



**THE SOCIETY FOR ORGANIC PETROLOGY**



# NEWSLETTER

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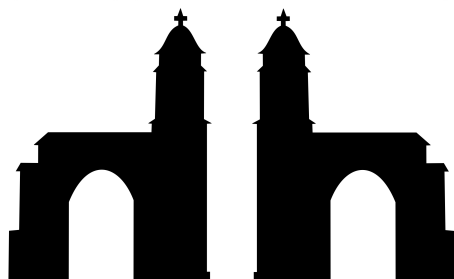
## 36<sup>th</sup> TSOP Annual Meeting

September 7 – 11, 2019  
Bloomington, Indiana, USA



*Grotesque atop Maxwell Hall, Indiana University Bloomington (photo by Agnieszka Drobniak)*

## 36th TSOP ANNUAL MEETING



BLOOMINGTON

SEPTEMBER 7-11, 2019

<https://www.tsop.org/TSOP2019>**Early Registration rates end July 15<sup>th</sup>, 2019**

The 36th Annual Meeting of The Society for Organic Petrology will be held in Bloomington, Indiana, USA from September 7 to 11, 2019. Bloomington is a vibrant little town with a diverse and rich culture situated in the south-central Indiana. Our town is a home to the Indiana University (IU). University's campus, established in 1820, is located in the heart of the Indiana Limestone Heritage Trail, and it was recognized as one of the five most beautiful collegiate campuses in the USA. Please join us in Bloomington as we celebrate 36th TSOP Annual Meeting and explore the beauty and history of Indiana's limestone!

**Organizing Committee:**

Maria Mastalerz, Agnieszka Drobniak, Arndt Schimmelmann, Indiana University Conference Services

**Host Organization:**

Indiana University, Bloomington

**Conference Venue:**

Indiana Memorial Union, Indiana University, Bloomington

**The Society for Organic Petrology**

TSOP is a society for scientists and engineers involved in coal petrology, kerogen petrology, organic geochemistry and related disciplines. The Society organizes an annual technical meeting and field trips; sponsors research projects; provides funding for graduate students, and publishes a website, Facebook Page, quarterly newsletter, annual meeting program and abstracts and special publications. Members are eligible for discounted subscriptions to Elsevier journals *International Journal of Coal Geology* and *Review of Palaeobotany and Palynology*.

**The Society for Organic Petrology Newsletter**

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© 2019 The Society for Organic Petrology (TSOP)

**GUIDELINES:**

The TSOP Newsletter welcomes contributions from members and non-members alike. Readers are invited to submit items pertinent to TSOP members' fields of study. These might include meeting reports and reviews, book reviews, short technical contributions including those on geologic localities or laboratory methods, as well as creative works such as poems, cartoons and works of fiction. Photos, graphs and other illustrations are welcomed. Low-resolution images are discouraged, as they cannot be reproduced well in print. Articles are preferred in Microsoft Word, RTF or plain text formats.

**Contact the Editor:**

Rachel Walker  
e-mail: [dr Rachel Walker@gmail.com](mailto:dr Rachel Walker@gmail.com)

**Address Changes**

Please report any changes in address or contact information to: Paul Hackley, TSOP Membership Chair,  
[phackley@usgs.gov](mailto:phackley@usgs.gov)

Members can update their own information by logging into the secure TSOP website:  
[www.tsop.org/mbrsonly/](http://www.tsop.org/mbrsonly/)

The TSOP Newsletter is published quarterly by The Society for Organic Petrology and is distributed to all Society members as a benefit of membership.

Membership in the Society is open to all individuals involved in the fields of organic petrology and organic geochemistry. For more information on membership and Society activities, please see:

[www.tsop.org](http://www.tsop.org)

For purposes of registration of the TSOP Newsletter, a permanent address is:

The Society for Organic Petrology,  
c/o American Geological Institute,  
4220 King St., Alexandria,  
VA 22302-1520 USA

**Newsletter Submission Deadlines**

**September Issue: Sept. 10<sup>th</sup>, 2019**

**December Issue: Dec. 10<sup>th</sup>, 2019**

**March Issue: March 10<sup>th</sup>, 2020**

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**TSOP is an AAPG Affiliated Society.**  
**Abstracts from annual meetings are available**  
**through AAPG Datapages.**

## TSOP Membership Dues



TSOP dues payments are due on or before **December 31st each year**. We encourage you to check your dues status and make your payment so that you can continue your TSOP membership and support the society and its work.

TSOP dues are currently set at:

### Individuals:

- \$25 per year or
- \$100 for 5 years (5 years for the price of 4!)

### Students:

- \$15 per year

### Institutional/Corporate:

- \$75 per year

You can use our convenient online dues payment system to pay dues by credit card, check (US Members), or money order.

You can login at [www.tsop.org/mbrsonly/](http://www.tsop.org/mbrsonly/) and select 'Online dues payment' or go to [www.tsop.org/dues](http://www.tsop.org/dues) and access the online form without logging in.

Thank you for your interest and support of TSOP and we look forward to a renewal of your TSOP membership.



[www.facebook.com/OrganicPetrology](http://www.facebook.com/OrganicPetrology)



A coal carving of unknown age and origin depicting a ship and a zeppelin.

## Sponsorship Award for TSOP Meeting

The Indiana University Office of the Bicentennial has awarded a \$10,000 sponsorship to support the 36th Annual Meeting of the Society for Organic Petrology in Bloomington!! Thank you!

Indiana University was founded on January 20, 1820, making it one of the oldest public universities in the USA. To celebrate its Bicentennial, IU has developed a multi-year, multi-campus program that will recognize and chronicle IU history, showcase the university's significant contributions to the world, and set a course for the next century. For more information about the Bicentennial program, please visit <https://200.iu.edu>.



1820–2020

## INDIANA UNIVERSITY BICENTENNIAL

A BICENTENNIAL PROJECT

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### In Memoriam Dr. Chen-Lin Chou (1943–2019)



Dr. Chen-Lin Chou, an outstanding scientist in the fields of geochemistry and coal geology, passed away unexpectedly of cardiac arrest at the age of 75 on the evening of May 31, 2019.

Chen-Lin Chou was born on October 8, 1943, in Jiangsu Province, China, the eldest son of 8 children. He journeyed from Shanghai to Taiwan with his family when he was just 5 years old. After receiving his Bachelor's degree in Geology from National Taiwan University in 1965, he traveled to the United States of America. While a graduate student at the University of Pittsburgh, he met Susan Wen and they were married on June 14, 1970.

He received many honors over the course of his graduate studies, but the crowning achievement was the coveted Ninner Meteorite Award for his original paper entitled "Gallium and Germanium in the Metal and Silicate Phases of L- and LL- Chondrites: Implications for the Thermal History of the Chondrites." In 1971, he not only received his PhD in Geochemistry, but his daughter Cynthia was born. The young family drove across the country for him to start his academic career at the University of California Los Angeles, and drove again across the country in 1975 to Toronto, Canada, where his son Peter was born in 1976. He was busy with research and teaching at California State University, Fullerton, University of Toronto, and McMaster University.

Four years later he settled in Champaign, IL, where he was a Geologist in the Illinois State Geological Survey studying the geochemistry and coal geology of the Illinois Basin until his retirement in 2002. By then he had already been around the world many times, but in 2002 his travels came full circle. He returned to the small town of Jiangyin in Jiangsu Province to visit his birthplace in China, and was so moved to see that the house in which he was born was still standing.



He began his collaborative research with colleagues in East Asia in 1993 when he accepted a visiting professorship at the National Central University in Taiwan. He held academic appointments at the China University of Mining and Technology (Beijing), University of Science and Technology of China, Taiyuan University of Science and Technology, China University of Geosciences, Anhui University of Science and Technology, Suzhou University, and Western Kentucky University. In 1997, he was elected Fellow to the Geological Society of America. He was consultant to the Exploration and Development Research Institute of Taiwan, and served on the editorial board for Journal of Palaeogeography.

Chen-Lin joined the editorial board of International Journal of Coal Geology in 2010. His great knowledge of geoscience was a valuable asset to the journal, consistently delivering timely, careful and insightful comments to authors of manuscripts he reviewed. Chen-Lin co-edited the special issue of the 23<sup>rd</sup> Annual Meeting of The Society for Organic Petrology for International Journal of Coal Geology (2008, vol. 73, p. 1-98).

Chen-Lin's knowledge of geoscience was profound. Through his over 130 publications and extensive collaborations, he made many important contributions to the science of meteorites, elemental and isotopic geochemistry, coal geology, and ore deposit geochemistry, as well as the impact of coal mining and coal utilization on the environment and human health. Of particular note, his work on the origin, distribution, and mode of occurrence of sulfur in coal was recognized and cited by many geologists around the world. For example, his paper "*Sulfur in coals: A review of geochemistry and origins*" (International Journal of Coal Geology, 2012, vol. 100, p. 3–21) was listed in the top 1% of highly cited papers on the Web of Science.

His co-authored paper "*Geochemistry of trace elements in Chinese coals: A review of abundances, genetic types, impacts on human health and industrial utilization*" (International Journal of Coal Geology, 2012, vol. 94, p. 3–21) was also recognized as one of "The Most Influential 100 International Papers in 2012 in China," selected from 190,100 international peer-reviewed publications.

Chen-Lin attended a number of annual meetings of The Society for Organic Petrology (TSOP), including as one of organizers of the 2006 TSOP annual meeting in Beijing where he was not only instrumental to the arrangement of the technical sessions of the meeting, but also to the field trip to the Datong Coalfield in Shanxi Province.

Chen-Lin also taught university courses, and was invited to lecture and chair scientific meetings, including delivering the keynote address at international symposiums held in China. He was also the first to organize a series of scientific meetings called the Cross-Straits Conference on Resources and Environmental Geochemistry, bringing together scientists from the Chinese Mainland and Taiwan for the first time in history.

We particularly wish to acknowledge how well he mentored numerous young professors, postdoctoral fellows, and graduate and undergraduate students. He generously helped anyone who asked with regards to presenting lectures, analyzing elemental data, running experimental facilities, and reviewing manuscripts. He was always ready and willing to discuss how to approach answering a yet unanswered scientific question, and enthusiastically joined in field practice and field investigations.

Chen-Lin's optimistic and kind smile, patience, and straightforward manner made him stand out among his peers, having such genuine excitement for the process of geological investigation and scholarship among scientists.

Chen-Lin was a deeply philosophical man who devoted his life to his family and his true passion for science and scholarly pursuits. He led a most distinguished career in the geosciences and will be missed by all who were privileged to know and work with him.

Shifeng Dai

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### **Danielle Kondla Memorial Graduate Scholarship**



The University of Calgary has initiated a scholarship in the memory of the late Danielle Kondla with the support of her family and the Faculty of Science at the university.

This scholarship is in memory of Danielle's dedication to the department at the University of Calgary, and her contributions to geoscience. The aim of the scholarship is to support female graduate geoscience students with a field research component as part of their studies.

Danielle was also an active member of The Society for Organic Petrology. She organized student events at several TSOP meetings and chaired the Student Affairs Committee. She received the TSOP Best Student Presentation Award and the Student Travel Award three times each. At the 2017 TSOP Annual Meeting in Calgary, Danielle was awarded the TSOP Distinguished Service Award.

From the University of Calgary page:

"Although her life was short, she filled in every moment with adventure and accomplishments. Danielle was her most authentic self when she was in nature. She truly enjoyed exploring, collecting rocks, camping, and hiking. Danielle had a unique connection to animals, she was an accomplished equestrian, and completed several marathons and triathlons. She was a kind soul who cherished sharing laughs with her family and friends. Danielle's passion and dedication to geology led her to a career that allowed her to travel the world, making lasting friendships along the way. She passed away from cancer in 2017 at the age of 34. Danielle set an excellent example for us all how life should be lived."

The university website for accepting donations towards the scholarship is here:

<https://netcommunity.ucalgary.ca/DanielleKondla>



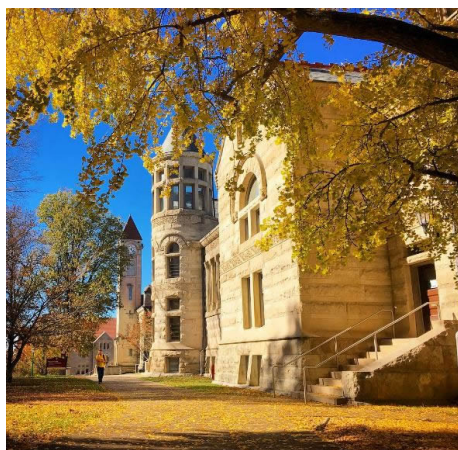
## 36th TSOP ANNUAL MEETING



The conference organizers are delighted to invite you to the 36<sup>th</sup> Annual Meeting of the Society for Organic Petrology! The conference will take place from September 7 to 11<sup>th</sup> at the Indiana Memorial Union in Bloomington, IN, USA.

We have planned an exciting 5-day event consisting of technical sessions, pre- and post-conference field trip, and a short course. Please refer to the conference website (<https://www.tsop.org/TSOP2019>) for information related to the conference events, registration, travel and accommodations. If you have any questions, please don't hesitate to contact the conference organizers at [agdrobni@indiana.edu](mailto:agdrobni@indiana.edu)

**Please remember that the early registration ends on July 15<sup>th</sup>!**



*Indiana University campus, photos by IU and A. Drobnik*



## TSOP 2019 CONFERENCE SCHEDULE

	SATURDAY September 7	SUNDAY September 8		MONDAY September 9	TUESDAY September 10	WEDNESDAY September 11
8:00 – 8:30	Pre-conference field trip			Registration (Coffee and light breakfast) IMU Dogwood Room (M045)		Post-conference field trip
8:30 – 9:00			Short course  IU Luddy Hall 700 North Woodlawn Ave., Room 0117	Welcome	Technical sessions IMU Dogwood Room (M045)	
9:00 – 9:30		Free guided tour of IU campus		In Memoriam		
9:30 – 10:00				Technical sessions IMU Dogwood Room (M045)	Coffee break	
10:00 – 10:30				Coffee break	Technical sessions IMU Dogwood Room (M045)	
10:30 – 11:00			Technical sessions IMU Dogwood Room (M045)			
11:00 – 11:30						
11:30 – 12:00						
12:00 – 12:30		Lunch break		TSOP general meeting and business lunch IMU Georgian Room (161)	Group photo and lunch break (lunch not provided)	
12:30 – 13:00						
13:00 – 13:30		Short course  IU Luddy Hall 700 North Woodlawn Ave., Room 0117		Technical sessions IMU Dogwood Room (M045)	Technical sessions IMU Dogwood Room (M045)	
13:30 – 14:00						
14:00 – 14:30				Technical sessions IMU Dogwood Room (M045)	Technical sessions IMU Dogwood Room (M045)	
14:30 – 15:00						
15:00 – 15:30		Technical sessions IMU Dogwood Room (M045)	Technical sessions IMU Dogwood Room (M045)			
15:30 – 16:00				Coffee break		
16:00 – 16:30			Technical sessions IMU Dogwood Room (M045)	Closing ceremony		
16:30 – 17:00						
17:00 – 17:30		Icebreaker & Registration IMU Federal Room (269)	Poster session IMU Frangipani Room (M051)			
17:30 – 18:00						
18:00 – 18:30						
18:30 – 19:00	TSOP Council Meeting IMU Charter Room (M009)	Student event Nick’s English Hut	Conference dinner IMU Tudor Room (169)			
19:00 – 19:30						
19:30 – 20:00						
20:00 – 20:30						

**TSOP 2019 SHORT COURSE****Organic petrography and biomarker and isotopes geochemistry of unconventional systems**

It is a pleasure of the Organizing Committee to present all-day pre-meeting short course focusing on **organic petrography and biomarker and isotopes geochemistry of unconventional systems**.

The short course will be led by Maria Mastalerz, Simon Brassell, Arndt Schimmelmann, and Peter Sauer.



Maria Mastalerz



Simon Brassell



Arndt Schimmelmann



Peter Sauer

The short course will be held on Sunday, September 8 from 8:30 to 16:00 at the Indiana University Luddy Hall (School of Informatics, Computing and Engineering) in room 0117 at 700 North Woodlawn Avenue. Luddy Hall building is within walking distance (10 minutes) from the TSOP conference venue at the Indiana Memorial Union.

More info: <https://www.tsop.org/TSOP2019/workshop.htm>

## TSOP 2019 PRE-CONFERENCE FIELD TRIP

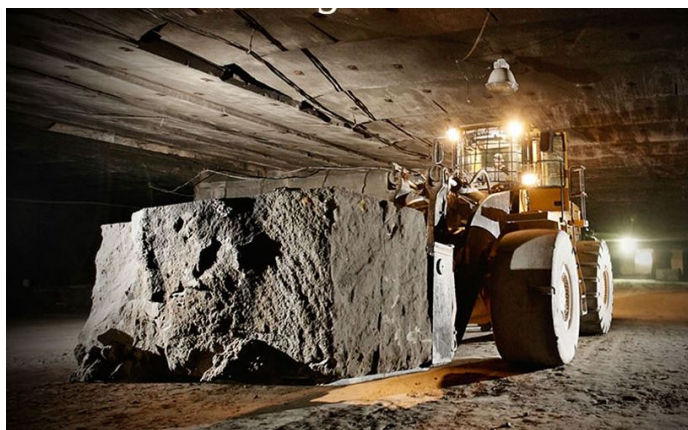
### Salem Limestone – America's building stone

Limestone is a big part of the history of south-central Indiana. Indiana's limestone was not only used on many of the Indiana University buildings, but also on other notable buildings including the Empire State Building, Rockefeller Center, and Yankee Stadium in New York; and the Pentagon and Lincoln Memorial in Washington, DC.

During our pre-conference field trip, we will learn about the geological conditions that led to forming of the Salem Limestone – America's building stone, the history of the limestone industry, and we will take a look at 3 limestone quarries and a limestone fabrication facility.

The field trip is scheduled for Saturday, September 7, and will be led by Dr. Todd Thompson, Indiana State Geologist and the Director of the Indiana Geological and Water Survey.

More info: [https://www.tsop.org/TSOP2019/pre-conference\\_trip.htm](https://www.tsop.org/TSOP2019/pre-conference_trip.htm)



*Field trip stops, photos by Elliot Stone, A. Drobnik and P. Sturgeon*



## TSOP 2019 POST-CONFERENCE FIELD TRIP

### Lower and Middle Pennsylvanian strata along the eastern margin of the Eastern Interior Basin

During our post conference field trip, we will examine exposures of Lower and Middle Pennsylvanian (Langsettian-Duckmantian) strata, assigned to the Caseyville and Mansfield Formations, along the eastern margin of the Eastern Interior (Illinois) Basin near the town of Cannelton, Indiana. Special emphasis will be placed on the origin of coal beds in this interval, using palynologic, petrographic and geochemical data. Stratigraphic relationships with other areas, worldwide, will also be discussed.

The field trip will be held on Wednesday September 11 and will be led by Cortland Eble and Steve Greb from the Kentucky Geological Survey.

More info: [https://www.tsop.org/TSOP2019/post-conference\\_trip.htm](https://www.tsop.org/TSOP2019/post-conference_trip.htm)



*Field trip stops, photos by C. Eble*



**Thank you to TSOP 2019 generous sponsor!**



1820–2020

# INDIANA UNIVERSITY BICENTENNIAL

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A BICENTENNIAL PROJECT

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## Application of optical microscopy in the analysis of contaminants in the wood pellets

### INVITATION FOR PARTICIPATION

The history of wood pellet production began with the oil crisis of the 1970s when they were manufactured to replace oil for heating purposes. Since the 1990s, there has been rejuvenation in the usage of wood pellets as they have become an alternative to natural gas, oil, or coal, especially in European Union countries. For example, in Italy, Denmark, Germany, Sweden, France and Poland wood pellets are used in boilers for heating of water in houses. The pellets are commonly produced from sawdust, preferably of deciduous trees, but in order to maintain low emissions upon combustion, they must be free of contaminants.

Organic petrology techniques can be used to identify and quantify contaminants in wood pellets. Our previous studies documented a range of contaminants including plastics, coal, rust, bark grains and metal, demonstrating that optical microscopy could be an effective tool to assess the purity of wood pellets. However, because optical microscopy has been used only recently to evaluate the purity of wood pellets, and considering a variety of potential contaminants present, efforts are needed to make such analyses reproducible and standardized.

We would like to invite interested parties to participate in a round-robin analysis of wood pellets and their contaminants. The pellet samples are available and will be sent to participating researchers. If you are interested in participation in this exercise, **please contact Iwona Jelonek** at the Silesian University in Poland ([iwona.jelonek@us.edu.pl](mailto:iwona.jelonek@us.edu.pl)).



Fig. 1A. Wood pellets free of impurities



Fig. 1B. Sample of wood pellets free of impurities, macroscopic image.

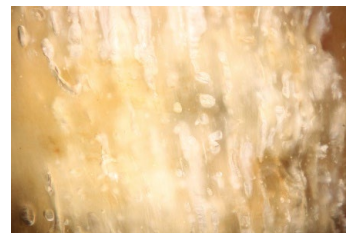


Fig. 1C. Fragment of biomass in the examined wood pellet samples, microscopic image, reflected light.

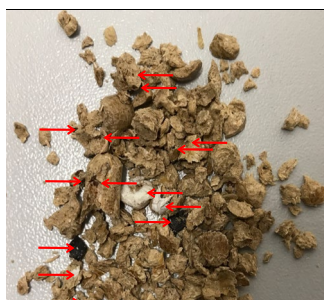


Fig. 2A. Wood pellets with a high content of impurities



Fig. 2B. Sample impurities in the wood pellets, macroscopic image.

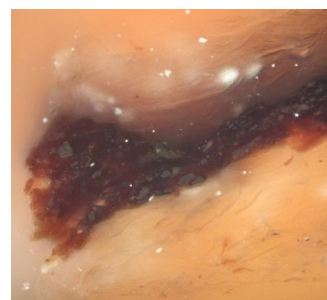


Fig. 2C. Bark grains in the examined wood pellet samples, microscopic image, reflected light

## CALENDAR OF EVENTS



2019



Please send in meeting, short course and special event announcements to the Editor

<http://www.tsop.org/events.html>

	<p><b>August 18-23, 2019</b>  <a href="#">Goldschmidt Conference</a> - Barcelona, Spain</p>
	<p><b>September 3 -6, 2019</b>  <a href="#">2019 International Pittsburgh Coal Conference</a> - Pittsburgh, Pennsylvania, USA</p>
	<p><b>September 7-11, 2019</b>  <a href="#">36th Annual TSOP Meeting</a> - Bloomington, IN, USA</p>
	<p><b>September 15-21, 2019</b>  <a href="#">71st ICCP Annual Meeting</a> – The Hague, Netherlands</p>
	<p><b>September 22-25, 2019</b>  <a href="#">GSA Annual Meeting</a> – Phoenix, AZ, USA</p>
	<p><b>December 9-13, 2019</b>            2019 AGU Fall Meeting - San Francisco, CA, USA</p>