

# ICCP NEWS



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Newsletter of the International Committee for Coal and Organic Petrology (ICCP).  
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## JOINT 74TH ICCP & 39TH TSOP MEETING 17-24 SEPTEMBER 2023 CONFERENCE & CULTURAL CENTRE, UNIVERSITY OF PATRAS, GREECE



Opening and Keynote speakers:  
Mr. Fokion Zaimis, Dr. Aristofanis Stefatos, Dr. Adamantia Chatziapostolou



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## EDITORS COLUMN

Dr Angeles Gomez-Borrego has captained the ICCP for almost a decade (8 years), and served on Council for 28 years: from Secretary to Commission Chair, to Vice President, to President. Your dedication to our organization is admirable, thank you Angeles. Angeles has provided a detailed 'exit' report (see page 8). As Angeles is arranging the 2024 Oviedo ICCP meeting, she will remain very active in the ICCP – refer to pages 30-31; Oviedo 2024, 22 – 28 Sept.

Dr Stavros Kalaitzidis was elected to the position of President of the ICCP. He provides some insight into his leadership style in the Presidents' Column on page 3. We look forward to the years ahead, Stavros. And thank you for taking on this role.

Stavros and his team provided us with an exemplary ICCP Meeting in Patras in September 2023. This Newsletter contains many memorable photographs of the weeklong event held in partnership with our sister organization, TSOP. The minutes from the Council meeting, the Plenary sessions, and Commissions I, II, and III are contained herein, as formal record of the ICCP activities 2023. Please do take time to read through the Minutes to keep up to date on various activities and initiatives. For an overview, see page 6. (And note the call for the 2024-2025 ICCP Accreditation Exercise also on page 6; <https://www.iccop.org/2024-2025-accreditation-application-form/>).

In this regard, Kimon is urgently requesting samples for SCAP as there is limited material in the sample bank. 500 g of medium rank bituminous coal sample is sufficient quantity for the maintenance of the sample bank. Please contact Kimon directly.

The 2023 ICCP-TSOP Joint Symposium took place on the final day of the Patras formalities. The presentations were of a high standard and truly reflect the work being undertaken in organic petrology globally. The ICCP 2023 Organizing Committee arranged for full papers to be published as a Special Edition of the International Journal of Coal Geology; all oral and poster presenters are encouraged to submit – please refer to page 6. Miss Itumeleng Matlala, from the University of Johannesburg, South Africa, is congratulated on the award of best TSOP Student Poster; Itumeleng is a student member of both the ICCP and TSOP (and is my PhD candidate, co-supervised by Dr Marvin Moroeng).

In terms of membership, the ICCP continues to attract new members – welcome all (page 10). A new full member, Rich Pearson, is recorded on page 11. All associate members are reminded to apply for full membership, which enables them to vote in the upcoming elections. Unfortunately, we lost 2 of our ICCP members in 2023, Dr Sánchez and Prof Wagner (p. 14), may you be at peace.

Angeles is also the new ICCP / organic petrology representative on ISO/TC 27, having assumed this role following the untimely passing of Dr Walter Pickel – see page 9. Please keep an eye on ICCP notifications as well as ISO updates as the ISO 7404 standards revision process is imminent, and your input may be of value. If possible, liaise with your country's ISO representative regarding country voting.

On an administrative note, all membership dues have been distributed by the Treasurer – please contact Prof Joan Esterle if you have not received your invoice or have any queries in this regard ([j.esterle@uq.edu.au](mailto:j.esterle@uq.edu.au)). Please do pay your membership as soon as possible to enable the ICCP to continue with its activities.

On a final note, the ICCP received a request to republish a book review authored by Prof Maria Mastalerz of the book entitled "Inorganic Geochemistry of Coal" by S. Dai, R.B. Finkelman, J.C. Hower, D. French, I.T. Graham, and L. Zhao.



Mmm... what's in this Newsletter?

Hoping it will not bore you....

**ICCP WEBSITE <https://www.iccop.org>**

**Please send any feedback, comments, and uploads to Stavros Kalaitzidis**

The ICCP Newsletter, ISN 1445-4793 (1445-4858 online) is distributed 3 times a year, & welcomes contributions from members & non-members. The minutes of the Annual Meeting are published in the final issue each year, & the program for the Annual Meeting is included mid-year. The Newsletter is distributed to all members & is available on the open area of the webpage. This enables anyone interested in the science to obtain exposure to the ICCP activities. ICCP application details are available on the website, or contact the General Secretary Paul Hackley [hackley\\_paul@yahoo.com](mailto:hackley_paul@yahoo.com).

**CONTRIBUTIONS TO THE  
NEXT ICCP NEWS BY 30  
MARCH 2024**

Permission was received from Elsevier to reprint this article herein (page 15). Happy holiday reading all, safe travels, and enjoy family time. Best wishes, Nikki Wagner, ICCP Editor.



Thank you to the GS for keeping us organized!!

## PRESIDENT'S COLUMN

Dear ICCP Members,

With great honour but also pleasure, I have commenced the term of ICCP President after enjoying with many of you our fruitful meeting in Patras. I would like to thank you for entrusting me with the new position and do hope meeting your expectations to work towards a vivid Committee by fostering our scientific engagement and visibility. In a more personal note, I would like to thank both Past Presidents Ángeles and Petra, and Walter Pickel as well, for being points of reference to me in ICCP issues, always eager to assist, advise, and - most significantly - allowing me to 'grow up' within our Committee.

Since the Potsdam meeting in 2015, Ángeles succeeded in keeping us active, improving our operational efficiency, welcoming many new members, and most importantly, by infusing a cooperative mode and team spirit. During these years, in which we had also to face the Pandemic, the ICCP evolved more its visibility to the scientific community through the numerous papers published by the WGs, the successful implementation of our Accreditation Programs, and by having fruitful meetings all over the world, some of them in conjunction with organizations like TSOP and The Palynological Society (AASP); last but not least, through striving to modify our Statutes to allow a more efficient voting system. Ángeles is leaving behind a legacy of true professionalism, commitment to Organic Petrology, engagement and a cooperative management style. Attributes worthy to keep alive, and enthuse to the young generation of our Committee.

I intend to keep all the best practices I learned from the past presidents I met, namely: Manuel Lemos de Sousa, who progressed the Internationalization of our Standards; Alan Cook, who inspired our professional engagement through the Accreditation Programs; Petra David, who brought us closer to the students and young generation through the Training Programs. All the Council Members are here to serve towards achieving our collective ICCP goals, and more importantly, doing this by finding that thin line between tradition and modernization.

Our latest joint meeting with TSOP in Patras, apart from offering us the opportunity to meet colleagues again after many years, proved that the Organic Petrology family can adapt to the current challenges and progress our discipline for the benefit of the society.

Moreover, I want to thank Magdalena Misz-Kennan for all her efforts as Chair of both the Commission III and the Accreditation Sub-Committee, and to congratulate Sandra Rodrigues for her election as Chair of Com III and for taking the responsibility of the Accreditation Sub-Committee.

The forthcoming months will be busy, as we have to renew our ICCP memberships; I hope most of you have already received invoices from our Treasurer. There will be an e-vote for Chair of Commission I and Secretary of Commission III; and the 2024-2025 Accreditations program will commence; as well as preparations for the Oviedo Meeting.

I am sure you will enjoy the current ICCP News, which Nikki put together, and wish all of you and your families a Happy Festive Period and a Wonderful Healthy New Year!

Stavros Kalaitzidis

## ICCP MEMORIES: past & current Presidents; past & current Honorary Treasures; & ICCP couples.



From right to left, past President of the ICCP Dr Petra David, outgoing President Dr Angeles Gomez Borrego, and incoming President Prof Stavros Kalaitzidis. Thank you all for your visionally leadership of the ICCP.

Past ICCP Honorary Treasures: Dr Rudi Schwab, Mrs Jen Pearson (represented by Rich Pearson—note his bended knees!), Peter Crosdale, and far right Prof Joan Esterle. Thank you all for your service to the ICCP.

Happy ICCP couples, matches made in petrography:)

Drs Krystina Tokarska and Rudi Schwab, and Drs Stavros and Małgorzata Wojtaszek-Kalaitzidi

# MINUTES OF THE OPENING AND PLENARY SESSIONS

## Minutes of the 74<sup>th</sup> Annual Meeting of the ICCP, September 17-24<sup>th</sup> 2023, Patras, Greece

As compiled by the General Secretary, Dr. Paul Hackley

*(Ed: please see accompanying photographs throughout this Newsletter)*

The 74<sup>th</sup> Annual Meeting of the International Committee for Coal and Organic Petrology was held in Patras, Greece from 17<sup>th</sup> to 24<sup>th</sup> September 2023, jointly with the 39<sup>th</sup> meeting of The Society for Organic Petrology. The Meeting was sponsored and organized by the Department of Geology, University of Patras, and occurred in the Cultural and Conference Center on the University campus in Rio, a suburb of Patras in western Greece. The Chair of the organizing committee was Professor Kimon Christanis and the executive secretary of the organizing committee was Associate Professor Stavros Kalaitzidis. The meeting was organized around the theme of "Organic Petrology in the Energy Transition Era: challenges ahead." The meeting was organized in a fully in-person format, with only a single guest tuning in online for one portion of the ICCP Commission meetings. Presenters were present from twenty-six ICCP working groups, as well as 74 technical presentations from individual research groups in a broad variety of organic petrology subdisciplines including: paleoenvironment and paleoclimate, petroleum systems, critical minerals, emerging applications of organic petrology, and environmental and industrial applications. Altogether, there were over 100 delegates representing 22 countries from all of the continents. The meeting offered a full-day short course in environmental applications of organic petrology and a microscopy session. Two mid-conference cultural excursions were offered to Delphi and Mycenae, and two post-conference geological excursions were offered to northwestern Greece for visiting hydrocarbon systems and the Ptolemais lignite basin or the Keri Mire on Zakynthos Island.

The **Ice Breaker party** took place at the lovely Deck restaurant on the Gulf of Corinth.

### Opening Ceremony

The technical meeting started on the 18<sup>th</sup> September with a gathering of representatives of National and Academic Authorities on the dais in the Cultural and Conference Center. The opening address was received from organizing chair Professor Kimon Christanis, who introduced the Academic speakers which included Dr. Bouras, the Rector of the University of Patras; Dr. Zaimis, the Vice Governor for Entrepreneurship Research and Innovation in the Region of Western Greece; and Dr. Xypolias, the Chair of the Department of Geology. Invited talks were given by Dr. A. Stefatos, the Chief Executive Officer of Hellenic Hydrocarbons and Energy Resources Management Company who spoke on "Hydrocarbon exploration integrated into Greece's trajectory towards a net-zero carbon future." This was followed by a second invited talk on "The contribution of the Hellenic Survey of Geology and Mineral Exploration in coal research in Greece" presented by Dr. A. Chatziapostolou. Finally,

a welcoming note was delivered to the delegates from Associate Professor Kalaitzidis and participants moved toward the coffee break.

### ICCP Plenary Session

Following coffee, the opening plenary session of the ICCP was chaired by Drs. Ángeles G. Borrego and Paul Hackley based on the agenda items as follows, with about 37 ICCP members in attendance whereas 22 participants attended the parallel Short Course on "Organic Petrography in support of environmental studies: History, State of the Art and Future Opportunities" given by Dr. George Siavalas & Dr. Małgorzata Wojtaszek-Kalaitzidi. **The agenda was as follows:**

1. Introduction – Dr. Ángeles G. Borrego
2. Presentation and acceptance of the agenda of Patras meeting – Dr. Ángeles G. Borrego
3. Minutes from previous meetings- Dr. Ángeles G. Borrego
4. Apologies for non-attendance – Dr. Paul Hackley
5. Membership – Dr. Paul Hackley
6. Awards – Dr. Ángeles G. Borrego
7. Elections (short status) – Dr. Paul Hackley
8. Alteration of the Statutes – Dr. Paul Hackley
9. Future Meetings (short status) – Dr. Ángeles G. Borrego
10. Treasurer's report – Prof. Joan Esterle
11. Accreditation Subcommittee Report – Dr. Magdalena Miszkennan
12. ICCP training courses – Dr. Stavros Kalaitzidis

### Minutes:

3. Short minutes of the New Delhi Council meeting and minutes of the Plenary Sessions were published in the ICCP Newsletter #84.
4. **Apologies** for non-attendance were received from members as listed in the minutes of Council.
5. **Associate membership** applications as listed in minutes of Council were forwarded to the General Assembly. The loss of members Harold Smith, Monika Wolf, Paul Robert, and Nicolas Gilles was announced and a moment of silence held before the General Assembly.
6. **Awards:** The celebration of Dr. Jolanta Kus receiving the Organic Petrology Award in 2021 was held, as Jolanta could not attend in person in 2021. ICCP President Ángeles G. Borrego presented Jolanta with the medal and certificate.
7. **The elections status** was presented and the call for nominations was announced for the positions of Chair of Commission I and Secretary of Commission III, as the current office holders

are moving to new positions in the Council.

**8. Alterations of the statutes:** A description of the voting results for update of the ICCP statutes to allow electronic voting was published in the ICCP Newsletter #85. The updated statutes now allow for electronic voting for officers and for modifications to ICCP statutes, allowing ICCP to enter the 21<sup>st</sup> century.

*Resolution ICCPC23/8/1. Council Thanks the Returning Officer Rudolf Schwab for his support in collecting the votes and reporting to Council on the results of the vote on alteration of ICCP Statutes.*

**9. Future meetings:** The 2024 meeting in Oviedo will be held September 22<sup>nd</sup> to 28<sup>th</sup>. The meeting in 2025 is planned in China, but no dates have been confirmed. No invitations have been received for 2026 and beyond, but Council is working on this issue as described in the minutes of Council.

**10. Treasurer's report:** The Honorary Treasurer gave the status of ICCP's finances showing a cash balance of about 90,000 Euros. The Treasurer is planning immediate reconciliation of membership databases to allow invoicing and will send dues invoices for 2022-2023 in the next weeks at the annual early bird rate.

**11. Accreditation Subcommittee report:** The Accreditation Subcommittee Chair gave the report summarizing the results of the last rounds of accreditation in Single Coal (SCAP), Coal Blends (CBAP), and for Dispersed Organic Matter (DOMVR). The evaluation of SCAP and DOMVR is finished and all participants were informed of their performance. The certificates were sent to accredited petrographers. The webpage containing names of accredited petrographers in SCAP and DOMVR was updated. The results of CBAP are being evaluated and participants will be informed of their performance in September 2023.

**12. The report on ICCP Training courses** covered the past 2022 and the to-be-offered 2023 courses which are being held in Patras. The training courses are financially successful for ICCP and are a recruiting tool for new members.

#### Other matters:

The conference dinner was held Thursday night September 21<sup>st</sup> at the beautiful Hedylophon Estate high on the hills overlooking Patras and the Gulf of Corinth. The entertainment included folk dances and traditional Cyclades dances from the Aegean Islands all while eating from the magnificent buffet. Live music accompanied the dancing during which the amazing Greek colleagues entertained all with their magnificent skills.

#### Closing Plenary Session

At the closing plenary session on September 22<sup>nd</sup> the **agenda was as follows:**

1. Editor's Report – Prof. Nikki Wagner
2. Membership – Dr. Paul Hackley
3. ICCP Courses – Dr. Ángeles G. Borrego

4. Elections – Dr. Paul Hackley & Dr. Ángeles G. Borrego

5. Short Report from the Commission Meetings – Comm. Chairs: Dr. Stavros Kalaitzidis, Dr. Jolanta Kus, Dr. Magdalena Mysz-Kennan

6. Short Report from the Council meetings – Dr. Paul Hackley

7. Awards – Dr. Ángeles G. Borrego

8. 2024 Meeting – Dr. Ángeles G. Borrego

9. Thanks to the 2023 Organizing Committee

#### Minutes:

**1. Editor's report:** The Editor, Prof. Nikki Wagner, gave her report on the ICCP News describing the number of pages, copies produced, associated costs, new members included, countries of distribution. A highlight on content is fun petrographic images contributed by members and non-members alike. The editor also called out that the position as Editor of ICCP News and on Council comes up for renomination after the 2023 ICCP Meeting and encouraged nominations to bring new ideas to the Newsletter.

**2. Membership:** The new associate members presented at the opening plenary and previously in the ICCP News were welcomed to ICCP and an application received during the meeting from longtime ICCP attendee Julito Reyes was announced and forwarded to the General Assembly.

*Resolution ICCPC 23/2/1. Council has accepted the membership application of Julito Reyes and has forwarded his application to the Closing Plenary Session for approval.*

Richard Pearson has indicated during the meeting his willingness to promote to Full Member. The application has been accepted by Council.

**3. ICCP Training Courses:** As described in the minutes of Council, the training courses on DOM to follow the 2023 Patras meeting were announced, as well as the course to be offered in 2024 (Patras) on Env. Applications of Organic Petrology (instructors Dr. George Siavalas & Dr. Małgorzata Wojtaszek-Kalaitzidi) or Carbon Materials (instructors Dr. Sandra Rodrigues & Dr. Georgeta Predeanu). As well, it was announced the idea to offer on the ICCP website <https://www.iccop.org/category/courses/> a 'suggestions box' to capture the wants and needs of ICCP members for future training courses in Patras. Suggestions were had from the floor to include coke petrography as a future training course and Dr. Małgorzata Wojtaszek-Kalaitzidi agreed that this could be a component of an industrial applications course.

**4. Elections:** The candidates for Commission I Chair and Commission III Secretary were announced, as well as for the position of Editor, and a call for nominations was requested from the floor. As no nominations were received from the floor, the position of Editor will run uncontested and Nikki Wagner will continue as Editor for another 4-year term. The other Council positions have two nominees for each position (Dr. Peter Crosdale and Dr. Dragana Životić for Chair of Commission I, and Richard Pearson and Dr. Małgorzata Wojtaszek-Kalaitzidi for Secretary of Commission III) so it will be (**proceed to page 7...**)

# LETTER FROM THE 74 ICCP ANNUAL MEETING ORGANISERS

(slightly adapted by the Editor...)

Take note

Dear ICCP

We would like to thank you very much for attending the Joint 74th ICCP and 39th TSOP Meeting in Patras. We do hope you have enjoyed the Meeting, both the scientific and the social programs. **The Meeting was well attended by over 100 delegates from 22 countries. About 66 papers and 33 posters were presented; one Short Course was given, and four trips provided the opportunity to visit some places in our country.**

For us it was a great pleasure organizing such a vivid conference, welcoming our friends across the globe and creating new ones.

You can find the Book of Abstracts online by following the link: <https://ejournals.epublishing.ekt.gr/index.php/geosociety/issue/view/1994>

**Please note:** A Virtual Special Issue of the International Journal of Coal Geology has been arranged. We are welcoming you to

submit the full paper of your work, presented at the Meeting, to the Special Issue "VSI:2023 ICCP-TSOP Patras".

Please follow the link <https://www.sciencedirect.com/journal/international-journal-of-coal-geology/about/call-for-papers#joint-74th-iccp-and-39th-tsop-meeting-organic-petrology-in-the-energy-transition-era-challenges-ahead> for more information.

**The option for selecting the "VSI:2023 ICCP-TSOP Patras" will soon be available under the Journal's Editorial Manager. The Submission Deadline is 31 January 2024.**

We wish you all the best and hope seeing you next year in Spain and/or Mongolia!

Kimon and Stavros



## Call for Participation in the ICCP Accreditation Programs

### 2024-2025 Exercise

The International Committee for Coal and Organic Petrology (ICCP) is pleased to invite you to participate in the 2024-2025 Accreditation round. The ICCP provides three Accreditation Programs:

- **Single Coal Accreditation Program (SCAP)** for both maceral group and vitrinite random reflectance analyses. In this program, the ability of an analyst to identify and quantify the maceral groups and to measure the vitrinite reflectance of coal samples according to ISO standards is tested.

**Organizer: Kimon Christanis (christan@upatras.gr)**

- **Dispersed Organic Matter Vitrinite Reflectance Accreditation Program (DOMVR)**. In this program, the ability of an analyst to identify and measure the reflectance of vitrinite occurring as dispersed vitrinite in rocks such as carbonaceous shales or hydrocarbon source rocks is tested.

**Organizer: João Graciano Mendonça Filho (graciano@geologia.ufrj.br)**

- **Coal Blends Accreditation Program (CBAP)**. In this Program, the ability of an analyst to identify the number of coals in a blend and their petrographic characteristics, such as vitrinite reflectance and maceral group composition according to ISO standards, is tested. Organic petrology is the only technique to yield information on the individual component coals within a coal blend.

**Organizer: Małgorzata Wojtaszek-Kalaitzidi (mwojtaszek@itpe.pl)**

The ICCP has established a procedure to facilitate payments in which a single invoice will be produced. This requires that participants fill in the **registration form** available in the following link [www.iccop.org/accreditation/accreditation-form](http://www.iccop.org/accreditation/accreditation-form) before **April 30, 2024** in order to expedite the procedures. In addition, the detailed schedule of the Accreditation Programs has been established to provide a reasonable distribution of workload from all activities and to accommodate the timelines for the evaluation process. The expected schedule is summarized in Table 1.

**Table 1.** General schedule proposed for 2024-2025 ICCP Accreditation Programs. (next column)

	SCAP	DOMVR	CBAP
Announcement and call for participation	February to April 30, 2024	February to April 30, 2024	February to April 30 2024
Invoicing	until May 31 2024	until May 31 2024	until May 31 2024
Sample distribution	May to June 2024	May to June 2024	December 2024
Reception of results	July to September 2024	July to September 2024	January to March 2025
Evaluation, Certificates and Web	October to December 2024	October to December 2024	April to June 2025
Certificates Validity	01.01.2025 to 31.12.2026	01.01.2025 to 31.12.2026	01.07.2025 to 30.06.2027

Different number of samples are to be analysed in the Accreditation Programs depending on your previous participation. Participants entering SCAP or DOMVR Accreditation Programs or having lapsed for a round, have to analyse six samples, whereas continuation in the Accreditation Program requires the analysis of two samples. For CBAP, new entrants are expected to analyze two samples and continuation requires the analysis of a single sample.

No participation of automated systems will be allowed in any of the Accreditation Programs.

The samples for the Accreditation Programs will be distributed shortly after registration. The evaluation of results and certificate of accreditation will be issued upon the reception of the corresponding fee. The fee structure for the 2024-2025 Accreditation Round is summarized in Table 2. In addition, for participation in the CBAP Accreditation Program and any other of the Programs, there will be a 20% discount for the CBAP Accreditation Program only. No additional discounts are applied to any other combination of the Accreditation Programs.

	SCAP		DOMVR		CBAP	
	Entry	Continuation	Entry	Continuation	Entry	Continuation
Non-Members, €	126	84	100	66	200	168
Members, €	63	42	50	33	100	84

**Table 2.** Fee structure for the 2024-2025 ICCP Accreditation Programs.

Further details on the Accreditation Programs, evaluation procedures, and screening method to limit outliers in the accreditation database can be found on the ICCP website ([www.iccop.org](http://www.iccop.org)) and can be also received by contacting the respective program organizers.

The ICCP Accreditation Programs have grown up and consolidated over the years and are an efficient instrument for validating the ability and method of an analyst for petrographic analysis. If you are interested in joining the programs, please contact the corresponding organizers.

**Sandra Rodrigues**  
**Chair of the Accreditation Subcommittee**

## Closing Plenary Session Continued.....

necessary to run an election. The election will be electronic as permitted by the alteration of the statutes and will be arranged by the General Secretary ASAP.

5. **Short reports from the Commission meetings** were delivered by Dr. Stavros Kalaitzidis (Commission I), Dr. Jolanta Kus (Commission II), and Dr. Magdalena Misz-Kennan (Commission III) as further documented in the meeting minutes contained in this edition of the Newsletter. An appreciation gift was given to Magdalena Misz-Kennan thanking her for eight years of service as Chair of Commission III and of the Accreditation Subcommittee.

6. A **short report on the minutes of the ICCP Council Meetings** was delivered by General Secretary Dr. Paul Hackley as further documented elsewhere in this Newsletter.

7. **Awards:** The laudation for the 2023 Organic Petrology Award to Dr. Stavros Kalaitzidis was delivered by ICCP President Dr. Ángeles G. Borrego in front of a backdrop showing photographs of Stavros from points in his early career to the present prepared by the Chair of the Organic Petrology Award Committee, Dr. Magdalena Misz-Kennan. The laudation is contained in full elsewhere in this edition of ICCP News. Dr. Kalaitzidis accepted the award with grace and honor and delivered remarks on his mentors in ICCP and the joy of working with colleagues and students in the field of organic petrology, with three standing ovations during his comments.

8. **2024 Meeting in Oviedo:** Dr. Ángeles G. Borrego presented the planning for the 2024 meeting in Oviedo, Spain, which will be the 4<sup>th</sup> meeting of ICCP in Oviedo. Planning is well underway for the 2024 conference which will be held in the venue of the Chamber of Commerce of Oviedo and the Institutional

Delegation of CSIC in Asturias located at the center of the town. A short visit is planned one of the afternoons to the pre-Romanesque Naranco monuments which are UNESCO world heritage. A full day excursion will be organized in cooperation with the department of Geology of the University of Oviedo to visit the Variscan Foreland Basin in northern Spain with outcrops to see the Vegamian black shales and the Barcaliente dark-grey laminated limestones. The driving way to the outcrops allow enjoying the wild mountains scenario of Asturias. Arrival early to Oviedo is suggested so that delegates can celebrate the Saint Mathew festivity ending the 21<sup>st</sup> of September. There is a slight overlap in the beginning of the meeting with the post-conference TSOP fieldtrip to remote Mongolia, but this could potentially be overcome via virtual attendance to ICCP Council meeting for any returning from Mongolia. Britta Hilgers will be in attendance at the Oviedo meeting with the Hilgers microscope system.

9. **Thanks to the organizing committee:** Angeles called to the stage members of the Patras organizing committee including the chair Professor Kimon Christanis and Executive Secretary Assoc. Professor Stavros Kalaitzidis for the presentation of gifts of thanks. All of the student organizing committee members were called next for the presentation of their gifts, including Konstantinos Perleros, María Georgiaki, Ethymios Douros, Mia Dimitriou, Christina Malama, Loukas Toliás, Nikolaos Sofis, Konstantinos Vavaroutas and Christina Fourkalidi.

At the closing, Stavros Kalaitzidis presented a laudation and appreciation gift to Angeles Borrego for her service to ICCP over the last 27 years as a member of the Council. This is Angeles last meeting as the President and all of the members of Council present gathered on the dais to thank Angeles and recount their favorite memories of her contributions to the organization. There were some tears. **(Ed: Thank you Angeles!)**



**Left:** Past-president Angeles Gomez-Borrego shows off her gift from the ICCP Council, on behalf of the entire ICCP.

**Above:** the 2023 ICCP Council members: L-R: Paul Hackley, Stavros Kalaitzidis, Nikki Wagner, Angeles Gomez Borrego, George Siavalas, Dragana Zivotic, Magda Misz-Kennan, Sandra Rodrigues, Joan Esterle, Jolanta Kus.

## OUTGOING PRESIDENT REPORT

### Angeles G. Borrego 2016-2023

As established by the current statutes, the outgoing President of the ICCP should publish a summary of the activities during his term(s). This overview is a personal perspective of the major events that occurred during the eight-year term in which I had the privilege of chairing the ICCP. These activities and changes have been the result of the collective efforts of many members and are in no way the result of any individual action. The President depends largely on the General Secretary and I was lucky to have W. Pickel, M. Hamor-Vidó and P. Hackley during these terms.

Meetings have been held in Houston, Bucharest, Brisbane, The Hague, Prague, New Delhi and Patras, on four different continents, reflecting the truly international character of the ICCP. For the first time in the history of the ICCP, the annual meeting scheduled for 2020 in China had to be cancelled due to the impossibility of traveling as a result of the restrictions imposed by the Covid-19 pandemic. Never before was the lockdown so global and the impact on the way we communicate was so high. During this period, the Council met several times online and two of the meetings: Prague (2021) and New Delhi (2022) were held in hybrid form. As an emergency measure in 2021 we also held electronic elections for the Secretary of Commission I using the Zeus program. The involvement of M. Hamor-Vidó, then General Secretary, was key to the success of the procedure. In the future, electronic voting will be the norm because we have approved a modification of the statutes in 2022 to allow for this procedure. With this tool, election procedures become very convenient and, hopefully, will increase the participation massively. This new development can also be used for electronically consult and approve any document within the Commissions.

The climate crisis and the massive incorporation of renewable energies for electricity generation force the elimination of fossil fuels in many countries where reducing CO<sub>2</sub> emissions is a high priority. Many of them are countries that contributed significantly to the development of organic petrology with schools accumulating knowledge about procedures and developments. These laboratories are forced to reorient their focus and discover different applications of organic petrology. In other countries, a high use of fossil fuels is expected until 2050 and therefore traditional applications of organic petrology continue to develop. Despite this pessimistic outlook the interest in the ICCP maintains high. This year we received 16 applications to join, keeping the membership number slightly above 200.

There is an important need for education and training and therefore ample space for the development of ICCP training activities. The ICCP training courses began during Petra David's presidency and are an important achievement for our organization. The beginnings were not easy, but now, with the perspective of the 15 editions, I can say that they are a great success. The continuity of large undertakings requires that each piece of machinery can be replaced, and this was the case in the case of training courses. The first trainers A.C. Cook and C.F.K. Diessel have handed the baton over to J.G. Mendonça Filho, W. Pickel, A.G. Borrego, I. Suárez-Ruiz, S. Kalaitzidis, N. Wagner, C. Fonseca and those to come G. Siavalas, M. Wojtaszek-Kalaitzidi, S. Rodrigues and G. Predeanu, increasing the group of ICCP trainers. The number of courses has been increased and new courses on Industrial Applications, Environmental Applications and Carbon Materials will be added to the General Organic Petrology and Dispersed Organic Matter Courses. The traditional venue for ICCP courses, the GFZ in Potsdam, has been no longer available since 2019 and a new venue has been established and is now consolidated after two editions in Patras. We really thank the persons in Potsdam (A. Keupers and A. Treutler) and in Patras (S. Kalaitzidis and his team) for making the courses possible. The Student Travel Grant, renamed in honour of W. Pickel after his death for his great contribution to the courses, facilitates course attendance.

The accreditation program is an important activity of the ICCP. This year (2023) we have celebrated the 30<sup>th</sup> anniversary of the first round of the Single Coal Accreditation Program (SCAP) and the 18<sup>th</sup> anniversary of both the Dispersed Organic Matter Accreditation Program (DOMVR) and the Coal Blend Accreditation Program (CBAP) with a good number of around 200 participants in the three programs. Every piece of the complex Accreditation Programs machinery had to be replaced at some point: two organizers have run SCAP, three DOMVR and two CBAP. Five people have chaired the Accreditation Subcommittee and two have acted as external experts. New tools have been developed to evaluate the results and the Accreditation Subcommittee has made decisions to preserve the quality and integrity of the data: outlier detection method incorporated after 2007; assignment of different samples to multiple DOMVR participants in a single laboratory since 2015; incorporating since 2017 an individual screening method to provide Ro values with a standard deviation that does not exceed 0.15 times the value of the mean in DOMVR in order to avoid providing mean values of a mixture of populations. A different approach to the evaluation of coal blends data is likely to be adopted in the coming years, as it is evident from the work of the coal blends working groups in Commission III. In addition to providing a great source of recognition and prestige within the community of organic petrographers and good income to finances, the accreditation program provides a huge amount of extremely valuable data that needs to be valued and publicized. These data would be of enormous value to be incorporated into ISO and ASTM precision and bias statements. We have to find a way to elaborate the data and feed back to the community while preserving the privacy necessary for the program to function properly. The ICCP will always be indebted to the major accreditation players for the enormous and generous work done for the benefit of the ICCP.

In 2017, Liptinite sheets were finally released. With this the revised classification of macerals has been completed. This has been an important task of the ICCP, which relied heavily on the work of our predecessors in developing the Stopes-Heerlen system sheets. I regret to see that with the authorship system adopted for the publication of the huminite and liptinite sheets the association of the classification and definitions to the ICCP has been largely lost. Although a few years ago we decided to opt for this system to publish the ready chapters of the handbook, I do not know how long this can be maintained. I am afraid that we cannot afford to publish the individual chapters as open publications in view of the costs involved in each publication. We will again need to decide what is the best way forward and recover for the ICCP the copyright on the definitions and classification of macerals that we should not have lost. It is important to find a balance between the reward that the main contributors to the reviewed documents deserve and the sacrifice that the organization has to make to provide it. I think that the authorship solution adopted works well for the results of the working groups, but not in the case of the more collective and historical work that is treasured in the ICCP definitions and classifications. The website may represent an opportunity to reverse this situation.

The contribution of the ICCP to the development of standards in petrographic analysis methods has been very relevant. I already knew this, but I became aware of the real dimension when I prepared a plenary talk in 2019 for the opening session of The Hague meeting. The ASTM standard for the measurement of vitrinite reflectance in dispersed organic matter emerged from the ICCP thanks to the impetus of P. Hackley in achieving the objective, and the methods described in the ISO 7404 standards were essentially taken from the ICCP Handbook. The ICCP has also participated in the successive revisions of the standards through its members as part of the national delegations. During Alan C. Cook's presidency, a formal liaison with ISO was established although it did not result in a regular and formal ICCP contribution to the revised documents. W. Pickel as Chairman of ISO TC27/SC5 Working Group 14 dealing with the petrographic analysis of coals facilitated the transfer of the position from the ICCP to the ISO 5 subcommittee. A new opportunity opens up now that the formal link has been re-established and ISO has opened for review the five standards included in ISO 7404 that must be completed within a period of two years.

Formal registration of the ICCP has been a topic of discussion for the past eight years, which was finally resolved with the registration in Australia for financial reasons. The ICCP is an "unincorporated association", which is the simplest form a non-profit organization can take. J. Esterle's efforts to achieve this goal are greatly appreciated. Billing with the new system is underway as I write this report.

During the period we have lost the last two founding members of the ICCP, Geoffrey H. Taylor in 2017 and Harold V. A. Smith in 2023. With them we lost an important part of our living memory and people who continued to contribute to the organization until the end of their lives. During the period we have also lost many members who have been key in the promotion of organic petrology in several countries.

The ICCP is in good health, the organization is attracting new members despite the difficulties that fossil fuels are experiencing around the world. Our finances are healthy. Work in all three commissions is progressing and the results of the working groups are regularly updated on the website and published. This provides a record of the WGs' activities and achievements. Still, there is a lot of information stored in files that are difficult to access. This is because the results of the round-robin exercise were often part of the minutes and were therefore difficult to extract from the scanned documents. Step by step and effort by effort, this information is recovered, but it is very important that at least the new products and results of the working groups are adequately disseminated through the website and archived.

This is not an exhaustive record of what has happened in recent years but I have highlighted the issues that I consider most relevant. As mentioned at the beginning it has been a privilege to serve the ICCP as President these years. New challenges arise in the new energy and circular economy context and I am sure that the ICCP will give them the appropriate response. The achievements of the ICCP are a consequence of the generous collective efforts of its members and we can be proud of this.



1st Organic Petrology Course.  
November 16-20, 2009 Helmholtz Centre Potsdam



15<sup>th</sup> ICCP Short Course: Dispersed Organic Matter  
September 25-29, 2023, University of Patras



Attendance of the ISO/TC 27 Meeting in Delft with the ICCP represented by the President



**ABOVE**  
Incorporation of the historical development of the ICCP Accreditation Programs in the website. <https://www.iccp.org/accreditation/historical-development-of-iccp-accreditation-programs/>



## NEW ASSOCIATE MEMBERS – WELCOME TO THE ICCP

Surname: BISWAS First Name: SANKI Title: DR. Position: POSTDOCTORAL RESEARCH FELLOW  
 Degree: PhD  
 Organization: Department of Geology, University of Johannesburg, South Africa  
 Email: [sanki2810@gmail.com](mailto:sanki2810@gmail.com) // [sankib@uj.ac.za](mailto:sankib@uj.ac.za)  
 Sponsoring member: Prof. Nikki Wagner  
 Commissions: I, II, III  
 Comment: Doctoral degree completed at the Indian Institute of Technology (Indian School of Mines) in 2021. The thesis title is: Petrographic and geochemical controls on coal and shale for hydrocarbon generation from Makum and Barjora Basins of India: experimental modelling.



Surname: LARIKOVA First Name: TATIANA Title: DR. Position: Research Scientist  
 Degree: PhD  
 Organization: Institute of Rock Structure and Mechanics of the Czech Academy of Sciences, Prague, Czech Republic  
 Address: V Holešovičkách 94/41, 182 09, Praha 8, Czech republic  
 Email: [larikova@irsm.cas.cz](mailto:larikova@irsm.cas.cz)  
 Sponsoring member: Dr. Ivana Sýkorová  
 Commissions: I, II  
 Comment:



Surname: REYES First Name: JULITO Title: DR. Position: Research Scientist  
 Degree: PhD  
 Organization: Geological Survey of Canada, Nat Resources Canada, CALGARY, AB, CANADA  
 Email: [julito.reyes@canada.ca](mailto:julito.reyes@canada.ca)  
 Address: 3303 33rd Street NW/ rue nord-ouest, Calgary, Alberta T3L 3E4  
 Sponsoring member: Dr Angeles G. Borrego  
 Commissions: I, II, III  
 Comment: Finally we can officially welcome you, Julito!



Surname: LIS First Name: GRZEGORZ Title: DR. Position: Assistant Professor  
 Degree: PhD  
 Organization: Institute of Geological Science, University of Wrocław, Poland  
 Okrzei 15, 49-340 Lewin Brzeski, Poland  
 Email: [geoglisu@gmail.com](mailto:geoglisu@gmail.com)  
 Phone: +48 789 271 590  
 Sponsoring member: Dr. Paul Hackley  
 Commissions: II  
 Comment: PhD from Indiana University in 2006 for a study titled “Effects of thermal maturation on organic 2H/1H ratios and hydrogen isotopic exchangeability in Paleozoic marine kerogens (type-II),”



Surname: HATCHERIAN First Name: JAVIN Title: MR. Position: Physical Science Technician  
 Degree: BSc  
 Organization: US Geological Survey, Reston, USA  
 1933 Sagewood Ln, Reston, VA, 20191  
 Phone: +727-460-1504  
 Email: [javin.hatcherian@gmail.com](mailto:javin.hatcherian@gmail.com)  
 Sponsoring member: Dr. Paul Hackley  
 Commissions: I, II  
 Comment:



Surname: DIMITRIOU First Name: YPERMACHIA (MIA) Title: MISS Position: PhD Candidate  
 Degree: MSc  
 Organization: University of Patras, Greece  
 Phone: +6980151809  
 Email: [geo14043@ac.upatras.gr](mailto:geo14043@ac.upatras.gr)  
 Sponsoring member: Prof Stavros Kalaitzidis  
 Commissions: I, II, III  
 Comment: PhD in progress “Palaeoenvironmental study of the Ptolemais Lignite, NW. Greece: petrographical, geochemical and palaeontological features”



# COUNCIL OF THE INTERNATIONAL COMMITTEE FOR COAL AND ORGANIC PETROLOGY (ICCP)

**Outgoing President**

(2015— 2023)  
Dr M Ángeles Gómez Borrego  
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**Vice-president**  
(2019—2026)  
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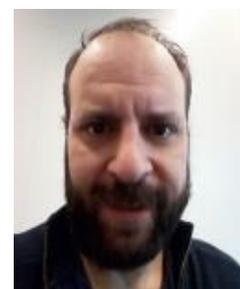
**Incoming President**

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Kalaitzidis  
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**Commission II Secretary**  
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**Commission I Chair**  
(2024-2027)  
To be elected



**Commission I Secretary**  
(2016-2024)  
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**Commission III Chair**  
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**Commission III Secretary**  
(2024—2027)  
To be elected



**Treasurer**  
(2021—2025)  
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**Editor**  
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**Organic Petrology Award Committee:** Contact the Chair ..... mailto: [magdalena.misz@us.edu.pl](mailto:magdalenamisz@us.edu.pl)  
**Webmaster** (<http://www.iccop.org>): .....Contact Dr Stavros Kalaitzidis, .....mailto: [skalait@upatras.gr](mailto:skalait@upatras.gr)  
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.....or visit the website <http://www.iccop.org>  
**ICCP Publications & Training Material:**... Prof. Nikki Wagner .....mailto: [nwagner@uj.ac.za](mailto:nwagner@uj.ac.za)

**Minutes of the ICCP Council Meetings**17<sup>th</sup> and 19<sup>th</sup> September, 2023

As compiled by the General Secretary

**Council**

On the 17<sup>th</sup> Sept, in attendance were the President, General Secretary, Treasurer, and the Chairs and Secretaries of the Commissions, with apologies received from the Vice-President and Editor. The Editor was present on the 19th September.

**1. Apologies**

Apologies were received from the following members: João Graciano Mendonça Filho, Antonis Bouzinos, Paddy Rana-singhe, Jen and Dave Pearson, Matt Todd, Diego Alvarez, Angelika Vieth, Alan Davis, Carla Araujo, Peter Handley, Sanki Biswas, Marvin Moroeng, Mihai Popa.

**2. Minutes of Previous Meeting**

Short minutes of the New Delhi Council meeting and minutes of the Plenary Sessions were published in the ICCP Newsletter #84.

*Resolution ICCPC23/2/1. Council approves the 2022 Council minutes as printed in the ICCP Newsletter #84.*

*Resolution ICCPC23/2/2. Council approves the 2022 Plenary Session minutes as printed in the ICCP Newsletter #84.*

**3. Arrangements for the Patras meeting**

The preparations for the outstanding 2023 meeting were discussed including the schedule, sponsorship, and the full program including the fieldtrips and conference dinner. Approximately ninety international delegates were expected alongside about twenty national delegates with catering arranged for one hundred and ten attendees each day. The two mid-conference fieldtrips and two post-conference fieldtrips were a major organizational and logistical challenge to arrange but expected to be well-attended. The conference dinner was planned for Hedylophon Estate with a view over the lights of Patras. There was to be no online component for the meeting, except for the invitation of Matt Todd from Australia to discuss the ISO standard methods. A large delegation was expected from China, with only one attendee from India.

*Resolution ICCPC23/3/1. Council thanks the organizers on their excellent work in preparation of the meeting.*

**4. Future meetings**

4.1. Planning for the 2024 Oviedo meeting was discussed with a presentation to be given for the closing plenary of the Patras meeting. The location of the 2024 Oviedo meeting would be near to the prior meeting, at the chamber of commerce and industry, which is part of CSIC and about 10 minutes walking distance from the hotels. Britta Hilgers has agreed to be there with a Hilgers system microscope. It was discussed the possibility to invite some of the longtime ICCP members from western Europe but this was eliminated due to a perceived lack of funding support. The meeting chair will be Angeles Borrego and a good number of helpers are already working on the organizing committee.

4.2 There was no information available yet on planning for the 2025 meeting in China although a request for update had been submitted to organizing committee chair Shifeng Dai.

4.3 Possibilities for future meetings beyond 2025 were suggested for Colombia, USA, and South Africa, although no formal invitations have been received to-date.

**5. Awards**

5.1 Thiessen Award: no new nominations.

5.2 Organic Petrology Award: a nomination has been received and the laudation will be read and the award presented at the closing plenary session.

**6. Walter Pickel Student Travel Grant**

The student travel grant for the short courses has been renamed to the Walter Pickel Student Travel Grant in honor of Walter. There was only one (late) applicant for this year and no grant was awarded. Stavros Kalaitzidis will be stepping down as chair of the grant committee and Dragana Životić replacing him. It was discussed that better monitoring of the obligation of the

Grant Receiver to provide an article to ICCP News was needed and the proof of acknowledgments of the Grant in Publications from her/his Thesis as well.

*Resolution ICCPC23/6/1. Council thanks the award committee on their past work in evaluating the student travel award applicants to help students attend the short course.*

*Resolution ICCPC23/6/2. Council approves the renaming of the award to the Walter Pickel Student Travel Grant.*

**7. Elections**

Candidates for the Council positions of Chair of Commission I and Secretary of Commission III are needed and have to be filled ASAP as the current Councilors in these positions are promoting to new positions in the Council. The Council discussed potential candidates and the desire to have at least two nominees for open positions so that an electronic election could be run under the recently amended statutes. As well, the Editor position is up for re-election.

*Resolution ICCPC23/7/1. Council nominates the following candidates for election: Peter Crosdale and Dragana Životić for Chair of Commission I, Richard Pearson and Malgorzata Wojtaszek-Kalaitzidi for Secretary of Commission III, and Nikki Wagner for Editor.*

**8. Membership**

8.1 Applications for Associate membership:

Dr. Mehmet Akbulut, ICCP Newsletter #84; Ms. Rimpay Chetia, ICCP Newsletter #84; Mr. Peter Handley, ICCP Newsletter #85; Ms. Ashley Douds, ICCP Newsletter #85; Dr. Sue Rimmer, ICCP Newsletter #85; Ms. Jennifer Nedzweckas, ICCP Newsletter #85; Dr. Demberelsuren Batbold, ICCP Newsletter #85; Mr. Ganzorig Ranjin, ICCP Newsletter #85; Dr. Ana Claudia Santos, ICCP Newsletter #86; Dr. Xin Guo, ICCP Newsletter #86; Ms. Shukla Priyanka; Dr. Sanki Biswas; Dr. Konrad Ziemianin; Dr. Tatiana Larikova.

*Resolution ICCPC 23/8/1. Council has accepted the membership applications and has forwarded them to the Plenary Session for approval.*

8.2 Applications for Full membership: No applications were received.

8.3 Honorary Membership: no nominations were received.

8.4 Deceased Members: Harold Smith, 2023, obituary in ICCP News #86; Monika Wolf, 2022, obituary in ICCP News 84, Paul Robert, 2021, Nicolas Gilles, 2020.

8.5 Other Membership Matters: The significant number (15) of new ICCP membership applications since the last meeting was discussed including the reasons behind the applicants requesting to join ICCP, and their relative inattention to which commission to join, that is, they want to be members of the ICCP for all commissions. Council discussed the possibility to capture during the application process information on why the new member was interested in joining ICCP and how to connect them to the relevant Commission and also how to alert the Commission Chair and Secretary to the relevant interests of the new member. There was discussion on the need for a professionally developed membership database, or its update by members of Council, which would permit automated membership renewals. The treasurer and webmaster agreed to work together in the next weeks with the website host Silktech to automate the process of dues payment and capture of membership information for an online membership directory and database. The Council agreed that the Treasurer should be allotted as much financial support as necessary to bring the membership database and membership status up-to-date.

**9. Financial matters – Treasurer's report**

The Treasurer presented the report of ICCP's financial status over the year since the last meeting. Discussions on finances included the difficulties in keeping records on cash payments, accounting of the accreditation programs and short courses, and the loss of membership dues payments because of lack of invoicing.

*Resolution ICCPC23/9/1. Council i) receives the report presented by the Honorary Treasurer, ii) agrees that the report represents a fair statement of the financial affairs of the ICCP and congratulates the Honorary Treasurer on the report, and iii)*

thanks the Honorary Treasurer for their outstanding work to update and reconcile the membership accounts and to ensure all ICCP memberships are current.

#### 10. Accreditation programs

The accreditation subcommittee report covered the details of the programs, the overall decreasing number of participants, and discussion of those participants who did not submit results as in past years. Varied reasons were given for not submitting results, including the inability to receive samples, movement to other employment during the year by the participant, issues with the microscope, etc. Council discussed the need to advertise more in China, India, Pakistan, and Mongolia about the opportunity for persons in these countries to participate in the accreditation program.

*Resolution ICCPC23/10/1. Council thanks the organizers of the three programs Kimon Christanis, Joao Graciano Mendonça Filho and Malgorzata Wojtaszek-Kalaitzidis for their work and congratulates them and Magdalena Misz-Kennan for their reports.*

#### 11. ICCP training activities

11.1 Details of the 14<sup>th</sup> ICCP training course in Patras from 2022 were presented which included 18 participants who studied over 4 days followed by a visit to the Keri mire in Zakynthos Island. The course should have a small financial profit, which is yet to be finalized. Details of the 14<sup>th</sup> training course were published in ICCP News #84. The 15<sup>th</sup> ICCP training course for September 26-29, 2023, is again in Patras on dispersed organic matter, and would follow the current meeting, with 9 attendees currently enrolled.

*Resolution ICCPC23/11/1. Council thanks the organizer of the ICCP training courses Stavros Kalaitzidis and congratulates instructors of the 15<sup>th</sup> course Angeles Borrego and Carolina Fonseca on this important activity for the ICCP.*

11.2 A discussion was had on future training activities and deciding on the content of future courses. Environmental applications of organic petrology was well-received in the one-day short course as part of the current meeting, and a decision was taken to extend this material to a four-to-five day course with instructors George Siavalas and Malgorzata Wojtaszek-Kalaitzidis. A desire for a short course on carbon materials with instructors Sandra Rodrigues and Georgeta Predeanu was expressed. The Council agreed that a website survey will be placed online for members to comment and suggest topics they would like to see in future training courses.

*Resolution ICCPC23/11/2. Council thanks the future instructors of the courses in environmental applications of organic petrology and carbon materials and congratulates them on this important activity for the ICCP.*

Following the Council meeting of September 17<sup>th</sup>, Council members visited the joint ICCP-TSOP Ice Breaker party which was held at the Deck restaurant with a beautiful sunset view over the Chapel of St. Nicholas on the seawall and out into the Gulf of Corinth.

The Council reconvened on September 19<sup>th</sup> with the President, General Secretary, Treasurer, Editor, the Chairs and Secretaries of Commissions I and II, and Secretary of Commission III in attendance with apologies received from the Vice-President and the Chair of Commission III.

#### 12. Editor's report

The editor's report included discussions of content, copies, costs and distribution. The Editor discussed content of the newsletter issues and needing to reconcile member lists for distribution.

*Resolution ICCPC23/12/1. Council receives the report of the Editor and congratulates her on her outstanding work.*

#### 13. Website

A discussion was had to move the responsibility for the website from Stavros to a person in Stavros' group, possibly Konstantinos Perleros. A brief discussion was had on the possibility of creating a webmaster position in the Council.

#### 14. Registration

The long-postponed registration of ICCP has been resolved by its registration in Australia for financial reasons, that is, to allow

the invoicing of members. The ICCP is an 'unincorporated association'. According to Australia the definition of an unincorporated association is as follows: "An unincorporated association is the simplest form that a non-profit organisation can take. It is sometimes also called a voluntary association. This structure represents a majority of the non-profit organisations in Australia." So, by financial necessity (the need to invoice) the ICCP has become a registered organization with its official registration occurring in Australia, by virtue of the physical location of the Treasurer.

*Resolution ICCPC23/14/1. Council thanks the Honorary Treasurer for their outstanding work in managing the financial affairs of ICCP and to finally provide a formal resolution on the issue of registration for ICCP.*

#### 15. Revision of the Statutes

The Council agreed to reconsider the relevance of updating the statutes in the future, starting with review of the current statutes which were previously marked up by past Council members. Any relevant future update to the statutes would be done all at once, and would be voted on electronically by the full members.

#### 16. Relations with TSOP

Information has been received from Paula Gonçalves regarding the joint ATLAS of DOM that is ready to be published. The proposal was to distribute it for free from the ICCP and TSOP webpages. TSOP has recently provided a positive response for free distribution. The ICCP Council also agreed that the joint Atlas should be made freely available from the ICCP webpages when it is available.

*Resolution ICCPC23/16/1. ICCP Council agrees with the TSOP to jointly distribute the ICCP-TSOP Image Atlas from the webpages of both organizations for free when the joint Atlas project is completed.*

*Resolution ICCPC23/16/2. ICCP Council thanks Paula Gonçalves for her efforts to finalize the joint image atlas and congratulates her on the future success of this organic petrology resource.*

#### 17. Feedback from members

No input from members was reported at the Council meeting.

#### 18. Other business

18.1 The idea for creation of a ICCP procedures manual to explain ICCP operation and to describe the roles and responsibilities of Council and working group members was presented. A short discussion related to this matter was covered with the subject tabled until the next meeting.

18.2 A formal liaison has been established with ISO as category C allowing ICCP to participate at working group level in our case on the WG14 'petrographic analysis of coals.' The category A which allows to participate at subcommittee level SC5 Coal and Coke could not be achieved because it is restricted to formally registered organizations.

18.3 Deolinda Flores contacted the ICCP regarding the publication of the book review by M. Mastalerz in the ICCP and TSOP News. The review is published in COGEL on: Inorganic Geochemistry of Coal by S. Dai, R.B. Finkelman, J.C. Hower, D. French, I.T. Graham, and L. Zhao. Options to carry out this are: 1) Elsevier gives republication rights to ICCP and TSOP. In this option, rights of the article is owned by Elsevier B.V alone, and 2) joint publication between Elsevier B.V, ICCP and TSOP. The rights are jointly owned by all the 3 publications, and they agreed to publish the article on an agreed date and a joint agreement has to be created between the 3 parties. Option 1 was the decision that was taken, and this will be facilitated by Deolinda and the ICCP Editor will apply on behalf of the ICCP for the permission.

18.4 A discussion on the potential elimination of the full vs associate member structure was tabled until next year.

18.5 Finally, the Council discussed the potential to sell ICCP meeting abstracts under the umbrella of a larger organization, similar to the position of TSOP which sells its abstracts for several thousands of dollars each year under the auspices of the AAPG organization. This discussion was also tabled next year when more information could be available.

## NEW FULL MEMBERS – ALL ASSOCIATE MEMBERS MAY PROGRESS TO FULL MEMBERS – SEE WEBSITE FOR BENEFITS

Mr Rich Pearson, President Pearson & Associates; Pearson Coal Petrography, Victoria, BC.

Representative on the ASTM and ISO Coal and Coke sub-committees. ICCP accreditation since 2010.



### REQUEST FROM A COLLEAGUE IN COLUMBIA—CAN YOU ASSIST??

Dear petrographers colleagues,

**First I'd like to thank to Prof. Nicola Wagner for allowing me to post this message.**

**I'm Ricardo Ruiz a Colombian scientist with interest and enthusiasm for organic geochemistry and organic petrology. I participated in several rounds of the accreditation programs conducted by the ICCP and I want to keep refining and practicing in this amazing field of science**

**Now we're starting an organic petrography laboratory in Bogotá, Colombia. We are looking for a secondhand microscope suitable for the task including carrying out vitrinite reflectance measurements or spare parts that can be used to set up a microscope.**

**So, if any of you can help in this endeavor it would be highly appreciated.**

Contact info:

email: [ricardoruizmonroy@yahoo.com](mailto:ricardoruizmonroy@yahoo.com)

phone: +57 3208037102

### OBITUARIES

#### **Noe Piedad Sánchez born 10.11.1966**

Noe Piedad Sánchez was born in the city of San Luis Potosí, on November 10, 1966. He studied Geological Engineering at the National Autonomous University of Mexico, graduating in 1991. He continued his master's studies in the specialty of Geology at the School of Engineering and Architecture of the National Polytechnic Institute between 1996 and 1997. In 2000 he began his doctorate studies in Environmental Geosciences at the Faculty of Sciences and Techniques of the Henri Poincaré University in Nancy. During his doctorate period he performed long stays at INCAR-CSIC in Oviedo and in 2004 defended his PhD Theses devoted to "Hydrocarbons prospecting using an integrated approach of petrography, geochemistry and modeling of organic matter transformation. Analysis and reconstitution of the thermal history of the Central Carboniferous Basin of Asturias (Spain) and the Sabinas - Piedras Negras Basin (Coahuila, Mexico)".

Upon his return from France, he joined the teaching staff of the Autonomous University of Coahuila, at the Adolfo López Mateos School of Engineering in the Department of Extractive Sciences. His work at the institution began in January 2005. As part of his professional career he participated in teaching, research, dissemination and training of technical and professional staff within the field of geosciences and their appli-

cations. In his more than twenty-five years of professional experience, he ventured as a manager and collaborator in projects of exploration, characterization and evaluation of georesources, in the areas of conventional and unconventional deposits, aquifers, geothermal, and strategic minerals, including geological risk evaluation, environmental impact and remediation for oil and mining industry and for geothermic, geotechnics and environmental services.

Dr. Piedad Sánchez was a member of different national and international scientific-technical associations such as the Association of Mining Engineers, Metallurgists and Geologists of Mexico, the Mexican Geological Society, the National Institute of Geochemistry, the Latin American Association of Organic Geochemistry, and the International Committee for Coal and Organic Petrology where he became a member in 2008. Those of us who had the opportunity to get to know him witnessed a close and friendly person who always enjoyed a life who had to leave too early.



#### **Marian Wagner, Kraków, deceased 21.11.2023**

With great sadness the ICCP Community was informed about the passing of Prof. Marian Wagner, on 15th November 2023. Marian Wagner was a Professor Emeritus of the Faculty of Geology, Geophysics and Environmental Protection at the Academy of Mining and Metallurgy. He was an eminent expert in coal deposit geology, petrology, sedimentology and coal geochemistry. From 1999 to 2002 he was head of the Department of Coal Deposit Geology. Among other things, he was a founding member and secretary of the Coal Petrology Section of the Polish Geological Society (1999-2002), Member of the Polish Committee for Standardisation (1999-2002) and member of the International Committee on Coal and Organic Petrology since 1998. In 2000, in recognition of his scientific achieve-

ments, he was awarded the Gold Cross of Merit.

He was a modest, warm and sensitive person. I know he had many friends in ICCOP family.

*Ed: The above was provided by his daughter, Aleksandra Wagner. May Prof Wagner rest in peace, and we thank him for his contribution to organic petrology.*



## BOOK REVIEW – REPRODUCED WITH PERMISSION FROM ELSEVIER

### *Inorganic Geochemistry of Coal*

by S. Dai, R.B. Finkelman, J.C. Hower, D. French, I.T. Graham, and L. Zhao

#### Review by Maria Mastalerz

This is a very timely publication that, beyond any doubt, will become the major reference book in the library of anyone who works with coal or organic matter in general. This book has it all: it has great data, it has summary tables, it is well illustrated, it provides critical reviews, it gives recommendations for the future, and it is also an interesting and easy read. What attracted me immediately to this book was the initial 14 pages about pioneers in the inorganic geochemistry of coal. This is priceless information about 15 scientists, from Vladimir Bouska to Peter Zubovic, who made major contributions to the studies of mineral matter in coal.

The book includes 11 chapters: 1. Introduction; 2. Analytical methods for elements in coal; 3. Abundance of elements in coal; 4. Definition of modes of occurrences of elements in coal; 5. The importance of abundance and modes of occurrence of elements in coals; 6. Modes of occurrence of elements in coals; 7. Minerals in coal as the hosts of chemical elements; 8. [Enrichment mechanisms of elements in coal](#); 9. Health impacts of the inorganic constituents in coals; 10. [Critical elements in coal](#); and 11. Future directions and application.

Chapter 2 discusses coal sampling and sample preparation for analysis; analytical methods used to determine the concentrations of elements in coal; and methods of determination of modes of occurrence of elements in coal. This is an important part of the book because determining element concentration and their modes of occurrence are two critical aspects of the inorganic geochemistry of coal, and the selection of analytical techniques can determine coal utilization and feasibility of element extraction or extraction methodology. The part about analytical methods is of special value here because, while describing individual techniques, it also discusses their detection limits, limitations and gives recommendations about their use. The techniques described include X-ray fluorescence spectrometry, inductively coupled plasma-mass spectrometry and multi-collector (ICP-MS), inductively coupled plasma-optical emission spectrometry (ICP-OES), instrumental neutron activation analysis (INAA), atomic absorption spectrometry (AAS), atomic fluorescence spectrometry (AFS), and pyrohydrolysis coupled with ion-selective electrode (ISE). Techniques to determine C, H, N, O, and S in coal are also briefly mentioned. At the conclusion of this chapter, emphasis is placed on direct methods to determine the mode of element occurrence, both optical and spectroscopic.

Chapter 3, about abundance of elements in coal, is short, but contains two summary tables with element concentrations. Table 3.1 is a compilation of major and trace element concentrations in coals from various countries based on published sources. This is a great reference table for anybody researching elements in coal. Table 3.2 lists concentrations of elements in Queensland and Chinese coals by geological age based on published and unpublished data.

Chapter 4 provides the main definitions of the modes of element occurrences in coal and briefly compares coal composition to that in the Earth's crust. Chapter 5 discusses the importance of abundance and modes of occurrence of elements in coals. These two short chapters would be especially valuable for those who need an introduction or a refresher to the inorganic geochemistry of coal, and especially about why certain elements or their ratios are important in coal geochemistry.

Modes of occurrence of elements in coal are discussed in chapter 6. It offers a comprehensive review of the literature on the modes of occurrence of 58 elements, rare earth elements and Y (yttrium), platinum group elements (PGEs), and rare gases in coal. Each element review is followed by a critical summary of the most likely modes of occurrence in coal. A great quick reference on this subject is provided in two tables that list the mode of occurrence of major elements in coal (Table 6.1) and trace elements (Table 6.2, 25 pages). These tables, in addition to the mode of occurrence, list the frequency of occurrence and the degree of occurrence certainty.

Chapter 7 contains brief discussions of the significance of the most common minerals in coals, such as clay minerals, phosphate minerals, pyrite and marcasite, carbonate minerals, or biogenic minerals. The main part of this chapter is a 12-page-long table that lists minerals reported in coal and coal low-temperature ash along with their abundance and the sources of the data. This table is a great resource for those who study minerals in coal.

Enrichment mechanisms of elements in coal are discussed in chapter 8, and this is a very important and timely chapter because of the recent interest in critical minerals in coal and coal by-products. The enrichment aspects discussed include erosional sources, seawater influence, volcanic ash contribution, leaching processes, hydrothermal fluids, groundwater, and the role of organic matter.

Chapter 9 reviews health impacts of the inorganic constituents in coals, emphasizing the elements that affect human health most: arsenic, fluorine, selenium, iodine, mercury, and radioactive minerals. This chapter also discusses uncontrolled coal fires, and health impacts of coal mining.

Critical elements in coal are discussed in chapter 10. Critical elements received especial attention in this book (pages 235-377), rightfully so because of their significance for world economies. Critical elements drive advancements in technologies and energy efficiency. Uranium, germanium, rare earth elements and yttrium, gallium, and aluminum are discussed, with a large emphasis on rare earth elements – their distribution patterns, genetic types, and anomalies. This chapter is well illustrated and includes numerous summarizing tables.

The text ends with a discussion of future directions and the application of inorganic geochemistry of coal (chapter 11). This part gives an excellent brief overview of what improvements are needed to make further progress in the understanding of inorganic matter in coal.

The book includes 37 pages of references, making it the most extensive publication on inorganic matter in coal available. The authors selected high-quality references that use modern techniques and provide high-quality data. In addition to the excellent review of various aspects of inorganic geochemistry of coal over 11 chapters, this book's extensive bibliography is another reason why it should be a major reference for anybody who researches or is interested in coal and coal-related topics.

# COMMISSION I MINUTES

## MINUTES OF COMMISSION I GENERAL COAL AND ORGANIC PETROLOGY

74<sup>th</sup> ICCP and 39<sup>th</sup> TSOP Meeting – Patras, Greece, 17-24<sup>th</sup> September 2023

**Chair:** Stavros Kalaitzidis, [skalait@upatras.gr](mailto:skalait@upatras.gr)  
**Secretary:** Dragana Životić, [dragana.zivotic@rgf.bg.ac.rs](mailto:dragana.zivotic@rgf.bg.ac.rs)

### Opening remarks

The session of Commission I started at 14:30 on Monday September 18<sup>th</sup> and was attended by 25 members. The Secretary of Commission I, and outlined the programme for session. Progress within the Single Coal Accreditation Program (SCAP), Radiolytic alteration of the organic matter in coal and rocks enriched in radioactive minerals WG, ISO standard, Classification and Terminology of Zooclasts in old sediments WG, Xylite-rich Lithotype Classification and Investigation fluorescing void filling substances WG, were planned for presentation.

Commission I sessions included a slide show and Microscope Session, as well as presentations of the following WG's:

**SCAP - Single Coal Accreditation Program,**  
**Radiolytic alteration of the organic matter in coal and rocks enriched in radioactive minerals WG,**  
**ISO Standard Working Group,**  
**Investigation fluorescing void filling substances Working Group,**  
**Classification and Terminology of Zooclasts in old sediments Working Group**  
**Xylite-rich Lithotype Classification Working Group.**

Apologies for not attending were received by Antonis Bouzinos.

### 1. Single Coal Accreditation Program – Kimon Christanis

Kimon Christanis presented the start and development of SCAP, which this year has completed a 30-year-long history, followed by current activities, results, and challenges of the 2022 exercise.

At the 1986 ICCP Annual Meeting in Doncaster (UK), Dr. A. Harold V. Smith proposed starting a coal accreditation exercise. Harold considered two parameters, namely: vitrinite random reflectance (VR) and vitrinite content (VC), being mature enough to constitute the basis of an Accreditation Program. The procedure was established during the 1988 Meeting in Aachen (Germany) and the first exercises were conducted by Dr. Reinhold Kutzner in 1993 and 1994. From 1996-2005 the exercises were run by Aivars Depers. Since 2005, Kimon has been the organizer. In total, 17 exercises have been conducted since 1996: 14 regular rounds plus 3 supplementary rounds in 2003, 2008, and 2021. The exercises were performed on 35 different coals from deposits in Australia, Germany, Mozambique, Poland, Venezuela, and the USA. More details of the historical development of SCAP and other ICCP Accreditation Programs are available on the webpage: <https://www.iccop.org/accreditation/historical-development-of-iccp-accreditation-programs/>.

The 2022 SCAP exercise was announced in March 2022 and participants registered via the ICCP webpage. The dispatch of invoices, samples, and instructions was completed by August 2022. As the first sample sets sent to participants in Colombia and Indonesia were not delivered, new sample sets were firstly sent to Joan Esterle and Jolanta Kus, respectively, asking to forward. The exercise was carried out on bulk samples: beginners received six and continuing participants two bulk coal samples. The deadline for result submission was planned for November to December 2022 and then extended to January

2023. Around 270 samples were dispatched. The participants had to measure the following parameters:

- ⇒ Vitrinite random reflectance (VR) according to ISO 7404-5, and
- ⇒ Vitrinite content (VC) according to ISO 7404-3.

**For the 2022 SCAP exercise 100 analysts registered, but only 94 submitted results; 44 were ICCP members. Participants were from 69 laboratories located in 25 countries. The ratio continuation versus new entries is 83% vs. 17%, respectively.**

The geographic distribution of the participants was: America 32% (South America 12%, North America 20%), Oceania 25%, Europe 24%, Asia 14%, and Africa 5%.

The organizer of the 2022 SCAP exercise acknowledged the contributions of all the members of the Accreditation Sub-Committee, particularly the current chair Magdalena Miszkennan, the Honorary Treasurer Joan Esterle, Jolanta Kus and BGR's post office, as well as Joan Esterle, for delivering the samples to Indonesia and Colombia, and Deolinda Flores and Álvaro Figueira, for maintaining the database, Małgorzata Wojtaszek-Kalaitzidi for sample supply, postgraduate students Costadis, and all the participants.

**Members who can supply suitable bulk, single coal samples (2-3 kg, vitrinite-rich, low ash coal with reflectance between 0.5 to 1.8% R<sub>r</sub>, even higher) are please to contact Kimon: [christan@upatras.gr](mailto:christan@upatras.gr).**

The SCAP organizer asked participants to: 1) carefully fill in the registration form; 2) write the VC counts, instead of the percentages, in the Excel spreadsheets; 3) pay attention on separating decimal points either with dot or coma, because a mixed use in the same sheet leads the database to confusion; 4) not change the name of the automatically generated excel sheets they receive for reporting the results.

After short discussion Commission I thanked Kimon and Magda for their great work on the organising 2022 SCAP exercise, and Kimon for all his efforts in convening the SCAP all these years.

### 2. Radiolytic alteration of the organic matter in coal and rocks enriched in radioactive minerals WG – Tatiana Larikova and Ivana Šýkorová

Tatiana Larikova presented the summarized results of the first Round Robin Exercise WG. 96 marked areas on 39 images were used to determine the textures of radiolytically altered fossil organic matter, including lignite, bituminous coal, fossil resin, and bitumen. The aims of the WG are: petrographic identification and definition of microscopical textures of radiolytic alteration of organic matter and determining basic types of the bright aureoles around radioactive minerals: halos, bright zones and others. The preliminary classification of radiolytically altered textures of organic matter containing 14 proposed levels was suggested. After the evaluation of the first RR exercise, it was concluded that the textures in coal and fossil resins were identified with less difficulty and more certainty than those in bitumen. Moreover, there were difficulties in the identification the radiolytic alteration in bitumen. The difficulties in identification of textures found in the studied U-bearing bitumen were: 1) variability and great complexity of the altered textures; 2) local mineralization of the altered organic matter; 3) very subjective point of view on descriptive parameters revealed during the RR WG exercise. Tatiana and Ivana proposed changes in the classification levels, and simplification of description of irregular morphology of radiolytic alteration in bitumen for the next exercise.

During the discussion the participants congratulated the conveners on the results of the first RR exercise, and pointed out that statistical evaluation is very difficult, and that the number of categories (levels) should be reduced. Therefore, it was suggested that the next 2024 exercise will concentrate only on coal and shales.

**Conveners would like to include the textures from other localities and encourage all participants to provide their examples of the radiolytically altered samples.**

Members interested in participating in the activities of this WG please contact Tatiana ([larikova@irsm.cas.cz](mailto:larikova@irsm.cas.cz)) and Ivana ([sykorova@irsm.cas.cz](mailto:sykorova@irsm.cas.cz)).

Commission I thank Tatiana and Ivana for her initiative and efforts in this Working Group.

### 3. ISO standard WG – Angeles Borrego

Angeles Borrego gave a historical review of the methods for the petrographic analysis of coals ISO - **ISO standard WG**. Feedback from the ISO Meeting 2023 and future activities in revision on Methods for the petrographic analysis of coals ISO - ISO 7404 were presented. The revision of the standards was on hold after Walter's passing. Lauren Williamson is the new Chair of the ISO Committee. The five ICCP standards are due for revision. Angeles pointed out that precision and bias from SCAP and CBAP should be considered in the updates of ISO 7404 – Parts 3 and 5. The ICCP provided feedback on a proposal from the Kazakhstan delegation to establish the level of oxidation of a coal using petrographic methods. Rich Pearson also gave brief explanation of revision of ISO 7404 standard. Angeles pointed out that on ICCP Meeting in Oviedo (2024) all the issues related to changes of ISO 7404 standard shall be addressed. During the discussion participants pointed that all new methods and equipment should be added to the standard.

Commission I would like to thank Angeles for her fantastic efforts in this WG.

### 4. Classification and Terminology of Zooclasts in old sediments WG – Thomas Gentzis and Xiaowei Zheng

Thomas Gentzis presented the scope of the **WG** and proposed three types of graptolite fractions. He showed photomicrographs prepared for the next exercise and proposed the future activities within Commission I and the cooperation with the **Reflectance and Terminology of Zooclasts in old sediments WG** within Commission II. The aim of both working groups is to standardize the terminology and the geological application of graptolite reflectance within ICCP.

**Anyone interested in participating in the new exercise may contact Thomas ([thomas.gentzis@corelab.com](mailto:thomas.gentzis@corelab.com)) and Xiaowei ([zhengxiaowei@geo.au.dk](mailto:zhengxiaowei@geo.au.dk)).**

After a short discussion Commission I thanked Thomas and Xiaowei for their efforts and dedication on this WG.

### 5. Xylite-rich Lithotype Classification WG – Ioannis Oikonomopoulos

Ioannis Oikonomopoulos presented the overview of the **WG** exercises with the proposed definitions as well as the problematic issues during last two years. Next steps in the activities of the WG will be discussions on particular definitions between participants and ICCP members; distribution of a map of xylite-dominated deposits in Eastern Europe – Asia, including the age; photomicrographs of woody materials, and a classification to the existing nomenclature should be uploaded to the ICCP database; distribution of photomicrographs and/or actual pellets (to the participants) for macro and micro scale description. Ioannis explained the reasons why the current WG cannot be further coordinated only by him and proposed continuation of WG with Konstantinos Peleros as co-convenor. Konstantinos is a young scientist, member of ICCP and interested in contributing to the

WG.

During the discussion participants supported Ioannis proposal. Members interested in participating in the activities of this WG please contact Ioannis ([ioikonomopoulos@helpe.gr](mailto:ioikonomopoulos@helpe.gr)).

Commission I would like to thank Ioannis for his initiative and efforts in this Working Group.

### Proposals for New Commission I Working Groups

#### 1. Investigation of fluorescing void filling substances – Peter Crosdale

Peter Crosdale proposed to establish a new WG to investigate fluorescing void filling substances. He presented some examples and problems and proposed the following program: 1) To examine samples in fluorescence and white light mode without oil and take photos of exact spots; 2) Extract any bitumen into organic solvent (dichloromethane or other solvents) for about 3 minutes; 3) Rinse the sample with isopropyl alcohol; 4) Re-examine exact location in fluorescence mode, 5) Re-examine exact location in standard white light mode in oil; 6) Perform SEM examination if possible. Peter could not lead the WG but could supply samples.

**Anyone interested in participating in the new exercise may contact Peter ([peter.crosdale@energyrc.com.au](mailto:peter.crosdale@energyrc.com.au)).**

After a short discussion Commission I thanks Peter for his efforts in this WG and in general for his dedication to the ICCP tasks.

### Microscopy session

The Microscopy Session took place on Friday the 22<sup>nd</sup> of September. The new semi-automated Hilgers System, the new capabilities of which were demonstrated by Britta Hilgers, was used for the session. The participants had the chance to discuss on the petrographic features of environmental samples presented by George Siavalas, showing fresh plant material, unburnt or thermally affected coal particles, coke and char textures, from fluvial sediments and soils near lignite mines of Greece. Magdalena Zielinska presented coaly layers and shales from the Carpathian Belt, with beautiful liptinites resulting in a vivid discussion between the participants. Konstantinos Perleros and Stavros Kalaitzidis presented peat blocks of variable gelification/maturation degrees from a deep Philippi profile, with pre-tectonite, epiderminite and other macerals, refreshing our memories on the Peat-Petrography WG nomenclature proposed for the upcoming classification.

Commission I would like to thank Britta Hilgers for her great help sponsoring the microscope facilities, and to all participants providing samples and contributing to the fruitful discussions.

***(Editor: the microscopy session is definitely a highlight at the annual meeting – remember to bring samples for discussion!)***

### Closing Remarks

Stavros Kalaitzidis and Dragana Životić closed the Session of Commission I.

Commission I would like to thank the conveners for their dedication and efforts to run the WGs and encourage ICCP members to participate in Commission Exercises.

**COMMISSION I CONTIN....**

ICCP Members were also reminded that the following Commission I Services are available for the Organic Petrography Community:

**Single Coal Accreditation Program, SCAP** – Kimon Christanis ([christan@upatras.gr](mailto:christan@upatras.gr)).

**Reflectance Standard Checking:** The service to check standards against the *ICCP Reflectance Standard* continues to be available from Richard Pearson (50€ for non-members and free for ICCP members) and from Evelyn Bieg (only for ICCP members)

Commission I would like to encourage ICCP members to visit the webpage. A lot of data and information from the WGs has been uploaded <http://www.iccop.org/commissions/commission-i/>. The convenors of the various WGs are encouraged to check and regularly update the web material.

At the end, Commission I would like to express gratitude to Kimon, Stavros and their team, as well as all participants of the sessions for their active participation resulting in well organised and productive Meeting.

**We hope to see you in Oviedo next year.**

**SHORT COURSES 2023**

The 15<sup>th</sup> ICCP Course of General Coal and Organic Petrology took place between 25-29<sup>th</sup> of September 2023, in the Conference and Cultural Center of the University of Patras. The Course was jointly organized by the International Committee for Coal and Organic Petrology and the Geo-Energy Resources Team of the Department of Geology, University of Patras, being supported by Hilgers Technisches Büro and the Special Research Account of the University of Patras.

Instructors of the course were Dr. Maria Ángeles Gómez Borrego, Instituto de Ciencia y Tecnología del Carbono (INCAR-CSIC), Spain, and Dr. Carolina Fonseca, Palynofacies and Organic Facies (LAFO) and Petroleum and Environmental Geochemistry (LAGEPA) Laboratories of the Federal University of Rio de Janeiro (UFRJ), and Dr. Stavros Kalaitzidis, Department of Geology UP, Greece in the practical sessions.

The course included 5 days of class-based seminars with afternoon practical sessions by using both Fossil Software and actual microscopic examination (see Annex). In the afternoon of the

fifth day the participants visited the Agia mire in Patras, where they had the chance to see and core an active telmatic peat-forming environment.

The Course was attended by 9 participants, including young scientists and professionals, who work in organic petrology related disciplines.

Attendees came from universities, research centers, geological surveys, and Companies, originating in Australia, Canada, Greece, Mongolia and Philippines.



**ICCP Short Course 2023, Patras.**

Lignite Mine



**The TSOP Short Course** was held on Monday 18<sup>th</sup> of September 2023 entitled “Organic Petrography in support of environmental studies: History, State of the Art, and Future Opportunities”, in the Conference and Cultural Center of the University of Patras. The instructors, Dr. George Siavalas & Dr. Małgorzata Wojtaszek-Kalaitzidi, presented the environmental aspects & applications of organic petrography.

Twenty-one ICCP and TSOP Members had the chance to observe environmental, biochar and coke samples using the semi-automated Hilgers System provided by Britta Hilgers. The organizers would like to thank Britta Hilgers for her valuable contribution, the instructors for organizing this short course and all participants contributing to the fruitful discussion.

# TSOP—ICCP COMBINED POSTER SESSION



## CONGRATULATIONS TO:

Recipient of the TSOP best student poster award,  
Itumeleng Matlala, South Africa



**Minutes of ICCP Commission II  
Geological Applications of Coal and Organic Petrology  
74<sup>th</sup> ICCP Meeting  
Patras, 18<sup>th</sup>-23<sup>th</sup> September 2023  
Chair: Jolanta Kus, [J.Kus@bgr.de](mailto:J.Kus@bgr.de)  
Secretary: George Siavalas, [Georgios.Siavalas@shell.com](mailto:Georgios.Siavalas@shell.com)**

## Tuesday – 19<sup>th</sup> September

The Commission II meeting started on Tuesday September 19<sup>th</sup> at 09:00am (local time), and the Chair and Secretary chaired the session in the Auditorium of the Conference Centre of the University of Patras. Peak attendance was 31 persons. The meeting did not include an option for online participation.

### 09:00 – 09:15 - Opening address – Jolanta Kus & George Siavalas

Com.II Chair, Jolanta Kus, in her welcome talk, kicked off the activities of the Commission. She gave an overview of the publications generated from the Commission's past activities, the recent developments in the ICCP webpage, the training material currently available under Com.II, and of the working groups formed during the previous two meetings. On the latter topic, she announced that Prof. Sue Rimmer has been added to the group of conveners of the "Igneous intrusions in coal and shale WG". The opening session closed with the presentation of the meeting's schedule.

### 09:15 – 09:45- Correction Function for Fluorescence Lamps WG – Jolanta Kus (Acting Convenor: A.G. Borrego)

The technical presentations commenced with Jolanta Kus, presenting the activities related to the correction function for fluorescence lamps WG. Jolanta gave a quick account of activities between 1997-2014 related to the acquisition of calibrated quartz-iodine lamps and the performance of two inter-laboratory exercises on fluorescence spectral measurements, which resulted in two published articles respectively. From those results, it became evident that the reference emission spectrum of the applied calibration lamp required a correction as it displayed peaks and background noise with both background noise, and absorption anomalies being then transferred further onto the measured corrected liptinite emission spectrum.

The presenter then described an effort carried out in the Federal Institute for Geosciences and Natural Resources (BGR), Germany in the field of fluorescence spectroscopy, which involves the calibration of the photometric responsivity with a calibrated light source (e.g., calibrated tungsten halogen light source, NIST), calculation of the correction function and application on certified reference materials (BAM-F012) with the collected spectrum being compared to the certified spectrum. It was concluded that certified values of the emission intensity pattern are valid for conditions and the limits listed. The presenter concluded with a set of observations and recommendations for the use of certified reference materials and the calculation of correction functions in fluorescence spectroscopy, including that the BAM-F012 reference material is appropriate as standard for validation of the wavelength intensity and wavelength accuracy of the emission and for calibration of the photometric responsivity. Prerequisites to the above are control of the wavelength accuracy of the excitation and emission channel(s) of the fluorescence instrument and operation of the detection system within its linear range. Data should be evaluated considering that changes in the emission intensity pattern result from changes in the wavelength accuracy of the excitation and emission channels and the spectral responsivity of the detection of fluorescence instrument and that changes in the emission wavelength pattern result from changes in the wavelength accuracy of the emission channel. Jolanta also acknowledged the contribution of P. Hackley to this effort by supplying a sample from the U. Devonian Huron Mb. of the Ohio Shale Fm.

#### Discussion:

A.G. Borrego mentioned that there are two correction functions currently available but they do not cover the entire visible spectrum.

J. Kus invited interested participants from the floor to participate in this effort.

**Com.II thanks Jolanta Kus for carrying out and presenting this work under the frame of this WG.**

### 09:45 – 10:30 – Dispersed Organic Matter in Sedimentary Rocks, Classification, Identification and Thermal Maturity – Conveners: Jolanta Kus, Paul C. Hackley, Paula A. Gonçalves

Jolanta Kus moved forward to present a summary of the original objectives of DOM in Sedimentary Rocks WG, their revised version after 2019, and the activities that took place between 2021-2023. The revised plan concluded to the preparation of two review papers on the application of DOM microscopy in geological studies instead of the originally intended one manuscript. The two papers are titled entitled: "The petrology of dispersed organic matter in sedimentary rocks: review and update" (Manuscript 1-Gonçalves et al.), and "Applications of dispersed organic matter petrology in the 21st century: a review" (Manuscript 2-Kus et al.). The convener presented the draft versions of the two papers, respectively demonstrating their advanced completion status and showed the timeline for internal and external reviews and submission. This plan briefly includes for Manuscript 1, internal review from November 2023 via the circulation among active reviewers within Commission II, revised version to be prepared in December, review at USGS in January and submission to the International Journal of Coal Geology (IJCG) between February - March 2024 after contact with Editor-in-Chief, Prof. Deolinda Flores. Manuscript 2 has a similar timeline with an extra review step added (BGR in January 2024). Target submission date for this manuscript too remains February-March 2024.

In addition to the technical parts, the convener explained the details of gold open access articles at IJCG, under which articles are freely available to both subscribers and the wider public with permitted reuse, and indicated that the article publishing charge for this journal amounts to USD 4.270,00 excluding taxes. The conveners request from ICCP to financially cover for the publication charges of the gold open access of both manuscripts.

#### Discussion:

Stavros Kalaitzidis, A.G. Borrego and other members from the floor congratulated the conveners for the results, which is impressive.

G. Siavalas indicated that the intended review timelines are tight for the amount of work that the reviewers will be asked to evaluate and asked the authors to consider extending these timelines by a few months. J. Kus agreed on behalf of the conveners.

Com.II agreed with the proposed manuscripts, review process, timelines, and supports that ICCP financially covers the costs associated with the publication of both manuscripts as described above.

**Commission II thanks Jolanta, Paul, and Paula for their enormous effort in the preparation of the two manuscripts.**

### 10:30 – 11:00- DOMVR Accreditation Programme – Magdalena Misz-Kennan on behalf of João Graciano Mendonça Filho

The Chair of the Accreditation Sub-Committee presented the report of the 9<sup>th</sup> (2022-2023) DOMVR accreditation exercise on behalf of the organizer, who was not able to attend the meeting this year. The report included the description of the timeline with regards to sample distribution, information, and instructions to the participants, return of the results, evaluation and distribution of certificates to the accredited petrographers. The results suggested that it was a very successful round with most of the participants being successful. The convener highlighted that sample selection is the main challenge in running of the DOMVR accreditation rounds, since samples must contain enough vitrinite particles, cover different levels of thermal maturity, and be representative of a range of depositional environments and show varying degrees of difficulty, in order to be appropriate. The report also included an overview of the evolution of participation over the years and a comparison between the number of participants who applied for the exercise against those who eventually submitted the results together with a geographic breakdown of participants. This information was also compared

against data from the previous round. The report also referred to the challenges that the exercise faces because of the limited number of samples combined with multiple participants from the same laboratories. Every participant receives one sample with predominantly terrestrial organic matter and one with predominantly marine organic matter.

The two new samples included in this round were described and an overview of the established ICCP accreditation statistics and success criteria was given together with the standards and guidelines that the participants were asked to follow for the acquisition and submission of the results.

The organizer highlighted once again the critical status of the sample bank and the dire need for new samples in order to keep the programme running smoothly. Both samples of terrestrial and marine origin are necessary. The presentation concluded with an overview of the programme's expenditure.

The organizer is grateful to Jolanta Kus for sending the samples to most participants, to Joan Esterle, ICCP treasurer, for dealing with the economic and administrative affairs, and to the Accreditation Sub-committee headed by Magdalena Misz-Kennan.

*Discussion:*

A.G. Borrego echoed the convener's request for new samples highlighting the importance of appropriate samples for continuing the smooth organization of the DOMVR accreditation programme.

J. Hatcherian suggested to reach out to affiliate universities and other institutes which organize field trips and ask them to collect and donate samples to the ICCP for screening.

J. Kus suggests the organizer to reach out to the list of participants via e-mail to further investigate who can potentially supply samples to the sample bank.

**Commission II thanks João for his continuous effort to keep running this significant activity for ICCP. Commission II also thanks Magda for presenting the report to the meeting.**

**11:00 – 11:30-Coffee Break**

**11:30 – 11:45 –Geological Application of Graptolite Reflectance WG – Conveners: Xiaowei Zheng and Thomas Gentzls**

Xiaowei (Sherry) Zheng presented an overview of the reasons why the WG was proposed and created in the 73<sup>rd</sup> ICCP Meeting in New Delhi and demonstrated the importance of reflectance measurements on different graptolite morphotypes (nodular, granular and non-granular) in the assessment of the thermal maturity and burial history of pre-Devonian sedimentary rocks. Sherry showed the vision for potential inter-laboratory exercises under this WG, which could include general round robin exercises on samples with well-identifiable graptolite morphotypes to measure reflectance values, testing graptolite reflectance anomalies from different basins, and investigate the relationship between graptolite reflectance and other geochemical maturity indicators. The first round robin exercise will be carried out after the Patras Meeting. Sherry showed a description of the sample, preparation, steps and timeline for this exercise and distributed samples to the interested participants being physically present in the room.

The exercise material also includes a guide book prepared by the conveners and distributed to the participants to be used for both exercises under Com.I Zooclast WG and the Geol. App. of Graptolite Reflectance WG under Com.II.

The conveners thank chairs and secretaries of Com.I and Com.II, respectively for their support.

*Discussion:*

J. Kus advised analysts who do not have enough experience with graptolites to first perform the classification exercise under Com.I before they proceed with performing reflectance measurements under this WG's exercise.

**Commission II congratulates Sherry for her efforts in preparing the material for the round robin exercise.**

**11:45 – 12:00 – Identification of Thermal Maturity Relevant Organic Matter WG– Convenor: Paul Hackley**

Paul Hackley showed a lookback of the WG activities and products, summarizing its objectives and history since 2008. The Convener also gave a progress update from the activities during 2022, which included update of the webpage with recent

activities and files, negotiations with negative voters from the ASTM D7708 renovation with a non-persuasive finding balloted on one of the negative voters and three new ballots, necessary to resolve technical comments/other negative votes received during the major renovation in 2022. Further on the renewal ballot, the convener reported a non-persuasive finding on negative vote with the voter being against language related to rotating polarizer which they thought could exclude some laboratories from performing the analysis: "*R<sub>o</sub>max measurement should not be limited to "using a fixed microscope stage and a rotating polarizer" since "a rotary stage and fixed polarizer" should also be included for measuring the R<sub>o</sub>max*". The voter declined to withdraw negative. The convener explained the rationale for finding the vote non-persuasive as follows: "*The rationale for finding the negative not persuasive is that there are currently no laboratories worldwide which make this measurement using a rotating stage, because of its difficulty, and the solution is to use a fixed stage with a rotating polarizer as balloted. Therefore, no laboratories are excluded by the balloted text. If technology should develop in the future to precisely center the rotating stage and objective, and keep the centration, then the updated language to incorporate this future technology for reflectance measurements of dispersed organic matter could be added to the text of the test method so that all laboratories using the future technology are included*". The voter's negative was found non-persuasive and the renewal ballot passed.

Paul Hackley also showed the plan for the proposed activities for 2023 onwards, which will include a photograph round robin to identify vitrinite vs solid bitumen using the Hilgers Fossil Student and the round robin will be performed on calibrated images and standardization of broad ion beam sample preparation. Maintenance of ASTM D7708 will continue incorporating feedback from the WG's activities.

**Commission II thanks Paul Hackley for his highly valued work and determination offered within this WG.**

**12:00 - 12:30 – Identification of Secondary Organic Matter in Sedimentary Rocks– Conveners: George Siavalas & Paul Hackley**

George Siavalas presented the activities of the Identification of Secondary Organic Matter in Sedimentary Rocks WG, established in 2021. He described the WG's first, photograph-based exercise showing the objectives and anticipated outcome from this exercise together with the material supplied to the interested participants. Because of the low response rate, only preliminary results and first insights of those were presented during the meeting. An invitation to more analysts from the floor was advertised in order to compile a more comprehensive and meaningful set of results which will allow extraction of more solid conclusions.

*Discussion:*

H. Petersen suggested that the Alpern et al. classification of petroleum inclusions could be also provided as supplementary material to the participants.

**Commission II thanks George and Paul for their time and effort in convening this WG and congratulates them.**

**12:30 – 14:30: Lunch Break**

Commission II reconvened for the afternoon session with 40 participants in the meeting room.

**14:30 – 15:15 – Identification of Dispersed Organic Matter – Convener: Jolanta Kus**

The aims of this WG are to test and assess a potential suitability of the ICCP-TSOP Classification System of DOM in identification of organic components in whole rock pellets and to modify, if necessary, the ICCP definitions of liptinite macerals (lamalginite, telalginite and bituminite-ICCP, 1993). Jolanta Kus gave a brief overview of the history and previous round robin exercises and publications of past activities with extra focus on the results of the 2020 round robin exercise, which warranted the need for the analysts to repeat the exercise during 2023 on the same polished pellets, which were dry-polished in the same laboratory. She then presented an overview of the sample distributed to the participants with regards to sampling location, geological unit and age (Kimmeridge Clay Formation), as well as lithology and depositional environment. The sample was

taken from mudstones interbedded with sandstones belonging to the Brae Member penetrated by the 16/17-14 exploration well. At this point the Convener acknowledged the contribution and assistance of Tracy Gallagher from the British Geological Survey and Prof. Chris Greenwell for assisting with access to the core and sampling.

Vitrinite reflectance displayed a group mean of 0.71% Ro with a standard deviation of 0.098 during the 2020 exercise and the results collected from the analysts suggested a single population. Many analysts reported preparation difficulties for this sample, which in turn created problems with the identification of vitrinite. Analysis on the dry-polished pellets showed revealed a group mean of 0.69%Ro with a significantly lower group standard deviation of 0.044. The range of personal standard deviations of the analysts was also narrowed down from 0.026-0.147 in the 2020 exercise to 0.025-0.091 in the 2023 exercise.

The convener showed comparative statistics for the same analyst between mean vitrinite reflectance, standard deviation, and number of measurements on wet- and dry-polished pellets, respectively. Photomicrographs of examples of vitrinite and solid bitumen in the analysed sample were also demonstrated.

Similar trends were also obtained from the comparison of the reflectance datasets for bituminite between the 2020 and 2023 exercises. Bituminite group mean was 0.35%Ro in the 2020 exercise and 0.34%Ro in the 2023 exercise. Group standard deviation was reduced from 0.170 in 2020 to 0.094 in 2023 and the range in personal standard deviation was narrowed down from 0.043-0.283 in 2020 to 0.019-0.142 in 2023.

Observations from this exercise suggest a much higher convergence among the analysts reflected in both group standard deviation and personal standard deviation range. The reasons for this could include better quality of polishing (no evidence for scratches, plucking, or topographic relief, unlike in the prior preparation), presence of tarnish residues was avoided for reflectance measurement and description of vitrinite and bituminite, more vitrinite particles were available for the reflectance measurements, improved surface quality of both vitrinite and bituminite and increased ability of a participant to discern between vitrinite and other components in the sample.

*Discussion:*

A.G. Borrego challenged the interpretation that all convergence is due to better quality of polishing as it could be the results of acquaintance of the analyst with the sample because of the repetitive analysis and bias because the sample group means were already known to the analysts from the previous exercise.

J. Kus suggests to have another round robin with a dry-polished sample of unknown to the analysts origin and thermal maturity.

P. David also indicated that while the wet-polished pellets were prepared in different labs the dry-polished pellets were prepared in a single lab and that could also contribute to the observed results.

G. Siavalas suggested to have both wet- and dry-polished pellets of a new unknown sample prepared in the same lab and J. Kus agreed to investigate this option in the new round robin exercise.

J. Kus announced the intention to publish the results of this exercise in a peer-reviewed journal and asked Com.II permission to proceed. Permission was granted by Com.II.

**Commission II thanks Jolanta for her energy and dedication to the activities of this WG.**

**15:15 – 15:30 –Igneous intrusions in coal seams and shales WG– Convener: Sandra Rodrigues, Jolanta Kus, Magdalena Misz-Kennan and Sue Rimmer**

Sandra Rodrigues presented the objectives of the WG, which include the investigation of the petrographic changes in dispersed organic, coaly, and mineral matter promoted by contact metamorphism, and the impact of emplacement of the igneous intrusions, which causes deformation at megascopic scale, such as folding and fracturing, columnar jointing, and other megascopic alterations. The original plan for the activities of the WG was modified, from publishing a review article on the subject to perform a round robin exercise with the objective to compile a petrographic Atlas of megascopic and microscopic features related to the impact of igneous intrusions in dispersed organic matter and coaly matter in coal seams and shales of

various coal ranks or thermal maturity. The reason for the modification was that Prof. Sue Rimmer was already writing a related review and for this reason, she was invited to be part of the group of conveners.

A set of samples including the Herrin (No. 6) Coal with isotropic and anisotropic coke occurring closer to the intrusion, 2 samples of lignite coal and coke, from the Suluova open-cast mine and 1 sample prismatic coke (background coal - bituminous) from Zonguldak opencast mine (Turkey), both Early Eocene age, supplied by Prof. Ali Ihsan Karayigit, together with samples of natural coke with columnar jointing from two mines of the Late Permian Bowen Basin (Australia), was qualified from the conveners in order to prepare photographic material for a round robin exercise.

Due to technical issues, it was not possible to collate material appropriate for an exercise this year but the conveners demonstrated the plan for an exercise to be carried out during 2024 and presented the structure of a system for the identification of petrographic features in heat affected particles. The system involves a basic distinction between organic and mineral matter and a levelled description approach for each of those two major groups.

**Commission II congratulates Sandra, Jolanta, Magda, and Sue for their initiative to create this working group and wishes them success in their first efforts.**

**15:30 – 16:30 – Classification of Dispersed Organic Matter, ICCP–TSOP Atlas WG- Convener: Paula Alexandra Gonçalves**

The convener gave a short summary of the history of this WG from the original idea and creation of the WG in 2003, to the objectives of the Atlas and of all past versions and rounds of review up to date. In addition to the recent reviews by H.I. Petersen and A.G. Borrego, two new independent reviewers (Peter Crosdale and Humberto Carvajal-Ortiz) were also invited to provide additional feedback. Almost all of the reviewers' suggestions were accepted. Suggestions not accepted included to describe DOM by well/Formation name and that photoshop could be used to fix inconsistencies among the colour of the various macerals. The convener explained why these suggestions were rejected, stating that for the former suggestion some of the photographs do not do justice to the geological formation and that it should be decided whether these photographs should be kept or deleted. The convener also showed the recent changes in the layout, such the change in the headers and the change of the elimination of the "Note of the editors" in the DOM classification and section and the replacement with a "New Note from the Editors". The convener stated that the "New Note from the Editors" highlights the fact that in the photograph section there will be photographs that do not match the current classification, for example the maceral amorphinite which has been replaced by the term bituminite in the most recent liptinite classification (Pickel et al., 2017). The convener also mentioned that there are several maceral entries, the photographs of which are still missing from the Atlas and presented a demo of the most recent version navigating through the online version.

*Discussion*

The discussion session was run in parallel with the demonstration of the Atlas.

P.A. Gonçalves asked whether the photographs that do not do justice to a specific geological Formation should be kept or deleted.

J. Kus suggested to delete them and replace with the most recent photographs unless someone from the floor disagrees. No objection to this suggestion was heard from the floor.

A.G. Borrego commented that amorphinite is part of the ICCP/TSOP DOM classification and should remain in the classification table together with bituminite as bituminite/amorphinite. She also commented that exsudatinitite should not be part of the liptinite group but part of the secondary products as described in the ICCP/TSOP DOM classification.\*

J. Kus suggested to liaise with TSOP in order to eliminate these discrepancies.

J. Kus suggested to advertise in the ICCP Newsletter the request for photographs of missing macerals to be added to the Atlas.

J. Hatcherian suggested to archive the older versions of the

Atlas and keep the most recent as active online.

P.A. Gonçalves reaffirmed her intention to maintain the Atlas with new material and the most recent photographs provided to her.

**Commission II thanks Paula for taking over the activities of this WG and for delivering the current version of the Atlas.**

**16:30 – 17:00 – Palynofacies WG - Jolanta Kus on behalf of the Convener João Graciano Mendonça Filho**

The main objective of the Palynofacies WG is the characterization of the origin of organic matter (botanical precursors), using a combination of morphology and optical properties (fluorescence and translucency), and the assessment of all aspects of the palynological organic matter assemblage, such as: identification of the individual particulate components, assessment of the absolute and relative proportions, particle size, and preservation state, and to investigate the feasibility of an integration and correlation of the palynofacies information obtained in this WG with the classification of organic components from ICCP (maceral composition).

A brief summary of the microscopic classification of organic matter, criteria applied to define the different categories, specimen types, microscopic observation modes and exercise layout was presented, together with a list of past exercises performed between 2013-2017 on two groups of phytoclasts, marine and freshwater palynomorphs, and amorphous organic matter.

The WG will continue the activities with the proposal for its sixth exercise for 2023-2024 with focus again on amorphous organic matter. Objective of the exercise will be the characterization of the origin of the AOM and all the aspects of its assemblage as listed above in the general objectives of the WG.

Two thermally immature samples from continental-transitional and marine systems encompassing the subgroups from Amorphous Group will be used in this 6<sup>th</sup> Exercise. The first sample is of Albian age from the Araripe Basin, Brazil, with TOC content of 3.46 wt.% and moderate carbonate content and the second sample is of Cenomanian-Turonian age from the Sergipe-Alagoas Basin, Brazil, with TOC content of 0.58 wt.% and relatively high carbonate content. Both samples have low sulphur contents. The exercise will comprise observations in strewn slides and polished pellets of kerogen concentrates and whole rock respectively. Instructions for return of the results will be provided to the participants together with the samples.

A call for participation was announced and interested participants signed up in a list circulated in the room.

**Commission II thanks João for his continuous effort as a long-standing convener in this WG.**

**17:00-17:15 – Closing remarks – Jolanta Kus & George Siavalas**

Lila Gurba was not able to present a progress update on the Shale Gas Studies and Pseudovitrinite WGs, respectively, as scheduled before the meeting, and together with her apologies she sent an e-mail update stating that Pseudovitrinite WG is near completion. The two final papers (as below) would be circulated later that week along with some points/questions for online discussion. The following tasks to be completed in 2023: 1. upload album of pseudovitrinite microphotographs; 2. circulate draft papers for review. Progress has been made towards completion of the paper on “Pseudovitrinite: An appraisal of the work carried-out by the International Committee for Coal and Organic Petrology (ICCP)”, and on the Pseudovitrinite Handbook (White Paper), comprising a discussion on its origin, reflectance, bireflectance, micro-chemistry, etching, microhardness, as well as significance in coal rank studies and coalbed methane exploration

The chair of Commission II, Jolanta Kus asked for proposals from the floor for new working groups and she showed a list of potential subjects, which could potentially warrant further investigation within a WG under Com.II. These subjects include: Faults and other structural discontinuities and impact on VRo (%), Relationship between VRo (%) and Hg porosity across sedimentary basins, Paleo-wildfire temperature vs. fusinite reflectance, Particle size and particle area analyses vs maceral group analysis in rock samples? (via the Hilgers Fossil Student software), and Meta-liptinite in the geological context. No further comments or suggestions were added from the floor and Commission II

concluded its activities during the 74<sup>th</sup> ICCP Meeting.

**The meeting of Commission II ended at 17:15 on September 19<sup>th</sup> 2023.**

**Commission II congratulates and recognizes all of the significant and valuable work of the Convenors and Participants, thanks all ICCP Commission II Attendees, and special thanks to Stavros Kalaitzidis for helping to update the webpage of Commission II.**



**Commission I Microscope session**



# MEMORABLE MOMENTS PATRAS 2023....

**TSOP ICCP Student evening at 'Poolevard' pool challenge enjoyed by all!**



Who is missing...?  
The years have been kind ... (see ICCP News 66...)

**Thank you to the 'ground staff' who kept everything running smoothly during the week long meeting.**



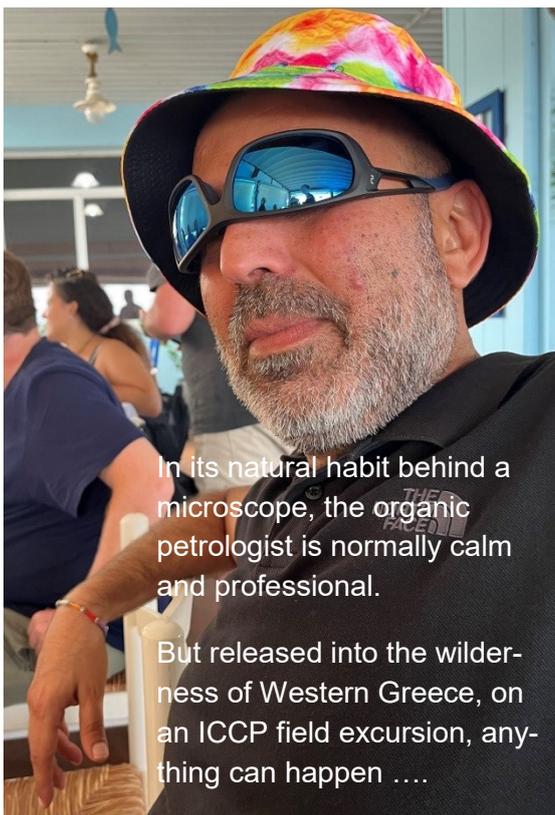
L-R: Paul Hackley, Mia Dimitriou, Angeles Gomez Borrego, Christina Malama, Loukas Toliás, Christina Fourkalidi, Maria Georgaki, Konstantinos Perleros.



You're all so hilarious:)  
Of course I am an ICCP Member! (finally!)



## Ice breaker event



In its natural habit behind a microscope, the organic petrologist is normally calm and professional.

But released into the wilderness of Western Greece, on an ICCP field excursion, anything can happen ....



# COMMISSION III MINUTES

## Minutes of ICCP Commission III Chair: Magdalena [Misz-Kennan](#) Secretary: Sandra Rodrigues Patras, Greece

The Commission III meeting was carried out on Friday morning September 22<sup>nd</sup> at the Conference & Cultural Center of the University of Patras. All presentations were delivered in person by the conveners. Commission III session was attended by up to 40 participants.

### 9.30 am – 9.50 am – Opening address - Magdalena Misz-Kennan and Sandra Rodrigues

The Chair of the Commission III opened the session describing the objectives and activities of the commission, including the CBAP. The Chair also presented the schedule for the presentations of the Working Groups (WG) organised for this meeting and called for proposals for new WGs.

### 9.50 am – 10.20 am – Carbon Materials WG

#### Conveners: Georgeta Predeanu, Małgorzata Wojtaszek-Kalaitzidi

Dr Georgeta Predeanu presented a summary report on the Round Robin (RR) exercises from 2016 to 2022. During this time, four RR were developed and sent to participants for evaluation of microscopic characteristics of activated carbons and precursors - biochar derived from coal, and biomass of different lignocellulosic origin. The exercises were photomicrograph-based with identification of optical features in areas of interest. Overall, there was a high level of agreement between the participants on the different optical categories. These RR led to numerous publications in abstract books, newsletters, including a publication in the International Journal of Coal Geology in 2015 from previous RR. A second paper is intended to be prepared by the conveners, having all the participants as co-authors on the RR exercises conducted between 2016 and 2022, to be submitted by the end of January 2024. A draft of the manuscript will circulate among the co-authors, who should give feedback to the conveners by the middle of November. The conveners asked the participants to gather bibliographic information on this topic based on their own country experience. Furthermore, the conveners are also planning to prepare an atlas publication in the form of an eBook, which will gather all the information from 2009 until 2022, comprising of all the different carbon materials assessed by this WG during that time. There were no comments from the audience to the conveners' presentation besides a huge thank you for all the effort and commitment through the years.

### 10.20 am – 10.55 am – Coke Petrography WG

#### Conveners: Małgorzata Wojtaszek-Kalaitzidi

Dr Małgorzata Wojtaszek-Kalaitzidi presented the results of the third RR exercise conducted during 2023. The exercise was photomicrograph-based where the participants had to categorise the optical textures of the coke of the binder phase under the crossed-hair based on the standard ASTM D5061-07, without needing to distinguish the size of the texture. The overall agreement among the participants was of 70%. Besides the RR exercises, the convener has been using the ICCP Facebook social media platform to post challenges to the viewers on coke textures, or some unusual and/or basic coke textural features. The convener asked for advice from the participants and overall audience regarding the next steps of the WG, either preparing a manuscript and/or a digital atlas of chars and coke and their respective textures and structures, or another RR exercise with physical samples. Dr Georgeta Predeanu suggested doing a joint atlas with the carbon materials WG as there is crossover between the groups and maybe try to find some students to help with this task. Dr Magda Misz-Kennan queried where this could be published either in ICCP website or in a publisher such

as Springer. Dr Georgeta Predeanu also suggested that could be interesting to test other coals, such as non-coking coal, and different ranks, as it could be a relevant exercise to observe the textures of semi-reactive and non-reactive semifusinite. Dr Brett Valentine suggested a short course in coke petrography saying that in U.S. is difficult to find professionals in this area, which was seconded by Heike Liszio. Dr Magda Misz-Kennan also asked the convener if she is going to send some samples next year, however, the convener says that perhaps doing a few RR exercises photomicrograph-based is probably the best to increase the low level of agreement in certain textures. Additionally, the convener requested help from the ICCP with expenses related to sample distribution for when the WG will distribute physical samples.

### Coffee break (10.55 am – 11.25 am)

### 11.25 am – 11.50 am – Environmental applications of Organic Petrology

#### Conveners: Dr George Siavalas and Dr Stavros Kalaitzidis

Dr [George Siavalas](#) presented an overview of the photomicrograph-based 2021 RR exercise and what the conveners see as the best way further for this WG. As already observed in previous years, the level of agreement strongly decreases as it moves from Level 1 (good agreement) related to the particle class to Level 4 (no consensus) related to individual maceral or other component. The conveners suggested that Level 4 should not be used routinely. In order to increase the consensus in the other levels, particularly on Level 2, the conveners suggested to combine fly ash and bottom ash into one group called combustion ash. Furthermore, the conveners also suggested to perform two dedicated exercises in "recent inertinite" and "thermally-altered coal" as there is some ambiguity in the identification of these particles. These two exercises will be distributed to the participants after the ICCP meeting. To close this part of the WG activities, the conveners are planning to write a manuscript on the results that they have, and possibly including the two dedicated exercises mentioned above. It is foreseen submission in mid of 2024. The next phase of the WG will be dedicated to samples from wildfire impacted forest soils, street or highway dust and fallout samples. This phase will be sample-based with assessment of composition by point counting and reflectance measurements. Dr George Siavalas invited Dr Joana Ribeiro to be co-convener in this WG due to her experience in wildfire particle identification. Dr Joana Ribeiro accepted this invitation. Dr Brett Valentine stressed the importance of having anthropogenic particles such as plastic, tyres, etc., in the exercises. The convener agrees that is important for us as petrographers to be able to recognise those particles, however, they are not very common in the samples been used for the exercises. Dr Paul Hackley, as a participant in this WG, warns the conveners that the manuscript needs to be reviewed by the USGS before submission.

### 11.50 am – 12.15 pm – Identification and petrographic classification of components in Fly Ashes WG

#### Conveners: Bruno Valentim and Nicola Wagner

Prof Nikki Wagner presented the results from the RR exercise carried out this year. Claudia Santos was proposed as a co-convener of the WG due to her substantial help with setting up this RR. The exercise focussed on using a simplified classification system for char morphotypes (3G) dividing the particles just in three groups (3G), with comparison to the more complex classification proposed by Lester et al. (2010). The conveners used Microsoft Forms instead to the traditional Excel file and PowerPoint format typically used in RR exercises. The photomicrographs and respective classification were uploaded into the same file, which minimised errors while performing the exercise. The results were then be exported to an Excel file for statistical evaluation. The conveners used the Fleiss Kappa method to

assess the results, which showed that the 3G classification system is faster with substantial agreement when compared with Lester's classification (moderate agreement). With such promising results, the conveners will prepare a new RR exercise for next year, preferably with the same participants and only considering porosity, or letting more participants participate although this may increase the level of disagreement. Nikki also suggested to carry out a live exercise during the next ICCP meeting in Oviedo if there is time available, which would require for the participants to have their own computers, tablets etc. George Siavalas commented that Microsoft Forms should be a standard method for the ICCP WGs and asked if it is possible to get trained to use this application. Nikki suggested an online meeting with Claudia Santos for training. George also commented that the statistical analyses are great but can get messy with 20 or more categories. Claudia replied that she never tried with that many categories but there are papers on this topic. Nikki asked the audience if the next exercise should be restricted to the previous participants or including more participants, to which Magda Misz-Kennan suggests opening the exercise to new participants but with two evaluations (continuing and new).

**12.15 pm – 12.45 pm - Self-heating in coal and coal waste dumps WG**

**Conveners: Jolanta Kus, Magdalena Misz-Kennan, Deolinda Flores**

Dr Jolanta Kus presented the results of the RR exercise performed this year. The exercise included modifications to the definitions of categories that seemed more problematic in previous exercises including: isotropic vs anisotropic, porous vs massive, devolatilization pores and paler in colour particles. The results showed an increase in the agreement between the participants for massive vs porous and isotropic vs anisotropic. However, the alteration of the definition of the pale in colour particles seemed to have promoted a decrease in the agreement between the participants for these particles together with a decrease in the agreement for plasticised edges. As such, these particles will be the focus of the RR exercise for next year, together with different types of fractures and self-heated coke. Nikki Wagner comment that paler in colour particles can be confusing with generally thermally-altered coal.

**12.45 pm – 12.55 pm – Coal Blends Accreditation Programme CBAP**

**Convener: Małgorzata Wojtaszek-Kalaitzidi**

Dr Małgorzata Wojtaszek-Kalaitzidi reported on the annual activities of the program. Coal blends were prepared in January 2023 and sent to the participants in February/ March for analysis and the results sent back to the convener by the end of July 2023. Thirty participants were registered, however, 5 of those did not lodge their results and 4 failed the exercise, due misidentified the number of coals in the blend and because of incorrect value of vitrinite reflectance. Despite this, the program was a success. Most of the participants were from Australia and South America, followed by European participants. Paul Hackley asked what was number of participants from Asia, to which the convener replied that only one participant from India performed the exercise. Angeles Borrego commented that there are more Indian participants in SCAP. Magda Misz-Kennan suggested translation of the programs into other languages that could attract more participants. The convener agreed and also suggested to collect information where potential participants are located and advertise the program.

**Optimization of reflectance measurements on complex blends WG**

**Conveners: Ashok Singh, Joan Esterle**

Presented by Peter Crosdale on Tuesday, 19<sup>th</sup> September, at 5.15 pm after Commission II meeting.

Dr Peter Crosdale presented some mathematical simulations to estimate the number of reflectance points that should be measured for coal blends. The results showed that no more than about 250 points are needed to have stable and accurate results for the estimation of the percentages of the components in simple blends (2 or 3 components with well separated reflectance profiles) as well as the mean vitrinite reflectance of each

component. Additional work is required for complex blends and where there is significant overlap in the reflectance distributions of the components. Comparison with data from real coal blends will be required as future work.

Angeles pointed out that 250 points are usually measured in the CBAP, and therefore, Peter's results are in good agreement, which is also good intel for ISO standards. Małgorzata Wojtaszek-Kalaitzidi commented that some blends can have 6 coals with overlapping ranks which is a problem, but it is up to the operator to decide where the boundary between those coal is, independent of the number of points measured. Rich Pearson pointed out that the analysis depends on what the operator is after, that is, reflectance or proportion of the components, and that is better to plot as a probability plot as this is better to model distributions. George Siavalas comment that AI could help with this.

**12.55 pm – 13.20 pm – Closing remarks - Magdalena Misz-Kennan and Sandra Rodrigues**

Magdalena Misz-Kennan opened the closing session of the Commission III with a short report of the WGs activities during the meeting and thanked all the conveners for making WGs quite active with so many participants. The chair of the commission asked Joan Esterle about the future of Optimization of reflectance measurements on complex blends WG and if would be better to integrate with Peter Crosdale work or conduct it separately? Joan Esterle replied that it would be better to do it together, which was agreed by Angeles Borrego since the data is the same and suggested that the participants should sent the data to Peter, so that he has some real measurements to work with. Magda asked the conveners to talk to Peter to make progress in that WG. The chair also comment that the number of points required to perform the exercise is excessive and can hinder the progression of the WG. Angeles mentioned that she did not measure 1000 points but 500, and the work that Peter demonstrated that there is not needed for such large number of reflectance measurements. Joan also suggested changing the conveners of the WG and that if there is not progression than the WG should be closed and specified in the statutes. Nikki Wagner recommended that the WG should not be closed but the datasets passed to Peter so that it can be finalised.

The chair of Commission III would like to thank the conveners and participants of the WGs for their dedication and efforts to the scopes this commission. Commission III also congratulates the organising committee for the well-attended and organised joint meeting.



Beautiful Greek sunsets, and memories with ICCP colleagues from all over the world—admittedly, the Aussies dominate in this photograph.

## ORGANIC PETROLOGY AWARD

Refer to Awards ICCP ([iccop.org](http://iccop.org)) for further information

2021 AWARDEE



Dr Jolanta Kus finally receives the Organic Petrology Award awarded in 2021, but not formally presented in previous meetings due to travel restrictions. Congratulations, Jolanta, well deserved!

2023 AWARDEE



Associate Professor Stavros Kalaitzidis is awarded the 2023 Organic Petrology Award. The award is awarded every two years to a member of the ICCP in recognition of their contribution to organic petrology; it is a mid-career award. Congratulations Stavros! Well deserved!



The photo says it all... mentor and mentee

## LAUDATION DR STAVROS KALAITZIDIS

Dear President, ICCP Council, Ladies, and Gentleman,  
The Organic Petrology Award is given every two years by the International Committee for Coal and Organic Petrology to recognise significant contributions by coal and organic petrologists at an intermediate stage of their career. I am pleased and honoured to inform you that this year the Organic Petrology Award Committee, with the support of the International Committee for Coal and Organic Petrology Council, decided to honour Dr. Stavros Kalaitzidis from Patras University (Greece) with this award. This award recognises the significant contribution of Dr. Kalaitzidis to the research on geology, ore (metallic minerals) geology, organic petrology, source rock evaluation, ore modelling and resource estimation, environmental impacts of mining, environmental applications of raw materials including coals, and their industrial wastes. The results of his work he published in 64 papers, abstract, reports and was cited about 1900 times.

Stavros was born on September 21, 1973 in Singen (Germany). In 1997, he obtained a BSc with honours at the University of Patras, Faculty of Sciences, Department of Geology. In 2007, he completed his PhD in Economic Geology of Energy Sources at the University of Patras, Department of Geology. His thesis on "Peatification and evolution of peatlands in Greece" was prepared under the supervision of Prof. Kimon Christanis. Still, as a student, he worked at the Department of Geology, University of Patras, Greece as a Research & Teaching Assistant, in the Greek Institute of Geology and Mineral Exploration (IGME), Athens as a coal petrographer, and in the Institute for Solid Fuels Technology and Applications (ISFTA), Athens, Greece as coal geologist. After obtaining PhD, he worked as exploration geologist in BHP Billiton Mitsubishi Alliance (BMA), Resource Development Group, Geological Services (Queensland, Australia), mine operation geologist in BHP Billiton Mitsubishi Alliance (BMA), Saraji Mine (Queensland, Australia), senior geologist in BHP Billiton Mitsubishi Alliance (BMA), Saraji Mine (Queensland, Australia), and senior geologist in Integral Resource Consulting Pty. Ltd. Having such enormous experience he decided to share it with students and from 2014 he worked at Department of Geology, University of Patras first as lecturer and later assistant professor of economic geology and currently as associate professor of economic geology.

During his career, he received a number of awards and scholarships. In 1994, he received an ERASMUS scholarship for visiting Freie Universität Berlin, Germany and in 1997-2002 he received a Ph.D. scholarship in Energy Sources given by the Greek National Grant Foundation. In 2012 he obtained the BMA Achievements Award: Silver Environment Award and in 2021, he obtained the 2<sup>nd</sup> Prize during SEG Student Vlog Competition, as Academic Advisor of the Upatras Chapter.

Stavros has great experience in sharing his knowledge and experience. At the beginning of his career, he was a teaching assistant to several undergraduate courses, including coal geology, geothermal energy, energy resources and computer science. In more recent years he was (and still is) teaching e.g. ore geology, introduction to exploration and mining geology. He is highly respected by students having opinion as somebody with great skills in sharing his knowledge. He supervised or is supervising 31 Undergraduate Diplom Theses, 7 Master Diplom Theses and 5 Ph D Theses. He co-supervised or is co-supervising 13 Master Diplom Theses and 7 Ph D Theses (of which two are completed).

Stavros has been an active member of the International Committee for Coal and Organic Petrology for 20 years. During the years, he had many functions. Currently, he is a Chair of Commission I, convener of Peat Petrography WG, Environmental Application of Organic Petrology WG, Temporal Variation of Coals WG, and Standardization WG. He is a member of the Accreditation Subcommittee, Coke Petrography WG, Self-heating of Coal and Coal Wastes WG and several other working groups. In 2018 and 2022, he was one of the trainers during the ICCP Courses that was on General Coal and Organic Petrology. Stavros is also Chair of Student Grant Committee. He is continuously updating the ICCP web page.

For his dedication to the science of organic petrology, organic geochemistry and to coal and peat science and his enthusiasm for the ICCP activities, I present Dr. Stavros Kalaitzidis with the 2023 ICCP Organic Petrology Award which honours him as organic petrologists at his intermediate stage of his career.

Chair of the Organic Petrology Award Committee of the ICCP.

# THE SERIOUS STUFF – 2023 ICCP-TSOP OPENING CEREMONY, ICCP GENERAL ASSEMBLY, WG PRESENTATIONS



# THE FUN STUFF—CONFERENCE DINNER GREEK STYLE!



75

# ICCP Meeting

22-28 September 2024

Oviedo, Spain

**Organic Petrology  
Research and Applications  
for the 21<sup>st</sup> Century**



**CSIC**  
Consejo Superior de Investigaciones Científicas



DELEGACIÓN  
EN ASTURIAS

## Welcome

In 2024 the International Committee for Coal and Organic Petrology will be holding its 75<sup>th</sup> Meeting in Oviedo. This is an extraordinary opportunity to meet and celebrate and to think on the challenges of Organic Petrology in the forthcoming years. Spain has hosted the ICCP meetings six times. The first three in the 60s were held in Madrid and the next three in Oviedo. The city will be dressed in its best clothes right after the patronal feast of St Matthew finishing the 21<sup>st</sup> of September. An additional attraction is that Oviedo has been elected as Spanish Capital of Gastronomy for 2024. Therefore, during your stay, you will have the chance to taste many of the delicacies that have made Oviedo deserving this honour. At the time of writing this note the COP28 has finally found an agreement on the “transition away

from fossil fuels” and therefore, the Meeting will be a good opportunity to reflect on the Theme:

### Organic Petrology Research and Applications for the 21<sup>st</sup> Century

The Meeting is organized by the Instituto de Ciencia y Tecnología del Carbono (INCAR-CSIC) together with the Institutional Delegation of CSIC in Asturias and will take place downtown in the building of the Chamber of Commerce of Oviedo which is also the venue of the CSIC Institutional Delegation in Asturias. The daytime is still long in September, the weather is typically mild and we will have the opportunity to visit the pre-Romanesque (IX Century) Monuments in Mount Naranco designated as UNESCO Heritage Sites and a field trip to see some of the Formations responsible for the relief of the Cantabrian Mountains, which are also rich in organic matter.

Email to: ICCP24 INCAR <[iccp24.oviedo@incar.csic.es](mailto:iccp24.oviedo@incar.csic.es)>

## Draft Schedule

Time	Sunday 22-Sep.	Monday 23-Sep.	Tuesday 24-Sep.	Wednesday 25-Sep.	Thursday 26-Sep.	Friday 27-Sep.	Saturday 28-Sep
<b>VENUE</b>	<b>Institutional Delegation CSIC in Asturias</b>	<b>Institutional Delegation CSIC in Asturias</b>	<b>Fieldtrip Carboniferous Carbonatic Formations in Cantabrian Mountains</b>				
9:00-10:30		Welcome words + Presentations	Commissions Meeting	Commissions Meeting	Commissions Meeting	Symposium	
10:30-11:00	Coffee break						
11:00-13:00		ICCP General Assembly	Commissions Meeting	Commissions Meeting	Commissions Meeting	Symposium	
13:00-14:00	Lunch break						
14:00-15:30	Council Meeting	Commissions Meeting	Commissions Meeting	Commissions Meeting	ICCP General Assembly	Symposium	
15:30-16:00	Coffee break						
16:00-17:00	Council Meeting	Commissions Meeting	Microscopy Session/slide show	Microscopy Session/slide show	Visit to Unesco Heritage Pre-Romanesque buildings (16:30-19:00)	Symposium	
18:00-19:00			Council Meeting				
19:00-22:00	Registration & Ice Breaker at Hotel España			Symposium Dinner at place to select			



# Mid- & Post-meeting field excursions

Zakynthos Island lunch break after Keri Mire visit.



Amphilochia seep (asphalt)



Lignite center of Western Macedonia

