NEWS OF THE INTERNATIONAL COMMITTEE FOR COAL AND ORGANIC PETROLOGY

No. 9

März, 1994

Aachen

Letter of the Editor

When we published the first issue of the ICCP News in its new format (no 7, March 1993) the President, Dr. Alan Davis, asked in his address for the participation of all ICCP members in the production of our small periodical. Reports of new petrographic techniques, of experiences with new type of equipment or materials or reports of activities of regional groups of petrographers were proposed from him and would be wellcome. Also book reviews may contribute to an interesting and diversified content of our News.

Several Regional Coordinators have agreed to assist the Editor by soliciting items from members in their geographic region for publication in the ICCP News. But, until now, the response is limited, although the organizational pre-conditions are given. It seems to me that everybody wishes to be entertained by a new issue of our News but nobody wishes to contribute by a short article. Yet it would need only two hours per year in maximum to prepare one!

Two exeptions have to be mentioned here, the coordinators for South America and China. Two short contributions of Prof. Wang Jie are incorporated in this new issue no 9 as I got them some days ago.

Monika Wolf

Request for Submissions for the Reinhardt Thiessen Award

ICCP members are reminded that now is the last chance for this year to supply to the Chairman of the Reinhardt Thiessen Award Committee names of prospective candidates for the award. ICCP membership is not a prerequisite for the award, any person of high standing in the field of organic petrology is eligible.

The award is made by the ICCP Council on the recommendation of the five members of the Award Committee who reach their verdict by ballot if more than one person has been nominated. Since there are so many potential medallists around, the Award Committee is eager to receive your choice and asks you to send your nomination to: Prof. (em.) C.F.K. Diessel, Chairman of the Reinhardt Thiessen Award Committee, Department of Geology, The University of Newcastle, N.S.W. 2308, Australia (Internat. Fax: 61-49-21-6925) until April, 30 at the latest.

Attention!

This is the last notice that the 46th Annual Meeting of the ICCP will be held from October 2nd to October 8th, 1994 at Oviedo, Spain.

Oviedo is situated in Asturias in the North of Spain. It is reached by train or bus, direct, from Madrid. Flights from Madrid and other places use Asturias Airport which is about 50 km to the north-west of the city of Oviedo. A bus connects to down-town Oviedo.

The meeting will be held in the Instituto National del Carbon (INCAR) which is about 8 km from downtown Oviedo. Those who are intending to take part in this meeting but did not get the first circular and/or did not send back the preliminary registration in time should contact immediately to: Dr. Rosa Menendez, INCAR, La Corredoria s/n, Apartado 73, E-33080 Oviedo, Spain (Phone: 34-8-511-1972; Fax: 34-8-529-7662).

Dr. Menendez will advise on all matters related to attendance at this meeting.

Edwin Hoffmann +



Picture taken on the occasion of the celebration of Prof. Mackowsky's 65th birthday. From left to right: Dr. Pfeiffer, Dr. Hoffmann, Prof. Stach, Prof. Pickhardt, Dr. Otte

Who was Edwin Hoffmann? This question will arise immediately among the younger coal petrographers who never have heard his name. Therefore I take the opportunity to remind my colleagues of this famous coal petrographer.

Edwin Hoffmann was born on August 26, 1902. After his school-days he took up his education in mining engineering at the Technical University in Berlin where he got his degree 1928. He started his career as assistant manager of the "Rheinische Stahlwerke" at Essen. Simultaneously he entered into the laboratory of the "Preußische Geologische Landesanstalt", the geological survey of the former country Prussia. There, the wellknown Erich Stach introduced him into the field of coal petrography. Together with Erich Stach Edwin Hoffmann started to investigate the bituminous coals of the Ruhr area and in contrast to Stach he already preferred the use of oil immersion objectives in those times. Hoffmann's activities in Berlin resulted in his PhD thesis entitled "The petrographic constituents of coal and their technical separation"1). This work influenced Hoffmann's whole professional life.

In 1932 Edwin Hoffmann published a paper with A. Jenkner about coalification and its identification in the microscopic picture²). This paper, later also published in Fuel³), gives one reason why this obituary is written because it marks the beginning of reflectance measurements, a method, nowadays used worldwide. Hoffmann used the so-called split-microphotometer after

Berek. He worked using polarized light but dry lense systems. Within the paper the authors discuss also the reasons for increasing coalification and describe the differences of coalification within Pennsylvanian coal basins. Especially by the regional distribution of coalification there they concluded that tectonic pressure is the main reason for increasing coalification.

C.A.Seyler developed Hoffmann's method using oil immersion objectives and he reported about it in his Melchett-Lecture 1941⁴⁾ not earlier than nine years later! The next step was done in developing reflectance measurements by Dahme & Mackowsky (1950)⁵⁾, who where the first to use an electronic system for the measurements. The further development is well known.

Edwin Hoffmann was continuously connected to applied coal petrography. In 1937 he became the head of the coal petrographic laboratory of the mining company of the Saar region, called "Kohlenpetrographische Rohstoffstelle der Saargruben AG", at Saarbrücken. One year later additionally he became managing director of all upgrading plants of the Saar region. 1950 Edwin Hoffmann went back to the Ruhr region where he held a similar position at the "Märkische Steinkohlengewerkschaft", Heesen. In this position he worked until his retirement at the end of 1967. He passed away December 15, 1993.

Edwin Hoffmann was a pioneer in the field of applied coal petrography. Many of his 36 papers are dealing with the influence of coal composition in upgrading processes and the development of upgrading methods by the application of coal petrographic knowledge. But he also published papers about the origin of coal and its different lithotypes. The ICCP decided during its meeting at Sheffield (UK) 1967 to honour Edwin Hoffmann's scientific work by the award of the Thiessen Medal which was handed over to him later in Germany by Erich Stach. This is the second reason to be suggestive of this outstanding personality.

Final clause: Within Stach's collection of reprints, now belonging to the Chair of Petroleum and Coal at the Aachen University of Technology, I found the laudatio given by Erich Stach on the occasion of the presentation of the Thiessen Medal to Edwin Hoffmann. This enabled me to make this compilation about Edwin Hoffmann's scientific carreer.

Monika Wolf

Papers mentioned within the text:

- 1. Hoffmann, E. (1929): Die petrographischen Kohlenbestandteile und ihre aufbereitungstechnische Trennung.- Diss. TH Berlin.
- Hoffmann, E. & Jenkner, A. (1932): Die Inkohlung und ihre Erkennung im Mikrobild. - Glückauf 4: 81-88.
- Hoffmann, E. & Jenkner, A. (1933): Fuel in Science and Practice. - Fuel <u>12</u>: 100.
- 4. Seyler, C.A. (1943): Recent Progress in the Petrology of Coal. Journal Inst. Fuel, 8 pp. (The Melchett Lecture, Oct. 1941).
- Dahme, A. & Mackowsky, M.-Th. (1950): Chemischphysikalische und petrographische Untersuchungen an Kohlen, Koksen und Graphiten: 4. Neues Meßverfahren zur Bestimmung des Reflexionsvermögens von Kohlen. -Brennstoff-Chemie 31: 129-138.

Raymond Noël +

October 22, 1993 Dr. Raymond Noël passed away unexpectedly. Only few weeks before he handed the ICCP archive over to our General Secretary who transferred it to the Chair of Petroleum and Coal at the Aachen University of Technology.

Dr. Noël was member of the ICCP since its first meeting in 1953. He served this organization as General Secretary and President. An extended appreciation of his career will ensue during the next meeting and in the following issue of the News.

Monika Wolf

Progress in applied coal petrology in China

by Wang Jie

Some notable advances of coal petrology studied in China developed rapidly. For example: studies on structural coal petrology by Dr. Rin Dajyong; coal as a good quality source rock by Dr. Guo Qianjie; the new method of separating of macerals by Prof. Jin Kuili; TEM dark field three dimension applied in coal structure by Dr. Qim Yong; study on sulphur occuring mechanism pyrite mineralogy and its magnetism of coal by Dr. Tang Yungang; study on microtexture of cake produced from converting lignite by using carbon monoxid and water by Prof. Wang Jie.

Microtexture of coke produced from lignite by using carbon monoxide and water

by Wang Jie

Lignite, generally containing high levels of side chains and oxyfunctional groups can not lead to the formation of ordered coke texture. Changes in the properties of the lack of plasticity and fluidity during carbonization using a mixture of CO and water conversion process were studied by the microscope photometry by plotting Rmax value against Rm, Rmin and bireflectance, as well as quantitative estimation of the optical anisotropy, based on 500 point-counts. The classification of the carbon forms of this converted lignite is proposed as follows:

 Isotropic, Mosaic, Fibrous, Flow and Leaf, Mesophasesphere, Fusitic, Inertic, Pore and Fissure.

This microtextures of coke were also analysed by using X-Ray Diffraction. It reveals that the values of diffractional angle, interlayer spacing (002) and the height of the crystallite are in good relationship with the degree of polymerization from the original lignite to its water gas shift reaction products.

International Conferences

8th International Conference on Coal Science Sponsored by The International Energy Agency, Sunday 10 - Friday 15 September 1995, Oviedo, Spain

The 8th IEA/ICCS will be held in Spain. Following the invitation from the Instituto National del Carbon (INCAR) this Conference will take place in the Hotel de la Reconquista, Oviedo, Asturias, Spain. This is a magnificent setting for such an important meeting. The city of Oviedo has recently seen extensive restoration of most of its historic buildings. This, together with the

creation of many pedestrian precincts makes Oviedo a most attractive town, with its excellent shops and restaurants, for the Conference. The surrounding countryside is extensively varied, from rolling hills to the mountains to the splendour of the Cantabrian coast-line.

The Hotel de la Reconquista is experienced with the management of major meetings and will accommodate the plenary lectures as well as the several simultaneous sessions. It is known for its excellent cuisine.

Research into coal is passing through a critical period. It is anticipated that the 8th IEA/ICCS will continue the tradition of stimulation and encouragement of all those who research into coal materials. The Chairman of this 8th meeting is Dr. Jesus Pajares, Director, INCAR, La Corredoria s/n, Apartado 73, 33080 Oviedo, Spain (Telephone +34-8-528-0800; Fax +34-8-529-7662). The Secretary of the IEA/ICCS is Dr. Rosa Menendez (Telephone: +34-8-511-1972).

Rosa Menendez

4th Latin American Congress on Organic Geochemistry

The 4th Latin American Congress*) on Organic Geochemistry will be held in Bucaramanga, Colombia October, 23-26, 1994. Abstracts should be written in Portuguese, Spanish and English and a maximum of 200 words will be accepted. The abstracts should reach the congress secretariat no later than March 30.

The topics of this congress will be:

- Organic Geochemistry in Petroleum Exploration and Production
- Environmental Organic Geochemistry
- Biomarkers
- Analytical Organic Geochemistry
- Stable Isotopes
- Coal Geochemistry
- Organic Petrography
- Hydrogeochemistry
- Reservoir Geochemistry
- Geochemistry Modelling

Congress Secretariat:

Blanca Nubia Giraldo P., ECOPETROL-ICP, Piedecuesta, Santander B.O.X. 4185 - Colombia; Phone: (97) 551001-445420; Fax: (97) 445444

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^{*)} The Volume containing Extended Abstracts of papers presented at the Third ALAGO Congress, which was held in Manaus, Brazil in 1992 will be mailed by the end of March to all ALAGO members, to those who participated in the meeting and to major organic geochemistry research groups and universities.