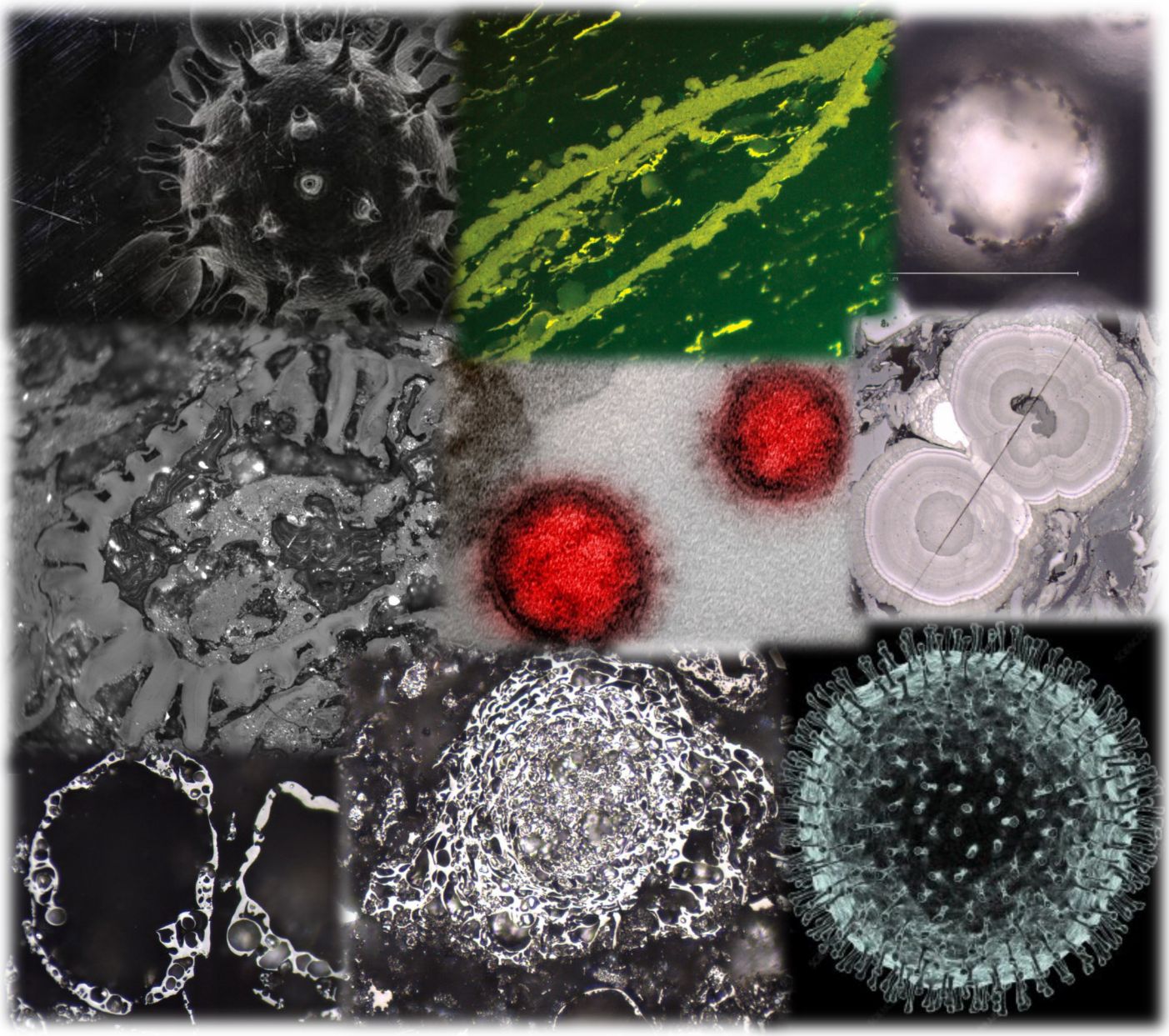
ICCP NEWS

NO 76
APRIL 2020

Newsletter of the International Committee for Coal and Organic Petrology (ICCP). Founded 1953. http://www.iccop.org

On-Line ISSN 1445-4858

PETROGRAPHY IN THE TIME OF CORONA: can you find the virus under your microscope?



IN THIS NEWSLETTER

INSTITUTIONAL MEMBER

SERVICIO GEOLÓGICO COLOMBIANO

ICCP WEBSITE

https://www.iccop.org

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

mailto:skalait@upatras.gr

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, Mária Hámor-Vidó hamorvido@gmail.com

Members who can supply suitable bulk, single coal samples, for the SCAP Program, please contact Kimon: christan@upatras.gr.

CONTRIBUTIONS TO THE NEXT ICCP NEWS BY JULY 2020

EDITORS COLUMN

Dear All,

I apologize for the significant delay in preparing this Newsletter — procrastination is a terrible consequence of working from home. And my postgraduate students have certainly been keeping me busy via many on-line submissions. Whom of us had that "20-20 vision" to predict the situation we find ourselves in? And so much for "twenty-plenty" . I hope and pray that you and your families are safe and healthy, and coping with lockdowns if they have been imposed in your country or region. Here in South Africa we have marked 4 full weeks of lockdown; 4 weeks of not wearing shoes on a daily basis. Or make-up. We are in complete lockdown for another week, partial lockdown thereafter. I may actually get through some of my backlog of work! Undergraduate teacher resumed last week after the slightly longer than normal Easter Autumn break, by on-line teaching only. It is a pity that I cannot access the microscope at this time. My favorite lockdown work space is in the photograph alongside — I realize I am privileged, and hope your home office spaces are comfortable.

Whilst we certainly cannot see the SARS Covid-2 virus with our petrographic microscopes, our medical colleagues are working hard to understand this critter. But we can observe extremely interesting features, such as some of the images captured on the front cover. The front cover includes an image of coal supplied by Peter Crosdale, a char particle from a power station in Portugal, a char particle from an entrained flow gasifier, pyrolytic carbon from South Africa, a sporinite showing ornamentation, and tiny ash particle recovered from an air filter. These images reflect some of the diverse samples organic petrographers work with.

As you probably already know, the ICCP Meeting in China will now take place in 2025 (pending the approval from the General Assembly). Unfortunately, with the required cancelation of the 2020 ICCP-TSOP Meeting, this Newsletter is somewhat thin. Peter has supplied a few images, Jolanta some information about her working group, and Magda Misz-Kennan and the Accreditation Subcommittee have extend the deadlines for registration and sample distribution in light of the current global CoViD-19 crisis—please see page 5. Unfortunately the 14th ICCP course has also been postponed—until 2021—and the ICCP grant for students call will be postponed until later in the year. Please do look through your petrographic images and submit to me—I may consider a competition for the best and funniest.

Best wishes, in the time of Corona, Nikki (Editor)

KNOW YOUR COAL PETROGRAPHER…… (page 7)

Image courtesy of Jim Hower

PRESIDENTS COLUMN

Dear ICCP members, most of us are living in countries in which right now a shorter or longer lockdown has been declared, which is impacting our lives and work. I hope and wish that you and your families stay safe and healthy. As you already know Covid-19 pandemic has impacted some of our planned activities. We will not meet in September in Xuzhou for our annual meeting and we will not be able to hold our training course in Potsdam. I would like to thank the Chinese Organizing Committee and Shifeng in particular for their diligence and care in keeping us informed about any developments and in facilitating finding an alternative. It is a pity that after so much effort invested on arranging venues, accommodation, obtaining the necessary permissions and sponsorships, we will not be able to enjoy these arrangements. We thank them for every effort. The agreement found has been to postpone the 2020 meeting to 2025 according to Chinese Organizing Committee and TSOP, pending General Assembly approval.

Our Course in Potsdam will be postponed to 2021, and we also thank our host for making this possible. You are aware of other deadlines delays as those of the Accreditation Programmes. Nevertheless and despite the lockdown, activities should continue. Many of you have movements restricted and are forced to do remote working and even remote teaching. No doubt that after this period we will be more familiar with remote working and available applications and this may represent also new opportunities for our working groups and exercises. So I encourage the convenors and participants to explore new ways to interact to each other to make advances within the working groups so that the forced Covid-19 pause is really taken as an opportunity to strength remote activities within the WGs.

You will see in the next pages some words in memoriam of Dr. Javier González Prado. He left us on the 7th of January. I hope that those of you who had the chance of meeting him can recognize his personality in my words.

I would like to finish this text with my best wishes of health for you and your families and the plea of exploring further options for remote activities. Do not forget our Newsletter, it is yours!!

Angeles G. Borrego
ICCP President

2020 ICCP Meeting in China is deferred

Dear ICCP Members,

We regret to inform you that, due to the global concerns regarding COVID-19 pandemic, the forthcoming 72nd ICCP Meeting in China will not take place as planned.

This decision has not been trivial and ICCP would like to acknowledge the substantial efforts of the 2020 Organizing Committee, and Shifeng in particular. The committee has been extremely active in not only arranging venues, accommodation, general items (satchels, lanyards etc.) but in obtaining the necessary permissions and sponsorships. They have also kept us informed of the developments in China. We thank them for all their diligence and care in the preparation of the meeting.

ICCP council has also been in contact with TSOP, as the 2020 was planned as a joint ICCP-TSOP Meeting. Councils of both organizations and China Organizing Committee have agreed to re-schedule the 2020 meeting for 2025.

We can only hope that soon we will be back in normality and ICCP activities will go ahead as per usual. It is anticipated that future meetings will occur as previously advised i.e. Prague in 2021; New Delhi 2022; Patras 2023; Freiberg 2024 and then, pending General Assembly confirmation, China in 2025.

We will keep you informed for any development, as well as for any ICCP business that will arise in the next period.

Dr. Angeles Borrego

Regarding Working Group Activities in 2020

Due to the health, travel and other limitations resulting from the COVID-19 virus, I would like to point out that the active work carried this year within the WGs of the Commission II is going to be very much restricted, if not postponed.

Therefore, I would like to ask you as the Conveners of the respective WG to communicate to your participants, if possible of course, any changes and adaptations or postponements to the running questionnaires, round robin exercises, preparation of such or any other relevant information that may arise from the current situation worldwide. This will help participants to plan and to assess the time interval, in which they might accomplish and hopefully submit the results at some later stage, provided they are informed and given direction.

Please, invoke also a possibility of publication a note in the ICCP Newsletter. In this regards, you may contact Nikki Wagner at: nwagner@uj.ac.za and discuss with her further requirements and time schedules for publication.

In case of questions, please send me an e-mail to J.Kus@bgr.de

PLEASE REMEMBER TO SUBMIT ADVERTS FOR CLASSIFIEDS, OBITUARIES FOR ICCP MEMBERS, SNIPPETS OF INFORMATION, OR ANYTHING THAT MAY BE OF INTEREST TO THE MEMBERS.

NEW ICCP MEMBERS

Please encourage all active organic petrologists to apply for ICCP membership. And, if you are eligible, please apply for full membership.

All membership information can be located on the webpage. Only Full Members may vote.

Round Robin Exercise on Self-heated Coals—extended

Due to the ongoing COVID-19 outbreak worldwide, the deadline for the 2020 Round Robin Exercises on self-heated coals has been extended.

It is anticipated for the participants to submit the results electronically by the October 31, 2020 (extended deadline; formerly by the May 30, 2020) in form of filled in exercise sheet to Jolanta Kus (J.Kus@bgr.de).

Check list to Council for Organic Petrology Award

Subcommittee Members (2020)

Magdalena Misz-Kennan (Chair)
Maria Mastalerz
Angeles G. Borrego
João Graciano Mendonça Filho
Paul Hackley

Year of Nomination:

How many candidates for Award?

External referees?

Reports received? yes/no

Recommendations received yes/no - number?

Feed back:

The next deadline is April 30, 2021

FUTURE ICCP MEETINGS

Prague, 2021

Further information regarding the ICCP Meeting in Prague will follow in due course.

New Dehli, 2022

Patras, 2023

Freiberg, 2024

China, 2025 (t.b.c)

Call for Participation in the ICCP Accreditation Programs 2020-2021 Exercise

The ICCP is pleased to invite you to participate in the 2020-2021 Accreditation round. The ICCP provides three Accreditation Programs:

1. 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)

2. 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: Joao Graciano Mendonca Filho (graciano@geologia.ufrj.br)

3. 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 able to yield information of the individual component coals within a coal blend.
Organizer: Dr. Małgorzata Wojtaszek, (mwojtaszek@ichpw.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 before **July 31, 2020** in order to expedite the procedures. In addition, the detailed schedule of the Accreditation Programs has been established to provide reasonable distribution of workload from all activities and to accommodate the timelines for the evaluation process. The expected schedule is summarized in Table 1.

Different number of samples are 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 analyse 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 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 2020-2021 Accreditation Round is summarized in Table 2. In addition, for participation in CBAP Accreditation Program and any other of the Programs, there will be a **20% discount for CBAP Accreditation program only**. No additional discounts are applied to any other combination of the 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) 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 now an efficient instrument for checking the ability and method of an analyst for petrographic analysis. If you are interested in joining the programs, please contact the corresponding organizers.

NOTE THE CHANGE OF DATES; EXTENSION DUE TO CORONA DISEASE. PLEASE CONTACT PROF. MISZ-KENNAN IF YOU REQUIRE FURTHER EXTENSION

Magdalena Misz-Kennan
Chair of the Accreditation Subcommittee; email: magdalena.misz@us.edu.pl

Table 1. General schedule proposed for 2020-2021 ICCP Accreditation Programs

	SCAP	DOMVR	CBAP
Announcement and call for participation	February to July 31, 2020	February to July 31, 2020	February to July 31, 2020
Invoicing	till September 30, 2020	till September 30, 2020	till September 30, 2020
Sample distribution	till October 31, 2020	till October 31, 2020	December 2020
Reception of results	December 31, 2020	December 31, 2020	January to March 2021
Evaluation, Certificates and Web	January - February 2021	December 2020-January 2021	April to June 2021
Certificates Validity	01.03.2021 to 28.02.2023	01.03.2021 to 28.02.2023	01.07.2021 to 30.06.2023

Table 2. Fee structure for the 2020-2021 ICCP 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

Coal Microscopy Made Easy

By Peter Crosdale

#1: The identification of air bubble in your immersion oil

Air bubbles in the immersion oil are not only annoying for viewing but also may impact very strongly on measured reflectance values. In extreme cases, the bubbles are obvious and may interfere with the actual observation. In more subtle cases, the image may appear a little blurry or hard to focus. Sometimes the air bubbles do not interfere with observations but their presence just outside of the immediate field of view may cause anomalous reflectance readings as the light becomes refracted by the bubbles.

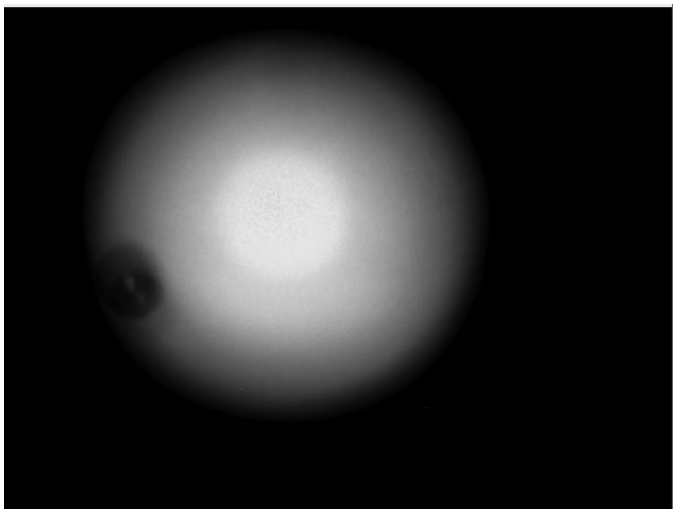


Fig 1 (L): A good looking field of view but an air bubble is present in the oil which would affect reflectance measurements

Fig 2 (R): An oil bubble revealed in Fig 1 by simply removing the eyepieces and looking down the microscope

At the 2018 ICCP Meeting in Brisbane, I asked the audience how do *you* identify an air bubble in your oil if you suspect one but cannot actually see it? The response was surprisingly muted. A number of persons noted how they would act to get rid of the bubble but it was the identification of its existence that was the point of the question - and the answer is surprisingly easy and can be very low tech.

If you have gone to the expense of buying a focussing Bertrand lens when you bought your microscope, then you have a high tech solution at your finger tips. Many of us used a Bertrand lens in undergraduate mineralogy to look at conoscopic interference patterns and optic axis figures to determine if the mineral was optically +ve or optically -ve, 2V angles etc and then use this information in composition determination. I remember doing this laboriously on plagioclase. A Bertrand lens is an accessory lens inserted into the light path of the microscope that lets you see the rear focal plane of the objective. A focussing Bertrand lens lets you focus on different planes in the microscope to assist in the alignment of various optical elements. So a focussing Bertrand lens will let you focus on the bubble in the oil and instead of on the polished surface – while the specimen remains in focus.

But what to do if you don't have this expensive accessory? The answer is to simply remove the eyepieces and look down the microscope. You will clearly see any bubbles in the immersion oil if they are present. This is what used to be done before the Bertrand lens was invented to observe the rear focal plane of the objective.

So it is super easy and super cheap to check for air bubbles in you immersion oil. Remember, coal microscopy is easy.

As we will not have a microscope session this year (due to the cancellation of the ICCP Meeting), please do send any images for discussion to the Newsletter. And prepare samples for discussion in 2021.

Thank you Peter for all your contributions!

Take time to look through your images and submit your most comical. Perhaps we can even consider a competition?????

Please do contact Peter if you have any questions about your microscope or images—he may be able to provide experienced advise that the microscope supplier may not be able to. And please do submit images to the ICCP Newsletter.

Know your coal petrographer

Prof. Dr. Marie-Therese Mackowsky

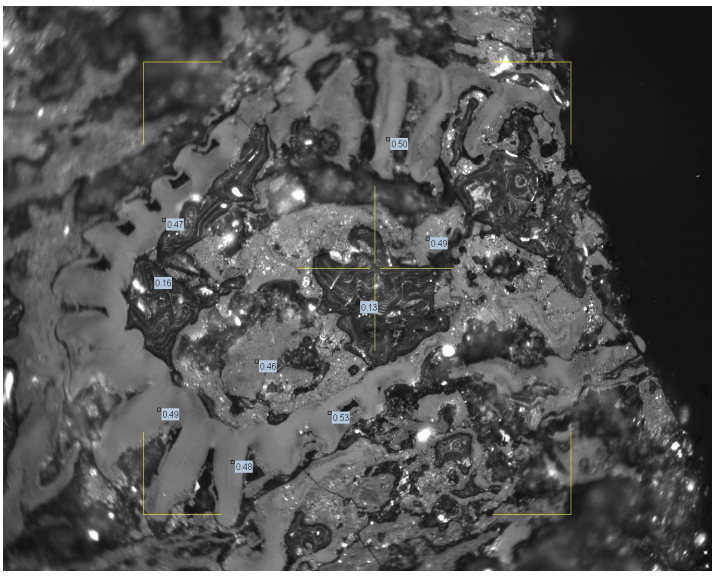
(December 7, 1913 – August 4, 1986)

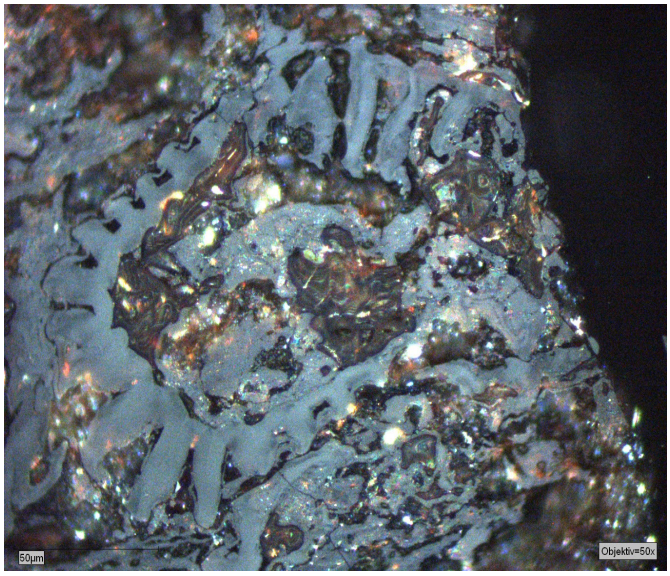
Born in Koblenz, Germany, Prof. Dr. Mackowsky is remembered for her significant contributions to organic petrology, and mineralogy (her PhD was on the optical and chemical properties of garnets). She was awarded the REINHARDT-THIESSEN-Medal from the ICCP in 1971 for her successful research into applied coal petrology. In 1978 she was given the CARL-ENGLER-Medal in honour of her outstanding scientific contributions to applied coal petrography, particularly in the area of maceral analysis, coal pyrolysis, mineral matter in coal and the assessment of coke properties from petrographic coal analyses, as well as in honour of her international reputation as university professor and as scientific expert in her field. In 1979 she was awarded the GEORG-AGRICOLA-Medal, which is bestowed by the Deutsche Mineralogische Gesellschaft (German Mineralogical Society) in recognition of outstanding achievements in applied mineralogy. Prof. Dr. Mackowsky retired in 1978, but remained actively involved with her students until her passing. She is specifically remembered for her community spirit, and ability to translate at the ICCP Meetings. (Information extracted from memorium by MARGRIT-URSULA OTTE November 1986, International Journal of Coal Geology, 9 (1987) 1-3).

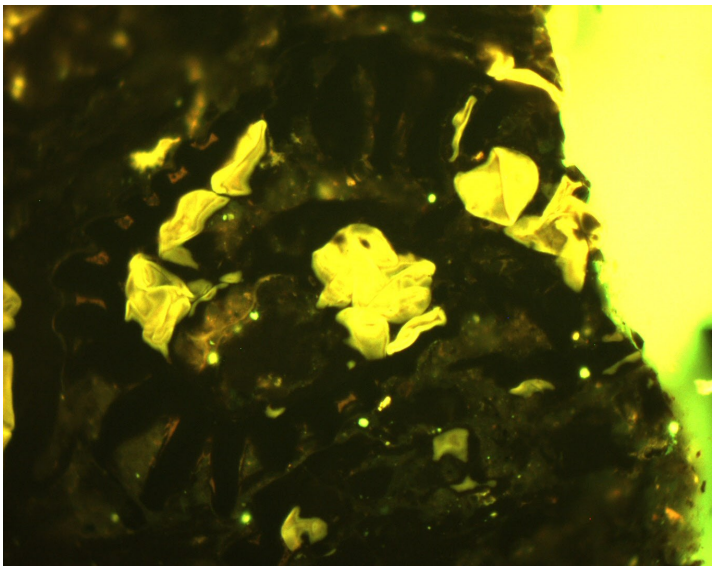
Awards and Honors:

* President, International Committee for Coal and Organic Petrology (ICCP), (1976-1979)
* President, German Union of Soroptimist International
* Fellow, Institute of Fuel
* Reinhardt-Theissen Medal, International Committee for Coal Petrology, (1971)
* Carl-Engler Medal, German Society for Mineral Oil Science, (1978)
*Georg Agricola Medal, German Mineralogical Society, (1979)

LET'S SHARE PETROGRAPHIC IMAGES!





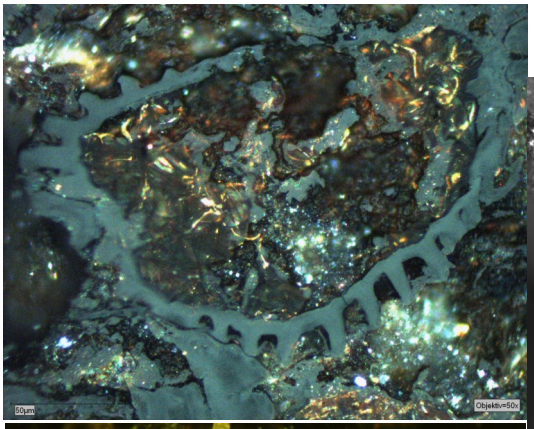


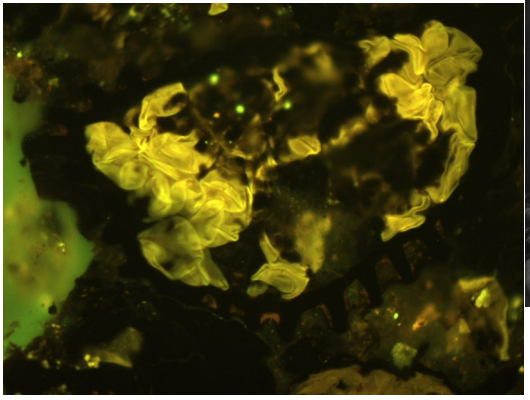
Favourite microphotographs!

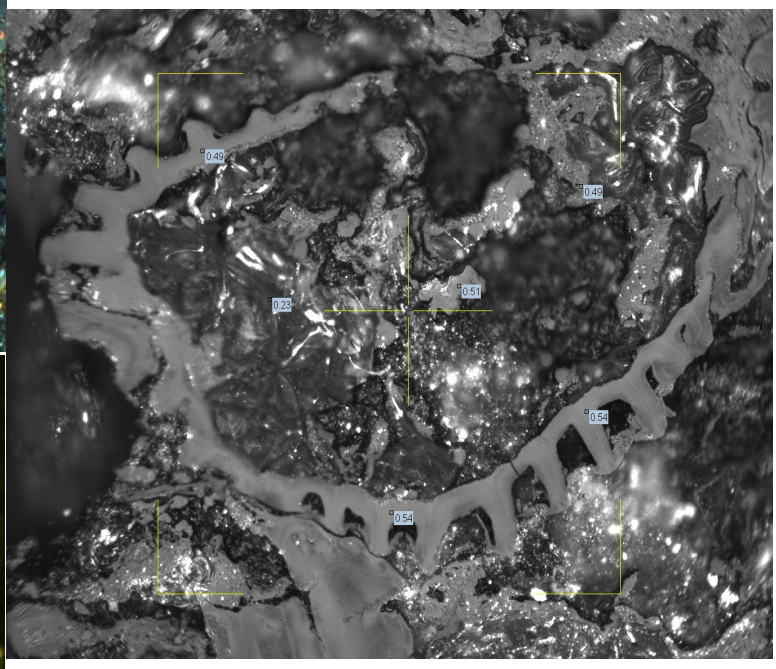
Submitted by Peter Crosdale

Sporangium with a well preserved (as vitrinite) annulus (Jurassic Walloon Coal Measures, Qld). I have NEVER seen such a thing before, and there were 3 of them in the same grain. I thought that I might have to self isolate as it looked pretty much like a fossil corona virus to me (but too big I guess).

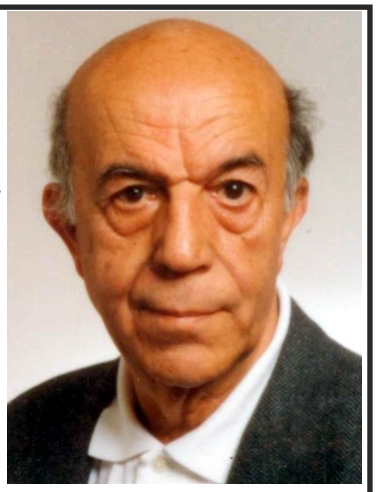
3 x same field (B&W; colour; fluorescence blue light excitation; B&W with selected Ro measurement included.







Obituary



José Javier González Prado

José Javier González Prado was born in La Polina-Sobrescobio 93 years ago as part of a family of 5 children. His childhood passed in this beautiful area of Asturias where he always liked to come back to until the last days of his life. He performed primary and secondary school studies in Gijón and graduated at the University of Oviedo, Spain first in Chemistry in 1951 and then in Geology, being part of the first promotion in 1965. He worked part-time as a lecturer in the Faculty of Chemistry from 1952 to 1963, while working at the Instituto Nacional del Carbón (INCAR-CSIC). His full-time dedication to research at INCAR started in 1963.

Prado defended his Ph.D. Thesis in 1973, in the field of microscopy of oxidised coals with Special Honours; his results are still now an essential reference. He has supervised quite a number of Ph.D. Theses on topics such as natural coke formation, coal depositional environments and relationships of coal petrology and coal-forming environments, petrology of source rocks in relation to petroleum occurrences and oil shale petrology and geochemistry. He supervised hundreds of research projects where different institutions from several countries were involved, and developed a continuous assistance to the industry of the North of Spain in many operational problems related to coke quality (steel companies), mining problems (coal producers) and characterisation of coal supplies for power stations. Dr Prado has been a key person in the creation and continuation of the organic petrology laboratory at INCAR.

In the eighties, Dr Prado was the Spanish representative in the European meetings aimed at the establishment of Coal Classification systems, in the framework of the European Coal and Steel Community. Dr Prado was always very much concerned with the improvements of the analytical procedures in microscopy, not only in the geometrical considerations and mathematical treatment of 2D data, but also in the automation of equipments. In 1973 he developed a semi-automatic system for data acquisition of reflectance measurements in microphotometer microscopes connected with computers. This was the precursor of the fully-automatic system subsequently developed for coal maceral analysis, which was able to recognise not only the three maceral groups but also the individual macerals. He was a member of the Editorial Board of the International Journal of Coal Geology from 1979 until his retirement in 1992.

Prado became a member of ICCP in 1966 where he actively participated in numerous working groups and joined most of the meetings At the 1998 meeting in Porto, Dr Prado received the Thiessen Medal Award. Dr Prado was well-known for raising intriguing questions, many of them remain unanswered even today. Dr Prado created a nice family together with Menchy and they both were very proud of their six children. Prado passed away in the same place where he was born the 7th of January of 2020. Those who knew him and worked close to him will never forget his personality.

Angeles G. Borrego

POSTPONEMENT OF THE 14TH ICCP TRAINING COURSE

ICCP Council is sorry to inform you that the 14th ICCP Course in Potsdam has been postponed to 21st-25th June 2021 due to travel and other restrictions imposed due to the COVID -19 virus.

All registrations received to date will automatically be transferred to next year (2021). However, if you would like to cancel your registration and receive a reimbursement, **please e-mail Dr. Peter Crosdale. (**mailto: peter.crosdale@energyrc.com.au)

We will continue to monitor the situation and further announcements regarding the Course will be available later this year.

We apologize for the inconvenience!

ICCP

https://www.iccop.org/postponement-of-14th-iccp-course/

We have already fixed dates for next year: 21st-25th of June

Commission III - Self-heating of Coal and Coal Wastes Working Group

The conveners of the Self-heating of Coal and Coal Wastes Working Group would like to announce that following the extensive work carried out within the numerous Round Robin Exercises in 2008-2017 on the self-heated coal waste in waste dumps, the overall and well-established results were published in 2020 in the International Journal of Coal Geology. The publication bears the following title: Development of a petrographic classification system for organic particles affected by self-heating in coal waste. (An ICCP Classification System, Self-heating Working Group – Commission III) and can be accessed at: https://www.sciencedirect.com/science/article/pii/S016651621930864X

The publication summarizes and derives criteria for distinguishing morphological forms of organic matter in coal waste dumps and establishes a classification scheme for microscopic forms related to the self-heating transformation of organic matter in coal waste. The work carried out is a relevant contribution towards the understanding of heating history in a given coal waste dump, and can be potentially applied to indicate subsequent recovery and/or environmental management.

The conveners of the Self-heating of Coal and Coal Wastes Working Group would like to thank all participants, also those being acknowledged in the above publication, for their valuable contributions, constructive remarks and suggestions, which shaped the successive outcomes of the former Round Robin Exercises and, which resulted in satisfactory identification and classification of the non-altered, altered, and newly formed particles subjected to self-heating and self-combustion processes. It was and it is a great pleasure to work with all of You.

Fig. 1. Classification scheme of organic particles affected by self-heating in coal wastes (Misz-Kennan et al., 2020)

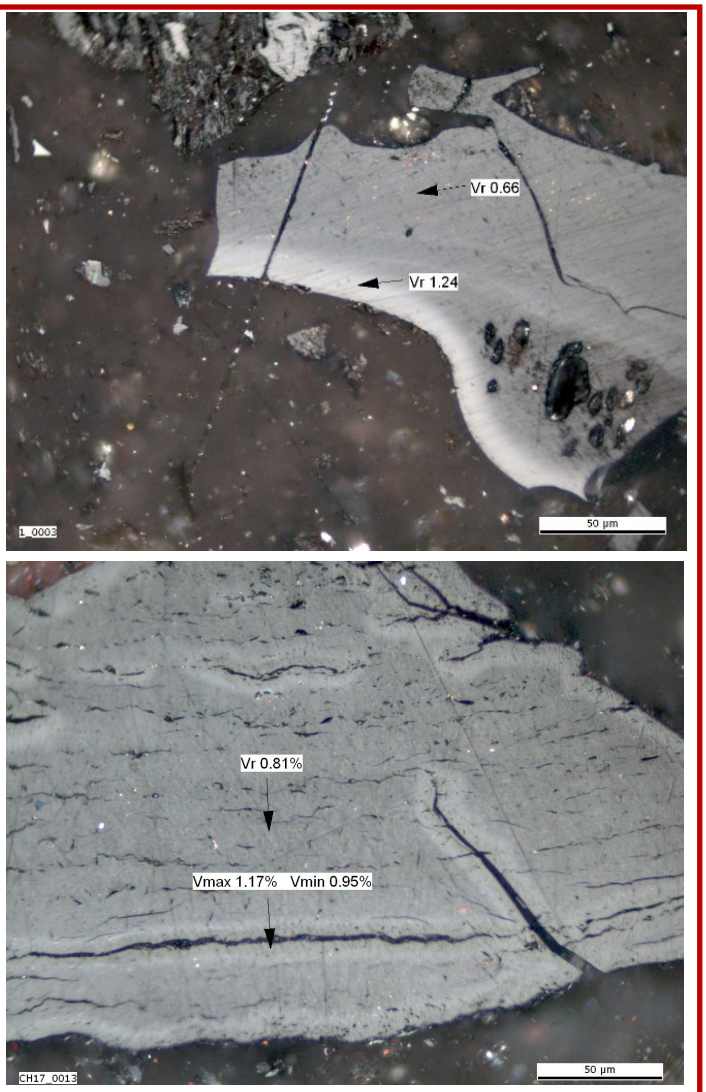
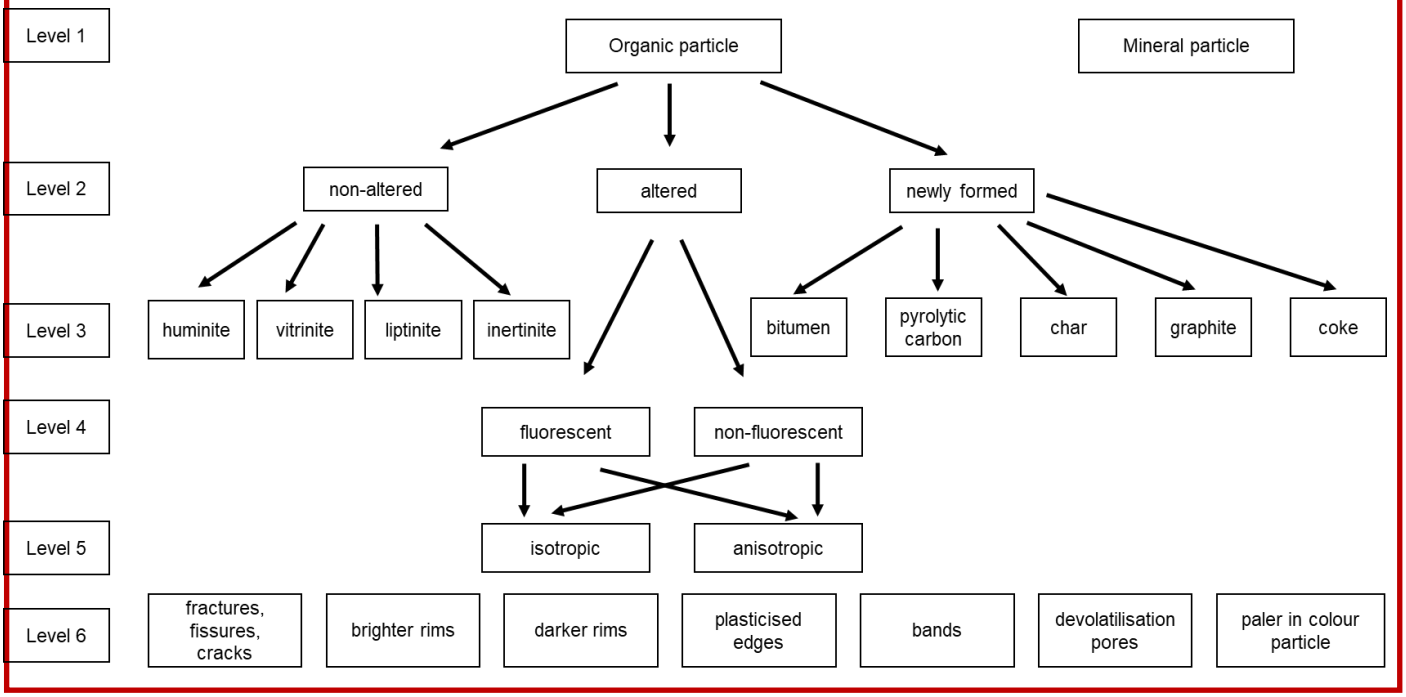


Fig. 2. Photomicrographs of oxidatively and thermally altered organic matter in coal wastes.

Thank you very much!

Best regards,

Magdalena Misz-Kennan, Jolanta Kus, and Deolinda Flores



Council of the International Committee for Coal and Organic Petrology (ICCP)

President
(2015— 2023)
Dr M Ángeles Gómez Borrego
Instituto Nacional del Carbón (INCAR-CSIC)
Carbón, Energía y Medio Ambiente
Ap 73, 33080 Oviedo, Spain
Telf: +34985119090
mailto: angeles@incar.csic.es

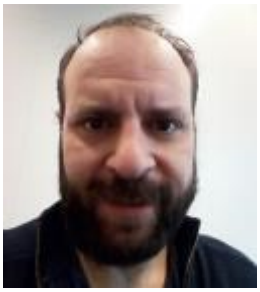
Vice-president
(2019—2022)
Dr João Graciano Mendonça Filho
mailto:graciano@geologia.ufrj.br

General secretary
(2019—2023)
Dr Mária Hámor-Vidó
mailto:hamorvido@gmail.com

Commission I Chair
(2012-2020)
Dr Stavros Kalaitzidis
mailto:skalait@upatras.gr

Commission I Secretary
(2016-2020)
Dr Dragana Zivotic
mailto:dragana.zivotic@rgf.bg.ac.rs

Commission II Chair
(2019—2023)
Dr Jolanta Kus
mailto:jolanta.kus@bgr.de



Commission II Secretary
(2019—2023)
Dr George Siavalas
mailto:georgios.siavalas@shell.com

Commission III Chair
(2015—2023)
Dr Magdalena Misz-Kennan
mailto:magdalena.misz@us.edu.pl

Commission III Secretary
(2016—2020)
Dr Sandra Rodrigues
mailto:s.rodrigues@uq.edu.au

Treasurer
(2019—2023)
Dr Peter Crosdale
mailto: peter.crosdale@energyrc.com.au

Editor
(2015—2023)
Dr Nikki Wagner
mailto:nwagner@uj.ac.za

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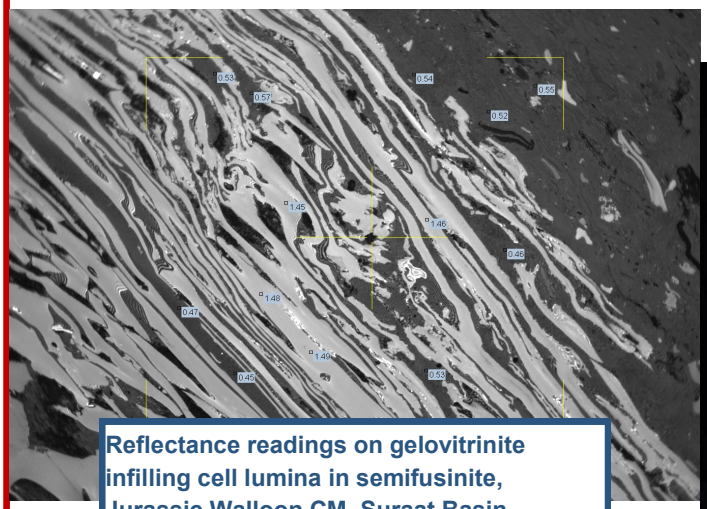
Webmaster (http://www.iccop.org): .....Contact Dr Stavros Kalaitzidis, ... mailto:skalait@upatras.gr
Archives: ..... Contact Dr Deolinda Flores, ... mailto:dflores@fc.up.pt
Membership Enquiries: ..... General Secretary .Dr Mária Hamor-Vidó mailto: hamorvido@gmail.com
.....or visit the website http://www.iccop.org
ICCP Publications & Training Material:... Dr Nikki Wagner ..... mailto: nwagner@uj.ac.za

UPCOMING EVENTS

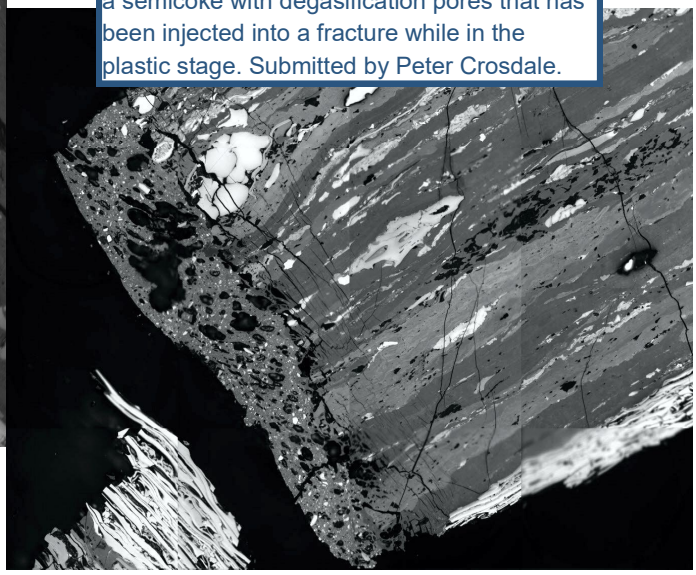
Due to the current global pandemic, most events planned for 2020 have been cancelled or postponed. As there is so much uncertainty about international travel and gatherings of people, I have not updated this event section this time.

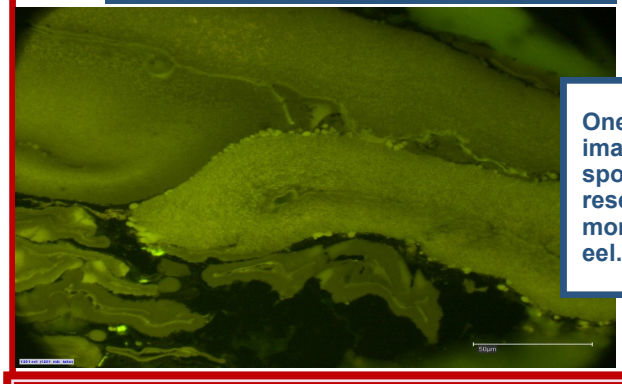
Should you wish to advertise a specific conference / workshop / seminar / course, please do contact me.



Reflectance readings on gelovitrinite infilling cell lumina in semifusinite, Jurassic Walloon CM, Suraat Basin, Queensland. Submitted by Peter Crosdale.

A photomosaic approx. 0.8mm wide. Permian coal that has been intruded. The image shows a semicoke with degasification pores that has been injected into a fracture while in the plastic stage. Submitted by Peter Crosdale.





One of my favorite images— sporinite resembling a mommy and baby eel. Witbank Coal.

PLEASE SUBMIT IMAGES TO THE Editor, with a short description.

PLEASE NOTE

ALL MEMBERS ARE RESPONSIBLE FOR MAINTAINING THEIR CONTACT DETAILS ON THE WEBSITE

Should you wish for new contact details to be published in the newsletter, please do forward these to the Editor (nwagner@uj.ac.za). Should you require your login details, please contact the General Secretary (hamorvido@gmail.com).

The ICCP Newsletter provides a forum for students, young and advanced researchers, petrologists, petrographers, and any one else, to present results, submit short reviews or articles, post notifications, request assistance, announce relevant conferences / workshops / courses. Please submit all documents for inclusion into the next ICCP Newsletter.

Membership Enquiries

General Secretary mailto: hamorvido@gmail.com
Or visit the website: http://www.iccop.org
ICCP NEWS Enquiries
Editor: Nikki Wagner / mailto: nwagner@uj.ac.za
President of the ICCP: Dr M Ángeles Gómez Borrego mailto: angeles@incar.csic.es

DEADLINE FOR CONTRIBUTIONS TO THE NEXT ICCP NEWS:

July 2020