochnerstr. 4-20, D-5100 Aachen. The deadline for the next issue is February, 28th, 1992.

# SHORT MINUTES OF THE 43rd MEETING OF THE ICCP, HELD IN PORTO ALEGRE, BRAZIL\*)

\*) A full version of the minutes will be circulated to ICCP members who attended the Porto Alegre meeting. Other members may obtain them by writing to the Acting General Secretary, Dr. Alen Davis, 205 Research Building E, Penn State University, University Park, PA 16802, USA.

The 43rd meeting of the ICCP took place in Porto Alegre, Brazil, from September 16 to 20, 1991. It was attended by the President, Prof. M. Wolf, and 38 members and guests from 15 countries. The meeting was officially opened at the Plenary Session by Prof. Geraldo Kroef de Fario on behalf of the Rektor of the Universidade Federal do Rio Grande do Sul (UFGRS).

The President asked the meeting to stand in homour of two colleagues who had passed away. Dr. Irma Waltz had worked at VSEGEI and the USSR Academy of Sciences in Leningrad; she died on November 14, 1990. Dr. Milan Hamrla, who had worked at Geological Survey of Ljubliana, died in May, 1991.

#### General events

On the morning of Monday, September 16, two invited lectures were presented:

Nahuys, J. (CIENTEC): Development of Coal Petrography at CIENTEC. Correa da Silva, Z.C. (UFGRS): Organic Petrology in Brazil.

Prof. Dr. Monika Wolf, Lehrstehl für Geologie, Geochemie und Lagerstätten des Erdöls und der Kohle der RWIH Aachen, Lochnerstraße 4-20, D-5100 Aachen, FRG

Prof. Dr.-Ing. H.W. Hagemann, Lehrstuhl für Geologie, Geochemie und Lagerstätten des Erdöls und der Kohle der RWIH Aachen, Lochnerstraße 4-20, D-5100 Aachen, FRG

#### Thiessen Medal

The Thiessen Medal was awarded in absentia this year to Dr. Claus F.K. Diessel for his outstanding work on the formation and utilization of deal, especially of Australian Gondwana deals.

### ICCP Statutes

A ballot to change the statutes of the ICCP was overwhelmingly in favour of the proposed changes. Some further changes were passed by the General Assembly at the first plenary session. The principal points of difference between the revised and old statutes are as follows:

- 1) The Association is now the International Committee for Coal and Organic Petrology. Mowever, the abbreviation will remain ICCP.
- The long-standing relationship between ICCP and the International Carboniferous (and Permian) Congress has been discontinued.
- 3) The Thiessen Medal may now be awarded annually at the ICCP meeting.
- 4) The number of Vice-Presidents has been changed from two to one.
- 5) The revised statutes contain provision for the appointment of a Newsletter Editor and the publication of a Newsletter.
- 6) The cumbersome pre-election procedure previously employed by the ICCP has been replaced by one in which a list of candidates is nominated by the Council and General Assembly prior to a mail ballot.
- 7) The requirements for election to Associate Member have been made easier; those for election to Full Membership have been made somewhat more stringent.
- 8) The President's report (once every four years) and the text of a laudatio on the occasion of the Thiessen Medal Award will be published in an appropriate international scientific journal instead of the Compte Rendu of the International Carboniferous Congress.

On behalf of the ICCP, the President thanked Prof. Murchison, Dean Ashley Wilton of the Faculty of Law, University of Newcastle upon Tyne, and others, for their assistance in drafting the new statutes.

A copy of the new statutes will be mailed to all members in due course.

# Treasurer's Report and Fees

Prof. Murchisen reported that the total balance in ICCP accounts is 6 24,620.43, some 6 3000 higher than 18 months ago. The Handbook account stands at 6 1668.00, an amount which is not expected to cover the costs associated with printing the 124-page 3rd Supplement to the 2nd Edition.

At the second plenary session, the current fee structure was considered in light of the Treasurer's report. It was decided that, because of future expenses associated with the 3rd Edition of the Handbook and of sending a representative to ISO and ECE meetings, the fees for Full and Associate Members should remain the same (\$ 30/year; \$ 60 for 3 years). However, it was decided to introduce a 3-year rate for retired members; this will be \$ 30 compared to \$ 15 for one year.

### Elections

The following officers were elected during the year:

President: Dr. A. Cavis
Vice President: Dr. N. Bostick
Secretary, Commission 1: Dr. A. Cook
Chairman, Commission 2: Dr. J. Senftle
Secretary, Commission 2: Dr. W. Kalkreuth

### Forthcoming Elections:

Elections for the following Council positions will be held before the next ICCP meeting:

General Secretary Chairman - Commission 1 Secretary - Commission 3 Editor

In accord with the new statutes, Council and the General Assembly nominated candidates for these positions.

# Membership

R. Menendez, Spain, was elected to Full Membership of the ICCP. The following were elected to Associate Membership:

S. Bhattacharya, India
I. Cheong, Kores
I. Cheong, Kores
I. Cheong, Brazil
D. Flores, Brazil
M. Ghiggi, Brazil
G. Holler, Brazil

G. Hallam, United Kingdom X. Marques, Portegal

N. Mergel, Brazil S. Nora, Brazil A. Penu, Romania

S. Predeanu, Romania M. Reinhardt, Germany N. Russell, Australia

W. Schneider, Germany I. Suarez-Ruiz, Spain J. Triguis, Brazil

L. de Sousa e Vasconcelos, Portugal

# President's Report

The retiring President, Prof. M. Wolf, gave a report of the activities of the ICCP during the period 1987-1991. The journal Evel has offered to print the texts of our President's Reports and the laudatios for the Thiessen Medalists. The text of the President's report will be appended to the full version of the minutes.

# Working Groups objectives

# Commission 1 (General Coal and Organic Petrology)

Chairman: Dr. E. Wolff-Fischer, DMT-FP/IRA1, Franz-Fischer-Weg 61, D-4300 Essen 13, Germany

Secretary: Dr. A. Cock, Keiraville Konsultants Pty. Ltd., 7 Dallas Street, Keiraville, NSW, Australia

Acting Secretary: 5r. W. Pickel

- 1. Dr. Wolf presented a proposal for the re-definition of the terms maceral, vitrinite, liptinite, and inertinite for the new edition of the Handbook. This proposal was submitted as a basis for further work on our descriptions. This work will be continued in a new editorial group chaired by Dr. Wolf. A working subgroup was established for each maceral group. Responsible for the subgroups are Dr. Y. Somers (liptinite), Dr. M. Wolf (vitrinite), Dr. M. Lemos de Sousa (inertinite).
- 2. WG Standardization of maceral-/reflectance analysis. Convener: Dr. W. Pfisterer

This group was not active in 1990/91. Dr. Afisterer has resigned and Dr. Pickel will be the new convener of the group.

3. WG Standardization of fluorescence measurements. - Convener: K. Ottenjann

The Chairman of Commission 1 read a short report on the activity of this group for the year, written by Karl Gttenjann. The main items are:

The text of the sneet FLUORESCENCE PART I - MEASUREMENT OF FLUCRESCENCE INTENSITY was finished after the final discussion at the Aachen meeting in 1988. It was ready to print in early 1989 and sent to Prof. Murchison.

In spite of intensive discussion among the ICCP experts and with scientists of microscope manufacturers, no practicable way was found to eliminate the effect of the dependence of the fluorescence intensity of the reflectance material on its excited volume.

An extensively improved draft of the text of FLUORESCENCE PART II - MEASUREMENT OF SPECIFAL CISTRI-BUTION was completed and sent to 15 members of the ICCP and one ISCP member experienced with spectral measurements for critical review and comments. The only few answers were very useful.

If the work is to be continued by K. Ottenjann, he asks politely for a personal declaration of the willingness for serious cooperation by really interested colleagues. After that he will send the current version of the information sheet to those who so declared. Together with the improved proposal he will also send one specimen with the request for some measurements made strictly according to the proposal's outlines in order to test the proposal. It should be possible to complete the final version of the sheet and submit it to the group at the next meeting.

#### 4. WG Saprovitrinite. - Convener: Dr. Kruszewska

The Convener presented a definition of "dark vitrinite", which was accepted. This definition will be included in the sheet "vitrinite" of the new Handbook.

#### 5. WG Gondwana Coals. - Convener: Dr. Correa da Silva

The Convener has no feedback of the round robin analysis 1990/91. It was decided to continue the work. The Convener has set a new deadline for all working group members: February, 28, 1992.

#### 6. WG Lithotype of Brown Coals

The activities of this group have been put on hold until a Convener can be found. It is hoped that new members, possibly from eastern Germany and Poland, and who are experienced in lignites, can be attracted to the ICCP.

#### 7. Accreditation scheme under the direction of Dr. Kutzner

The Chairman of Commission 1 read a report from Dr. Kutzner concerning the state of the scheme.

Until now insufficient results of the sample sets have been received for statistically valid calculations to be undertaken. When three more sets of results are submitted, it will be possible to commence the certification. Members involved are urced to complete this work as soon as possible.

It was agreed that the validity of the certificate will be for 5 years. It will be issued to a laboratory in the name of the person(s) undertaking the analyses.

#### 8. WG Coal Classification. - Convener: Dr. Lemos de Sousa

Dr. Lemos de Sousa reported about the history and the state of art of coal classification, with some personal observations.

The International Classification of Seam Coals is currently under study at the ECE-UN and, until now, at the ICCP. In this connection the question arose whether the ICCP will continue working on classification. It was decided that the ICCP is not interested at this time in developing its own classification, but that it will continue to serve in an advisory capacity upon request from any international organization. It was concluded by vote (15 members yes, nobody against) that this task should be directly linked to the President of the ICCP.

Depending upon the questions arising from 150 or ECE, the President will ask the members to establish advisory or working groups. The convener of such a group will be nominated by the President. The decisions of this group have to be presented to the General Assembly. The President will participate in any meeting of international organizations upon invitation, or he can delegate this participation to another ICCP member who is not acting as a representative of his own country.

The answer to this year's question from the ECE-sh concerning the definitions of "type" in the ECE classification scheme was deferred until the next meeting. The President informed the ECE of this decision by FAX, unging the ECE not to accept the proposed definitions of vitrio, fusic and liptic coals without further study.

The ICCP WG on Coal Classification terminated its activities.

# Commission 2 (Application of Coal and Organic Petrology in Geology)

Chairman: J. Senftle, ARCO Oil and Gas Company, Exploration and Production Research, 2300 West Plano Parkway, Plano, TX 75075, USA

Secretary: W. Kalkreuth, Geologisches Institut der Universität zu Köln, Zülpicher Str. 49, D-5000 Köln 31

Acting Chairman: Y. Somers Acting Secretary: W. Fermont

#### 1. MOD Round Robin

Or. Miltmann reported on activities centered around the MCD sample distributed in Aachen in 1988. Forty samples were distributed and only 7 members have since replied. A volunteer is needed to perform the evaluation of results; Dr. Hiltmann is not in a position to do this. He suggested that more time should be given to the sources of inter-lab differences before proceeding with subsequent samples. He also speculated that more progress may have been made by national groups (Germany, France). A new palyno-maceral classification has recently been established (see below). Two major classes (structured/structureless) are identified in strew mounts. Color and translucency are used as criteria.

In his report prepared for the meeting, Chairman Dr. Senftle has suggested that a new round robin sample should be used as a focus of the group's efforts. He provided five sets of samples (pellets, slides and isolated SOM) from the Dobroudya Basin, Bulgaria.

Or. Senftle also provided a simple working classification which should be used for round robin analysis and for discussion purposes. The dategories in this classification are: I. Structured Organic Matter - vitrinite, inertinite, liptinite, bituminite and zooclastics. II. Unstructured Organic Matter - amorphous organic matter and mineral matter. Further details of the classification and sample set will appear in the Commission 2 minutes. Leaders of regional groups (each of which will be given one sample set) will be chosen by Dr. Somers.

### 2. WG Alginite. - Convener: Dr. A. Cook

Dr. Cook is proceeding with the classification of alginite which is based on morphology. Some concern was expressed at the meeting concerning the distinction between telalginite and lamslginite. From recent work it is apparent that lamslginite may be structured. Why should it not qualify as telalginite if "tel" is used in the same sense as in telinite?

#### 3. Isolation of SOM

No progress has been made in this working group. A decision must be made as to whether this group will continue and under whose leadership. Dr. A. van der Meulen has resigned from the ICCP. A volunteer is hereby sought for this task.

#### 4. WG Thermal Indices (Basin Analysis). - Convener: Dr. W. Fermont

A decision to commence this work was taken in Wollongong with Dr. Fermont as coordinator. The Gipps-land and Pictou Basins were selected and samples have been distributed. However, the nature of the work really requires an Australian or Canadian geologist, respectively, to coordinate and interpret the results. If a Dutch basin is selected, Dr. Fermont would undertake the work. Dr. Fermont also questioned whether regional geology, such as is involved in these studies, is an appropriate activity of the ICCP. Clearly some redefining of the activities of the group, and possibly the naming of a new convener, are called for.

# Commission 3 (Application of Coal Petrology in Industry)

Chairman: C. Diessel, Geology Department, University of Newcastle, Newcastle MSW 2308, Australia Secretary: M. Bengtsson, M. Bengtsson Consultant AB, Blacksvampvagen 16, S-61163 Nyköping, Sweder Acting Chairman: D. Pearson

### 1. VG on Automation. - Convener: D. Pearson

After the meeting in Wollangona, the number of people working in Automation was determined through correspondence and the ICCP News. Iwenty-five laboratories were then sent five pellets each. Only eight labs responded. A blend of three coals and petroleum coke was analyzed by the respondents. The results of semi-actomated (manual control) at CSIR confirmed the proportions in the blend. Some image analysis systems were unable to complete the exercise because the range of high reflective petroleum coke was beyond the dynamic range of the systems. All labs were able to determine the vitrinite reflectance of the constituent coals. Some difficulties occurred in automated maceral group analysis because of filtering techniques. Five labs made reasonable attempts at determining the proportions of coals and coke in the blend. The Convener described his application of probability analysis to evaluate vitrinite reflectance of constituent coals in blends, and of whole-coal reflectance to quantify blend composition. - The working group will be expanded, and the work of ring analyses will continue.

## 2. WG on Reactive Inertinite. - Convener: Dr. K. Kruszewska

Twenty-eight laboratories produced maceral analyses and whole-coal reflectance histograms of an Australian coal and a Ruhr coal. Two laboratories produced aberrant values for vitrinite reflectance, and when these were excluded a standard deviation of 0.03 was recorded for the remaining twenty-three analysts. Good agreement was reported for group maceral analyses for both coals. Standard deviations of 4.1 were reported for Vitrinite and Inertinite on both coals. A low standard deviation of 0.8 was reported for Liptinite in the Australian coal, and of 2.3 for the Ruhr coal.

Calculated proportions of Vitrinite, Liptinite, Reactive Inertinite and Total Inerts, using the method of Kruszewska, were presented for both coals.

Coke produced from these two coals was also analyzed by twenty-six labs, with mixed results. By using results from only experienced laboratories, the results were much improved.

A comparison between three different methods of RI evaluation showed good agreement. A discussion of the methods revealed that a reflectance cut-off technique may be influenced by inertinite content. Kruszewska's and Pearson's methods can probably be related by formula and supported by Diessel's long-wave fluorescence intensity technique. This relation will be thoroughly investigated.

A further round robin will test a blend and z single coal of lower inertinite content. The WG continues and good progress was made.

### 3. WG on Coke Petrography. - Convener: D. Vogt

D. Vogt explained by letter that delay in the receipt of cake samples from Australia rendered the group inactive. (The cake samples are those used by the RI WG). The group members will receive photomicrographs soon, for comments to be submitted to the Convener. Then, based on new definitions, the WG will analyze the coke samples. The group will therefore be very active in the coming year.

## 4. WG on Combustion. - Convener: J. Bailey

Buring 1990/91 a round robin was conducted using the classification system for char analyses presented by Judy Bailey in Wollengong. A pyrolysed char sample produced at 1100°C and a combustion residue sample were distributed. Eleven participants conducted char counts in the 18 suggested categories. Standard deviations were large and in all cases unsatisfactory. In order to improve reproducibility, some categories were combined. These attempts have not yet solved the problems. It seems clear that future counts should be made on the basis of fewer char types and should not attempt to distinguish anisotropy differences at this stage. In order to improve the assessment of perosity a set of photos with known porosities will be available for inspection. — Progress has been made and work is continuing.

Isabel Suarez Ruiz presented a joint report or progess within the Joule program on coal combustion. The title was "Pulverized Coal Compustion: The Influence of Mineral Matter on the Structure and Reactivity of Chars". Various density fractions in a coal of 17.6 % V.M. (daf) showed differences in mineral matter distribution and petrographic composition. Reactivity and char structure varied with the censity fraction. Mineral matter content seemed to increase compustion reactivity.

# Future Meetings

The next meeting of the ICCP will take place in University Park/State College, Pennsylvania, USA, on July 19-25, 1992. Registration will be on Sunday, July 19 and the ICCP meetings will be held on July 20-23. A meeting of The Society for Organic Petrology will take place on Friday, Juli 24; ICCP members are encouraged to attend and submit papers. There will be a joint ICCP/TSOP field trip to the anthracite region of Pennsylvania on Saturday, July 25. Details of the meeting will be given in the next ICC? News and will accompany the invitation to be sent to all ICCP members. Enquires should be addressed to Dr. A. Davis, Director, Energy and Fuels Research Center, 205 Research Building £, Penn State University, University Park, PA 16802, USA.

An invitation to host the 1993 meeting has been accepted from the Technical University of Crete, Greece. Invitations are hereby requested from organizations willing to host the 1994 meeting.

# !!! Call to all associate members of the ICCP !!!

## Please, apply for full membership

A minimum of five years experience in organic petrology is required before an Associate Member may be elected to full Membership.

Ic attain Full Membership candidates must demonstrate their level of experience by sending to the General Secretary a curriculum vitae comprising a candidature letter, a list of their publications and the name of one sponsoring Full Member.

#### Miscellaneous

## Formation of a new society

In Amsterdam (The Netherlands) the International Committee for Palynological Organic Matter Classification was formed and eight working groups were installed. A basic framework for the classification was achieved:

# AMSTERDAM PALYNOLOGICAL ORGANIC MATTER CLASSIFICATION

#### 1st Division

- PALYNOMORPHS
- STRUCTURED DEBRIS
- 2UOH98CMA -
- INDETERMINATE

#### 2nd (and 3rd) Division

- PALYNOMORPHS
- sporomorphs
  - pollen
  - spores
    - megaspores (> 200 mu)
    - small spores (< 200 mu)
- 'algae'
  - dinocysts
  - presinophytes
  - chlorococcales
  - cyanobacteria

- acritarchs
- zoomorphs
  - foram linings
  - chitinozoa
  - tintingids
  - scoleccdonts?
  - rhizopods

- fundal spores
  - spores
  - scherotia
- indeterminate
- obadne
- seeds

finely dispersed

- STRUCTURED DESRIS

- weady

- plant epidermis/suticle - plant tissue (other)

- animalfungalpoacue
- Indeterminate

- AMORPHOUS

- INDETERMINATE

- opaque

- cther

homogeneous
heterogeneous

- opaque

Further informations can be given by Dr. W. Riegel, Geologisch-Paläontologisches Institut der Universität Göttingen, Goldschmidt-Str. 3, W-3400 Göttingen.

#### Other Meetings

#### 1992 ISOP Annual Meeting

The meeting takes place at University Park, Pennsylvania, USA, Juli 23-24, 1992. The first announcement and call for papers appeared in September. Extended abstracts will be accepted before March 31, 1992.

Ouestions should be addressed to the meeting's organizers; (1) Scott Stout (Unocal, PO Box 76, Brea, CA; 714-528-7201), (2) Jim Hower (Ctr. Applied Energy Res., Univ. of Kentucky, 3572 Iron Works Rike, Lexington, KY 40511; 606-257-0261), (3) Joe Senftle (Arco Oil and Gas Co., 2300 W. Planc Pkwy., Flanc, TX; 213-754-6256) and (4) Alan Cavis (Energy and Fuels Research, Penn State Univ., 205 Research Building E, University Park, PA, 16802; 814-865-6544).

#### 29th International Geological Congress

The congress takes place in Kyoto, Japan, August 24 - September 3, 1992. A symposium on "Coalification and Coal Petrology" is being convened by Prof. A. Aihara. Persons wishing to present a paper at this congress should write to Prof. A. Aihara, Faculty of Science 33, Dept. of Earth and Planetary Science, Kyushu University, Hakozaki Fukuoka 812, Japan.

#### 3rd Latin American Congress on Organic Geochemistry

The congress takes place at Manaus (Amazon), Brazil, Kovember 22-25, 1992. For details contact: 3rd Alago's Congress Organizing Committee, PETROBRAS/CENPES/DIVEX/SEGEO, Ilha do Fundao, Ouadra 7 - CEP, 21910, Rio de Janeiro, R.J. Brazil; FAX: 21-5986626.

#### Irma E. Waltz (1907 - 1990)

Dr. I.E. Waltz, a well-known coal petrographer and member of the ICCP, whose name is connected with the development of coal petrography in the USSR, passed away on November 14, 1990 in Leningrad.

Irma Waltz was born on July 23, 1907, in St. Petersburg. In 1931 she went to work at the Central Research Geological Prospecting Institute, subsequently VSEGSI, on the staff of the Laboratory of Coal Petrography headed by the outstanding specialist in coal geology Yu. A. Zhemchuzhnikov.

In 1944, in the town of Sverdlovsk, she defended her thesis on the topic "Petrographic composition and conditions of formation of the Tertiary brown coals in the Dniester Basin". After a <u>further</u> period of employment at VSEGEI and then at the Kemerovo Geological Board in Siberia, she again returned to Leringrad in 1954 as a Senior Research Worker at the Laboratory of Coal Geology of the USSR Academy of Sciences, and then, until she retired, at the Laboratory of Coal Petrography of VSEGEI.

Cr. Waltz placed a major emphasis on the study of the precursor meterial of coals, aided by her deep knowledge of botany. She developed a classification of coal macerals taking into account their anatomic - botanical structure. She was also one of the authors of the petrographic classification of humic coals in the USSR. - Dr. Waltz was well known as a teacher. She trained several generations of coal petrographers at production and research organizations and was the supervisor of many post-graduate students. - In the 40's Dr. Waltz organized the laboratory of Coal Petrography at the Urals Geological Board; in 1950-1953, she established and headed the laboratory of coal petrography at the Kemerovo Geological Board. From 1954 to 1962 she was Bead of the Section of Coal Petrography at the Laboratory of Coal Geology of the USSR Academy of Sciences in Leningrad. At the end of the 50's, together with V.S. Yablokov, she headed the All-Union Commission on the Compilation of Atlases of coals of the USSR. Over 10 Atlases on the main coal basins were published. During her retirement she participated in the compilation and editing of the books "Coal Petrography of the USSR".

The life of Dr. Irma Waltz was dedicated to science, primarily coal petrography, although her interests and education were broad. A person and a scientist has passed away, who has set high scientific and human standards for us. The results of her long-term creative work are widely used in the USSR, and her disciples will try to follow the example she set by continuing her efforts in the coal petrology to which she devoted her life.