

# MINUTES OF COMMISSION I GENERAL COAL AND ORGANIC PETROLOGY

70<sup>th</sup> ICCP Meeting – Brisbane, Australia, 24-25<sup>th</sup> September 2018

**Chair:** Stavros Kalaitzidis, [skalait@upatras.gr](mailto:skalait@upatras.gr)

**Acting Secretary:** Paul Hackley, [phackley@usgs.gov](mailto:phackley@usgs.gov)

Commission I met on Monday September 24, 2018, in the Catalina Room of the Royal on the Park Hotel in downtown Brisbane, with 25 attendees.

Stavros Kalaitzidis presided as Chair with Paul Hackley acting as Secretary in place of Dragana Životić whom could not attend the meeting, with apologies.

**Opening Remarks:** Stavros outlined the Commission I schedule, which was to occupy the remainder of the Monday afternoon. He highlighted recent achievements of Commission I, including the publication of papers in the International Journal of Coal Geology in 2017-2018; Kus and Misz-Kennan, 2017: "Coal weathering and laboratory (artificial) coal oxidation"; and Pickel et al., 2017: "Classification of liptinite - ICCP System 1994".

## Single Coal Accreditation Program - Kimon Christanis

On behalf of Kimon Christanis, whom could not attend the meeting with apologies, Stavros presented the activities of the Single Coal Blend Accreditation Program. The program is running slightly behind schedule, with 62 laboratories from 26 countries participating. Approximately 50 percent of the participants are ICCP members and the other non-members. For the first time, the program includes participating analysts from China, Indonesia and Japan. Up until now, there have been some issues with sample shipments, with some analysts still unable to receive samples for the 2018 round, results of which are due on October 14, only several weeks away. Walter Pickel commented that there will be a need to push back the deadline for returning analysis results because of the delay in sample shipment to some laboratories and asked that the specialized Excel sheet for entering results be sent immediately from Kimon to the participants. Magda Misz-Kennan commented that the deadline for results should not be pushed back because that would make the timeframe for analysis of the results too short and interfere with the Christmas holiday. Nikki Wagner, whom only just received her samples, commented that about 8 other analysts in South Africa still had not and that the October 14 deadline was not realistic. Stavros indicated that the need for the sample shipments to be completed and the Excel sheet sent to participants would be communicated to Kimon.

## ISO Standard – Walter Pickel

Walter Pickel presented on the ISO 7404 standards for petrographic coal analysis, outlining the responsibility that the ICCP has for maintenance of this international standards set. He asked for any in the audience that had interest in remarking on the standards during their update to be in contact with him. There were no comments or questions from the Commission I attendees.

## Standardization WG – Walter Pickel

Walter continued, by presenting on the Standardization Working Group of Commission I. This working group initiated a round robin on two lignite samples in 2016 to see if application of the huminite classification could be reproducibly adapted to point counts of these samples. Sample blocks had been sent to 24 participants, with results received from only 8 participants up-to-date, including results from Walter himself and another in his laboratory. Walter requested that the participants who had received blocks either send him results, with the deadline up

until the end of 2018, or return the blocks to him so that they could be sent to others interested in participating. Joan Esterle suggested that we use Hilgers Fossil Student to do a point count during the meeting, with a scan of the sample to begin immediately. However, fluorescence is required for these samples so that prohibited working on them during the meeting. Peter Crosdale remarked that the use of fluorescence would certainly impact the quality of results with different maceral abundances being reported by those laboratories who use fluorescence during a point count compared to those who don't. Angeles Borrego also remarked that the results are likely to be highly divergent and that the Hilgers Fossil Student should be used to sort out the reasons for potential discrepancies. Stavros remarked that an email reminder should be sent to the participants asking for the results and return of the samples.

## Suberinite WG – Peter Crosdale

Peter Crosdale handed out polished blocks for the Suberinite Working Group and passed around the room a sign-up sheet for those interested to participate in the 2018 exercise of this working group. He insisted that suberinite may be up to 50 vol.% in some samples of this coal. Peter requested that working group participants perform a point count of the sample using the ICCP nomenclature and complete a VRo measurement. Images, preferably annotated, were also requested from the participants. Peter noted that previous round robins in the working group presented a high range in VRo standard deviation, with some analysts reporting minimal values while others reported high values. He suspected that this was due to some analysts measuring all types of huminite while others selected only one type. There was a remark from Joan Esterle that perhaps VRo was an inappropriate rank parameter and maybe some other parameter should be used instead, although she admitted that other rank proxies had their own issues. Peter put the sample onto the microscope and projected the field onto the screen allowing a lively discussion of the merits of suberinite versus bituminite versus attrinite versus the "outlaw" degradinite. Peter commented that suberinite abundance in the coal measures may positively correspond to gas content, thus there is an economic implication for a better understanding of its abundance. Twelve people immediately signed up to participate.

The discussion continued in the afternoon with more insights on distinguishing features of suberinite, and the need to make its identification in context of its appearance in other microscope fields than the current. That is, the information from the whole sample should be taken in context, so that degraded suberinite which has lost its corpogelinite inclusions could be identified by the presence, in another field, of undegraded suberinite with corpogelinite fillings in place. This contextual need for maceral identification is not widely communicated and may be unknown to those whom are attempting to learn organic petrography without the benefit of attendance to the ICCP meetings.

## Xylite-rich Lithotype Classification WG – Giannis Oikonomopoulos

Commission I reconvened in the Catalina Room at 09:00 on September 25, with 17 attendees. Stavros ran over the schedule and launched into the remaining presentations, beginning on behalf of Giannis Oikonomopoulos with a description of the activities of the Xylite-rich Coal Working Group. There currently is a round robin exercise in progress, using images and an Excel form, although not all members of the working group have yet received the materials. The goal and objective of the working group is to have a classification and descriptive index for xylite-rich coals. A sign-up sheet was passed out for interested members to join the working group.

## Distinguishing Features of Macerals WG – Walter Pickel

Walter Pickel presented an update from the Distinguishing

Features Working Group, although he apologized that no work had been accomplished in the working group over the last year. He proceeded to discuss the need for a 'white paper' of maceral distinguishing features, a need which had been well illustrated by the preceding afternoon's discussion of the distinction of suberinite, bituminite or attrinite in the coal sample from the suberinite working group. Walter agreed that he would solicit contributions from ICCP members by placing a call in the Newsletter. The contributors would place their comments in an email to Walter, which he would then compile into the 'white paper'. It was suggested by Walter a deadline of New Years for these contributions. Angeles Borrego suggested that contributors should first read the maceral classifications before making their comments, so that the comments could add to the existing descriptions, and Walter agreed that this would be included in the invitation from the Newsletter.

#### **Petrographic Image database – Petra David**

Stavros next presented on the status of the Commission I image database, reminding attendees that a request for ICCP funding of 15,000 Euros to have a commercial vendor build the infrastructure had been rejected at last year's ICCP Closing Plenary. Instead the members of the working group had been requested to find a less expensive option. Petra David and Jolanta Kus had been able to find some more expensive options and several potentially less expensive options had been suggested but not researched to the point that a cost estimate was available. Magdalena Misz-Kennan suggested that she knows a colleague who worked in IT at her institute and she could ask for ideas, if she had a description of the requirements of the infrastructure, which Stavros agreed to provide. Javin Hatcherian asked what the right price would be and is it possible to scale down the requirements so that a cost more acceptable could be presented to the General Assembly. Stavros thought that the current requirements were a minimum. Greg Shand from ALS Global suggested that a cheaper or free option could be explored by having a student do the work from an ICCP member's institute and that if the product was not acceptable then the commercial route would be required, and the cost justified. Angeles noted that this was a very important activity for ICCP as regards preserving our work and providing a training tool for future organic petrology students. Isabel agreed that it was an important work, but it was necessary to find a lower cost to keep fairness among the funding priorities of ICCP activities. Angeles agreed that a new proposal should be presented to the ICCP General Assembly rather than a repeat of the failed proposal of last year's General Assembly. Stavros agreed that he would work further on identifying other options and Paul Hackley agreed that he would investigate possibilities within the USA.

#### **Application of TEM and SEM Chapter - Barbara Kwiecińska, Sławomira Pusz and Brett J. Valentine**

The last item discussed in Commission I was the status of the SEM-TEM handbook chapter which had submitted and rejected by International Journal of Coal Geology, despite that Editor-in-Chief Shifeng Dai had previously agreed that these handbook chapters would be accepted as approved by the Commission I and General Assembly. The main problems were that there were too much 'general' type information in the paper, such as the basics of SEM, and not enough information specific to SEM-TEM applications to organic matter. This had been addressed by the authors by an update, which included addition of almost 35 new references. Angeles noted that the changes should be approved by Commission I and the ICCP so the updates in tracked changes were reviewed and approved by Commission I with a show of hands and the comment that some grammatical fixes were required. Paul Hackley noted that based on discussions with the author Brett Valentine, the changes that were made should be sufficient for acceptance by the journal editor. Angeles asked if the authors could be contacted with the suggestion that if the paper were again rejected from the journal then it could be assigned an ISBN number and made available from the ICCP webpage and Stavros agreed to contact them with this request.

#### **Closing Remarks**

Commission I wrapped up with a short presentation from Stavros, and requests to update the Commission I webpages <http://www.iccop.org/commissions/commission-i/> and contact the Commission I Chair and Secretary with news about the working groups. Com I would like to thank the conveners for their dedication and efforts to run the WGs, and encourage ICCP members to participate in Commissions Exercises.

Stavros also acknowledged the great assistance of Paul Hackley to run the sessions of Com I.

The Commission activities concluded at 1030 with a break for coffee.

## **MINUTES OF COMMISSION II**

### **Geological Applications of Coal and Organic Petrology**

70<sup>th</sup> ICCP Meeting – Brisbane, Australia, 27<sup>th</sup> September 2018

**Chair:** Paul Hackley [phackley@usgs.gov](mailto:phackley@usgs.gov)

**Acting Secretary:** Stavros Kalaitzidis, [skalait@upatras.gr](mailto:skalait@upatras.gr)

Commission II met on Thursday, September 27<sup>th</sup> at 09:00, in the Catalina Room of the Royal on the Park Hotel in downtown Brisbane, with 18 attendees.

Paul Hackley presided as Chair with Stavros Kalaitzidis acting as Secretary in place of Jolanta Kus who could not attend the meeting, with apologies.

**Opening Remarks:** Paul outlined the Commission II schedule of the day and the changes required since Lila Gurba could not attend. He further presented the objectives and the status of the active WGs of the Commission II, emphasizing in recent activities. All the available information can be found in <https://www.iccop.org/commissions/commission-ii/>.

Paul also mentioned changes on the Conveners and the objectives of the Classification of Dispersed Organic Matter ICCP-TSOP DOM Atlas and Dispersed Organic Matter in Sedimentary Rocks WGs; Dr. Isabel Suárez-Ruiz will convene both activities with the objectives to a) produce a photographic atlas in cd or web based and b) produce a 'white paper' journal article linked to image atlas, for the two WGs, respectively. Paul also commented on the need to create a section in Commission II webpage for the Spectral Fluorescence Calibration Service, as well as he urges the Conveners of all the WGs to submit material to COM II Secretary for updating the WGs webpages, as many seem to be outdated.

#### **TSOP-ICCP DOM Atlas – Isabel Suárez-Ruiz**

Isabel presented the last version of the Atlas and the history of preparing it as well as what is still required. Main tasks for the immediate future are:

- Inclusion of all the contributors and reviewers
- Inclusion of more photomicrographs, and in different light modes, particularly of components that are totally missed (e.g. bituminite)
- The Introduction section needs to be significantly revised and to update the references
- Modifications of the Depositional Environment and Sedimentary OM sections
- Updating the text in DOM classification
- Include also comments on Transmitted light usage
- Modifications in Methods section
- Information on DOM by various Formations, mostly Reflectance and Rock Eval data

However, some of the above information can be provided in later stages, resulting in various versions of the Atlas. Isabel