

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

September 14 – 18, 2020 Xuzhou, China



Pan'an Lake, Xuzhou, Jiangsu Province, China. Photo from Jiangsu Facebook Page.

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

## September 14 – 18, 2020

## Xuzhou, China

The 37th Annual Meeting of The Society for Organic Petrology will be held in Xuzhou, China from September 14 to 18, 2020. Xuzhou is a famous historical, cultural and excellent tourism city in China. Specifically, the hotel is situated on the west side of Yunlong Lake, which is a Class 5A Tourist Spot in China.

Field trips will include the Jiawang Stromatolite Park and Pan'an Lake, along with visits to Confucian Mansion, Confucian Forest and Confucian Temple located in Qufu City in Shandong Province.

#### See pages 12 – 16 for details

#### Organizing Committee:

Professor Shifeng Dai Professor Wenfeng Wang Professor Jian Shen Associate Professor Wu Li Associate Professor Wei Ju Dr. Yang Wang Dr. Jingjing Liu Mr. Yuguo Liu Dr. Piaopiao Duan

#### Host Organizations:

China University of Mining and Technology

No-1, Daxue Road, Xuzhou, Jiangsu, 22116, P.R. CHINA

China University of Mining and Technology (Beijing)

D-11, Xueyuan Road, Haidian District, Beijing 100083, P.R. CHINA

## Visit the TSOP 2020 Meeting Website!

#### 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*.

Vol. 36, No. 4

The Society for Organic Petrology Newsletter (ISSN 0743-3816) is published quarterly © 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 editor@tsop.org

#### Membership Information:

Please report any changes in address or contact information to Brett Valentine, TSOP Membership Chair: <u>bvalentine@usgs.gov</u>

Members can also update their own information by logging into the secure TSOP website: 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: <u>www.tsop.org</u>

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**

March Issue: March 10th, 2020 June Issue: June 10th, 2020 September Issue: Sept. 10th, 2020 December Issue: Dec. 10th, 2020

## **Table of Contents**

TSOP Membership Dues	. 4
TSOP President's Letter	. 4
Microscope Wanted	. 5
Wood Pellet Exercise: Call for Participants	
New TSOP Members	. 7
37 <sup>th</sup> Annual TSOP Meeting	12
Calendar of Events	17
Collage by Judy Hower	18



A vintage desk set carved from anthracite coal. Photo from 'The Art of Anthracite Coal Carving': <u>http://journalofantiques.com/features/the-art-of-anthracite-coal-carving/</u>

## **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 <u>www.tsop.org/mbrsonly/</u> and select 'Online dues payment' or go to <u>www.tsop.org/dues</u> 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.



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Facebook

www.facebook.com/OrganicPetrology

## AAPG Datapages,Inc.

TSOP is an AAPG Affiliated Society. Abstracts from annual meetings are available through <u>AAPG Datapages</u>.

## **TSOP President's Letter**

Greetings TSOP Members,

I think I'm on the hook for some type of President's column, so here goes ....

My first official act as new TSOP President was to give the Danielle Kondla Best Student Presentation Awards at the Bloomington Annual Meeting, to the very deserving winners for poster and oral presentations. Dakota Lindsey from SIU received the best student poster award for his presentation on modified open-system hydrous pyrolysis and Heather Lawson from Indiana University received the best oral presentation award for her talk on dynamic failure in coals seams. Not only did Maria, Agnieszka and Arndt organize a fantastic meeting, with great field trips and short courses, but at the conference dinner we were treated to some of the best ballroom dancing in the world, led by none other than Maria and other staff and students from the Indiana Geological and Water Survey.

Check out the video on TSOP's Facebook page, you won't be disappointed.

I'd like to welcome our new Vice-President Kaydy Pinetown from CSIRO down under. Kaydy will be Vice-President until 2021 and then she'll become President at the conclusion of the 2021 Annual Meeting. Also, we welcome to TSOP Council Irena Kostova-Dineva who will serve as TSOP Councilor from 2019-2021.

Over the last month or so I've spent some time updating the TSOP Procedures Manual, the recipe book for how TSOP does its business. As part of that process, we'll have a few updates to our Bylaws, which you can find at https://www.tsop.org/bylaws.html

#### Vol. 36, No. 4 THE SOCIETY FOR ORGANIC PETROLOGY NEWSLETTER December 2019

Please look for the ballot and make sure you vote on Bylaws changes, when the time comes. Thanks in advance for your commitment to keeping TSOP current and relevant in our business processes.

Next year's Annual Meeting will be in Xuzhou, China, hosted by Shifeng Dai. Shifeng has great plans for us and we'll have the opportunity to visit the home of Confucius, the Confucian Mansion. Then on tap we have Sofia, Bulgaria, in 2021 hosted by Irena Kostova-Dineva, then Bogotá, Colombia, hosted by Tim Moore and Jillian Pearse in 2022, followed by Patras, Greece, hosted by Stavros Kalaitzidis in 2023. Looks like we'll all be earning some airline miles!

If you're interested in organizing a future TSOP meeting, we're looking for a host for the 2024 meeting. If you are interested to host, please don't hesitate to contact me at phackley@usgs.gov or contact any other members of the TSOP Council.

I look forward to seeing everyone in Xuzhou next year.

PAUL

Paul Hackley, TSOP President 2019-2021

### Organic Petrography Microscope Wanted

## Thomas Demchuk Adjunct Professor, LSU

Do you have a used and functional organic petrography, reflected light microscope sitting in your laboratory or office simply collecting dust? Consider donating it to the LSU in Baton Rouge. The Center for Excellence in Palynology, Louisiana State University is hoping to initiate research in organic petrography to compliment the excellent studies being undertaken in palynology and other organic studies. The Center is under the exemplary guidance of Endowed Chair Dr. Sophie Warny, with assistance from other distinguished palynologists and researchers well-versed in kerogen and organic examination.

LSU CENEX currently has need for an organic petrography microscope as part of a graduate student project into the characterization of coals via palynology, organic geochemistry and organic petrography. It is hoped that all the associated study will be conducted by the graduate student(s) but there is need for a functional microscope to be able to carry out reflected light identification of the coal macerals, vitrinite reflectance for maturation assessment, and examination of the dispersed organic matter within the associated clastic strata.

A donation of a microscope would greatly enhance the research program within the Center and may qualify as a tax deductible contribution. In-kind gifts made to LSU require evidence of value – invoice, appraisal, price list, etc. If valued above \$5,000, an independent qualified appraisal is required.

The desire is to attract other high-quality graduate students to be able to conduct organic petrography research in association with the other high-quality analyses being undertaken within the Department, particularly palynology but also other microscopic, geochemical and stratigraphic techniques.

Any questions can be forwarded to Thomas Demchuk at <u>tdemchuk@swbell.net</u> and I will be happy to answer your inquiries.

Regards, Thomas Demchuk CENEX Adjunct Professor Louisiana State University Baton Rouge, LA

## Application of optical microscopy in the analysis of contaminants in 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 commonly produced from sawdust. are 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, variety considering а of potential and 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 (<u>iwona.jelonek@us.edu.pl</u>).



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.

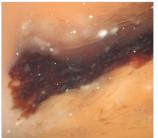


Fig. 2C. Bark grains in the examined wood pellet samples, microscopic image, reflected light

#### Vol. 36, No. 4

## **New TSOP Members**

#### Dr. Agnieszka "Aga" Furmann



Dr. Agnieszka "Aga" Furmann received B.Sc. and M.Sc. degrees in geology from the University of Silesia in Sosnowiec, Poland (2008), and second M.Sc. and Ph.D. in geology from Indiana University Bloomington in 2015, completed with a Ph.D. dissertation entitled: The Late Cretaceous Belle Fourche and Second White Specks Formations in west-central Alberta, Canada as an emerging hybrid source rock/reservoir shale play. She joined the Schlumberger Company in June 2015 as an organic petrographer and analyzed samples from unconventional formations located worldwide. Her main expertise is organic petrography and geochemistry of coal and sourcerocks reservoirs, combined with sedimentary petrology, mineralogy, and porosity studies. She focused her most-recent work on obtaining the kerogen density values for unconventional reservoirs.

### Batbold Demberelsuren



Batbold Demberelsuren, is a doctoral student at the Department of Geology and Hydrogeology, School of Geology and Mining Engineering, Mongolian University of Science and Technology (MUST). She graduated with a BSc in 2007 and MSc in 2008 from the Department of Geology, School of Geology and Petroleum Engineering, MUST. After MSc graduation, Batbold worked as a teaching assistant at the Department of Geology, MUST from 2009 to 2010. Her research focus is on sedimentology and coal.

#### Dr. Beilei Sun



Dr. Beilei Sun received her PhD in Coal Geology from the Taiyuan University of Technology, China in 2014. Her research interests include trace elements in coal, thermal maturity, and CBM geology.

#### Dr. Du Meili



Dr. Meili's organic petrology research interests include maceral characteristics of coal, oil shale, dispersed organic matter, palynofacies, characterization and composition of organic matter, thermal maturation, trace elements in organic matter, the spectral characteristics and molecular structure of organic matter, and the application of organic petrology in petroleum exploration, coal resources development and utilization.

### Ferran Bagaria Rovira



Ferran Bagaria Rovira graduated in Geology from the University of Barcelona (2015) and received a M.Sc. in Geology and Environmental management of mineral resources from the University of Huelva (2016). Currently he is combining the work as a geochemical consultant in an environmental consulting company (Amphos21 consulting) with the doctorate studies from the Technical University of Catalonia. Ferran's PhD project is based on the optimization of isolation and characterization protocol of solid organic matter (soluble and insoluble) from Boom Clay formation.

### Dr. Georgina Erra



Dr. Georgina Erra has a degree in Botanical Biology, from the Faculty of Natural Sciences and Museum of La Plata (FCNyM), National University of La Plata (UNLP) in 2000 and she received her PhD in Paleobotany in 2010. Since 2010 Georgina has been a professor in the Chair of Paleontology II of the FCNyM, UNLP. In 2014 she began as an Associate Researcher with the National Scientific and Technical Research Council (CONICET) of Argentina. Also, in 2014 she started to develop an organic petrology laboratory and form a working group for YTEC (YPF Technology) to provide solutions to the hydrocarbon industry. She is interested in learning more and sharing experiences in topics such as identification of macerals, structure of kerogen, palynofacies, reflectance of the vitrinite, maturity of the organic matter, etc.

#### **Heather Lawson**



Heather Lawson received a Bachelor of Science degree in Geology from Fort Lewis College in Durango, CO, in 2005. She also earned a Master of Engineering degree in Geotechnics from the University of Missouri, Rolla. Heather has worked in the underground coal mining industry (with brief forays into deep underground silver) since 2005, focusing on mine ground control. She currently works for the National Institute for Safety and Health (NIOSH) through the Spokane Mining Research Division (SMRD), where her primary area of interest for the past few years has been dynamic failure risk assessment and prevention. Her PhD work involves the application of organic petrology to identifying high dynamic failure risk coal seams, with the overall goal of improving miner safety.

### Dr. Irena Kostova-Dineva



Dr. Irena Kostova-Dineva is a professor in the Department of Geology, Paleontology and Fossil Fuels at the Sofia University "St. KI. Ohridski" in Bulgaria. She is a lecturer on Organic Petrology, Coal Geology, Applied Organic Petrology, Dispersed Organic Matter, Environmental Impact of Coal Production and Utilization. Her PhD theses, which were defended in 1999 is related to mineralogy and geochemistry of sulphur in Bulgarian coals. Irena's present research interests are related to organic petrology; geochemistry, mineralogy and petrography of coal and coal combustion by-products; Hg in coal & fly ash from TPPs and its impact on the environment and human health; Toxic elements in coal, waste products and soils.

## Oskar Hagelskjær



Oskar Hagelskjær received his BSc in Geology from the Department of Geoscience, Aarhus University in 2018. He has recently completed a geological project in organic petrology and geochemistry of the Upper Jurassic Farsund Formation source rock of the of the Danish and Norwegian North Sea sector. He is currently enrolled in MSc program under supervision of Professor Hamed Sanei in the Lithospheric Organic Carbon (L.O.C.) Group of the Department of Geoscience, Aarhus University. His project is in collaboration with the Organic Geochemistry group of Total in Pau, France and it is on the hydrocarbon potential and thermal maturity of the Oligocene source rock located in the Off-shore Black Sea of Bulgaria.

### Tim Gognat



Tim Gognat received his B.S. in Earth Science (1973) from Indiana State University and his M.S. in Geology (1977) from Southern Illinois University at Carbondale. Tim's experience includes 42 years of oil & gas exploration/development within the Illinois, Michigan, and Williston intracratonic basins, the North Slope of Alaska, South Sumatra basin, and the Cretaceous of the Northern Great Plains and Wyoming. He has completed coal resource and mining production studies for the BLM and USGS that included work within the Hannah, Powder River, Piceance, Southern Wasatch Plateau, and San Juan basins. His current interests include carbonate reef development, analysis of fracture systems applied to reservoir enhancement, hydrothermal alteration of carbonate rocks, and thermal maturation of organic matter. Of particular interest is the characterization of organic matter within Devonian and Ordovician strata.

### Dr. Xiamin Xie



Dr. Xie worked at the Sinopec Wuxi Institute Center from March 2009 to August 2019 and got a PhD from Aachen University (Germany) in early 2019. Through combination of organic petrology, geochemistry and petrophysical, Xiaomin's research focuses on conventional source rocks, shale oil and shale gas systems. She enjoys organic petrology research and is looking forward to further expanding her knowledge of the field.

## Xiaowei Zheng



Xiaowei Zheng is currently a PhD student in the department of geoscience, Aarhus University. She is doing her research on organic petrology and organic geochemistry of lower Paleozoic shale of Scandinavian area. Her research interests include a focus on the zooclastic kerogen types, maceral composition and the hydrocarbon generation characteristics. Vol. 36, No. 4 THE SOCIETY FOR ORGANIC PETROLOGY NEWSLETTER December 2019

#### Xin Guo



Xin Guo is currently a PhD candidate at China University of Mining and Technology, Beijing. Her research interests are petrology of coals from Permian, Jurassic, and Neogene ages of China, petrological and structural characteristics of unburned carbon in entrained flow coal gasification residues. Now Xin Guo is studying at the Kentucky Geological Survey, University of Kentucky as a visiting student under supervising of Dr. Cortland F. Eble. Her thesis is focus on petrological characteristics of unburned carbon, char, and coke derived from coal gasification and pyrolysis.

#### Yafeng Wang



Yafeng Wang is currently a Ph.D. candidate at China University of Mining and Technology, Beijing, majoring in Mineral Resource Prospecting and Exploration. His research interests are petrology, mineralogy, and geochemistry of coal and coal utilization by-products, and the environmental impacts of potentially hazardous trace elements in coal gasification by-products. Now Yafeng is a visiting Ph.D. student at the University of North Dakota, Energy and Environmental Research Center (EERC) and focuses on the application of CCSEM on coal and coal ash.



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

## September 14 – 18, 2020

## Xuzhou, China

## http://tsop-iccp-2020.com/home

The 37th Annual Meeting of The Society for Organic Petrology will be held in Xuzhou, China from September 14 to 18, 2020. Xuzhou is a famous historical, cultural and excellent tourism city in China. Specifically, the hotel is situated on the west side of Yunlong Lake, which is a Class 5A Tourist Spot in China.

Field trips will include the Jiawang Stromatolite Park and Pan'an Lake, along with visits to Confucian Mansion, Confucian Forest and Confucian Temple located in Qufu City in Shandong Province.

## Location

The New Century Hotel Xuzhou is located in Xuzhou, a famous historical, cultural and an excellent tourism city in China. Specifically, the hotel is situated on the west side of Yunlong Lake, which is the Class 5A Tourist Spots in China.



New Century Hotel, Xuzhou Hotel. Photo from hotel website.

## Hosts and Organizing Committee

#### Host Organizations

China University of Mining and Technology, Xuzhou, Jiangsu, P.R. CHINA China University of Mining and Technology (Beijing), Beijing, P.R. CHINA

#### **Organizing Committee**

Professor Shifeng Dai Professor Jian Shen Associate Professor Wei Ju Dr. Jingjing Liu Dr. Piaopiao Duan Professor Wenfeng Wang Associate Professor Wu Li Dr. Yang Wang Mr. Yuguo Liu

## **Conference Topics**

- Evaluation of the unconventional resources including shale gas, shale oil, coal bed methane, and gas hydrates.
- Coal geology, resources, and utilization.
- Toxic/Valuable trace elements and minerals in coal and coal ash.
- Petroleum geology, coal and organic petrology, and geochemistry.
- New techniques and applications.

## **Technical Sessions**

- Coal: geology, technology and the future.
- Shale gas and oil shale: geology, geochemistry, and technology.
- Coal bed methane: geology, technology and the future.
- Elements and minerals in coal and coal by-products: environmental concerns and valuable-metal utilization.
- Conventional oil and gas: geology, organic geochemistry, and petrology.

## **Call for Papers**

Abstract submission is open, and abstracts should be submitted by **June 15, 2020** via email to <u>liujj@cumt.edu.cn</u> See the website for more details about accepted abstract formats: <u>http://tsop-iccp-2020.com/about/6</u>

## **Conference Program**

#### Monday, September 14

TSOP Registration	08:00-21:00	Reception lobby of New Century Grand Hote I
Short Course	08:00-15:30	Daming Hall
Ice Break Breaker Party	18:00-19:30	2nd floor
Student Activity	19:30 - 21:00	Hanyuan Hall
Outgoing Council Meeting	19:30 - 21:00	Linde Hall

## Vol. 36, No. 4THE SOCIETY FOR ORGANIC PETROLOGY NEWSLETTERDecember 2019

#### Tuesday, September 15

Registration	08:00-08:30	Reception lobby
Welcome and Keynote speeches	08:30-09:50	Kaiyuan Hall
Group Photo	09:50- 10:05	
Coffee Break	10:05 - 10:20	
Oral Session 1A & 1B	10:20 - 12:00	Hanyuan Hall & Daming Hall
TSOP Annual General Meeting & Lunch	12:00 - 14:00	Kaiyuan Hall
Oral Session 2A & 2B	14:00 - 15:50	Hanyuan Hall & Daming Hall
Coffee Break	15:50 - 16:10	
Oral Session 2A & 2B	16:10- 17:30	Hanyuan Hall & Daming Hall
Conference Dinner	17:30- 19:30	Dazhang-Rolling Chinese pancake Restaura nt
Incoming Council Meeting	19:30- 21:00	Linde Hall

#### Wednesday, September 16

08:30 - 10:10	Hanyuan Hall & Daming Hall
10:10 - 10:40	
10:40 - 12:00	Hanyuan Hall & Daming Hall
12:00-14:00	Kaiyuan Hall
14:00-15:20	Hanyuan Hall
15:20 - 15:40	
14:00- 17:00	Daming Hall
All Day	In the lobby of hotel
15:40- 16:20	Linde Hall
18:00 - 20:00	Champs Elysees & Cafe Verona
	10:10 - 10:40 10:40 - 12:00 12:00-14:00 14:00-15:20 15:20 - 15:40 14:00- 17:00 All Day 15:40- 16:20

## Thursday, September 17

Depart for Field Trip	08:00	Lobby of New Century Grand Hotel
Field Trip		Pan'an Lake, Excursion & Standard Section in Jiawang

### Friday, September 18

Depart for Field Trip	08:00	Lobby of New Century Grand Hotel
Field Trip		Confucian Mansion, Confucian Forest and Confuci an Temple

Field Trip Sites

*Jiawang Stromatolite Park* is located at the junction of Jiangsu and Shandong Provinces, about 38km northeast of Xuzhou City. It is the geological heritage park of Jiangsu Province and the only stromatolite distribution area in Jiangsu Province. Jiawang Stromatolite Park is located in the Dadong Mountain Scenic Area, including Lu Mountain, Huang Mountain and Dajingshan Mountain. Geological phenomena are abundant. Typical rock types include grey/red stromatolite limestone, stromatolite dolomite, oolitic limestone, calcirudite, oncolite limestone, leopard-like limestone, mudstone, sandstone and glauconitic limestone. Sedimentary structures include stylolitic structure, bedding and mud crack structures. Geological structures include joint, strike slip fault, and folds.



Stromatolite limestone in Weiji Formation. Photo by Jian Shen.

#### Pan'an Lake

Jiawang District is the birthplace of the coal industry in Xuzhou. The coal field covers an area of 231 square kilometers, accounting for 37% of the total land area of the whole district. It has 132 years of mining history. During the peak of coal mining, there were 237 coal mines in Jiawang District. Large areas of coal gob were left behind due to mining. Pan'an Lake is located in Dawu Town and Qingshanquan Town, Jiawang District, Xuzhou City. It was originally a coal mining subsidence area of Quantai Mine and Qishan Mine, with a total area of 17,400 mu, which is the largest coal mining subsidence area in the local area. The surface subsidence began from the 1960s, which caused most of the farmland to collapse, including damage to buildings. In 2010, the

government of Xuzhou City strengthened scientific, technological innovation and capital investment and strived to promote an ecological transformation aimed at coal mining subsidence areas. A variety of new technologies such as "layered stripping, staggered backfilling, and coal gangue filling" were adopted to repair the mining subsidence of Pan'an Lake. Through the excavation and repair of the subsidence area, the connected lake and artificial islands were formed, and aquatic plants such as bulrush, lotus, and reed are planted. The fish and shrimp in the water increased, attracting numerous wild ducks and waterfowls. In June 2014, Pan'an Lake Wetland Park was rated as a national 4A-level tourist attraction. In August 2017, Pan'an Lake was identified as the first batch of 10 national wetland tourism demonstration bases.



Pan'an Lake. Photo from Pan'an Lake tourism website.

### Vol. 36, No. 4 THE SOCIETY FOR ORGANIC PETROLOGY NEWSLETTER December 2019

#### Confucian Mansion, Forest and Temple

Qufu, a city of Shandong Province in China, which is famous for hometown of Confucius (including the Confucian Mansion where he lived in, the Confucian Temple where he imparted knowledge to people, and the Confucian cemetery where he is buried).

Confucianism is described as tradition, a philosophy, a religion, a humanistic or rationalistic religion, a way of governing, or simply a way of life. Confucianism developed from what was later called the Hundred Schools of Thought from the teachings of the Chinese philosopher Confucius (551–479 BCE). The Confucian Mansion, Confucian Forest and Confucian Temple, usually referred to as the "Three Confucians" of Qufu, Shangdong, are the symbols of China's commemoration of Confucius. They are famous for their rich cultural heritage, long history and scientific and artistic value.



Right: Statue of Confucius. Photo from tourism website.

#### **TSOP Student Travel Award**

Are you a student needing financial support to attend the TSOP Conference? Consider applying for TSOP Student Travel Award! Three monetary awards of \$1,000 USD each will be granted.

For more information concerning student travel award, please see the following page on TSOP main website: <u>http://tsop.org/Travel\_award\_apply.html</u>

#### Do you have a question about TSOP 2020? Please get in touch with us.

For inquiries related to registration, or a general enquiry, please contact Wu Li at liwu@cumt.edu.cn

For inquiries related to submission of abstracts, please contact Jingjing Liu at liuji@cumt.edu.cn

For inquiries related to accommodation and pick-up at the railway station or airport, please contact Yang Wang at <u>wangy89@cumt.edu.cn</u>

For inquiries related to short courses or field trip, please contact Jian Shen at jianshen@cumt.edu.cn

For inquiries related to invitation letter, please contact Wei Ju at wju@cumt.edu.cn

## **CALENDAR OF EVENTS**







Please send in meeting, short course and special event announcements to the Editor http://www.tsop.org/events.html

CHOCORUM CONTRACTOR	<i>March 2 - 8, 2020</i> <u>36th International Geological Congress</u> - Delhi, India
(G) AAPG	June 7 - 10, 2020 AAPG Annual Conference & Exhibition – Houston, TX, USA
geochemical society	<i>July 21 - 26, 2020</i> Goldschmidt Conference - Honolulu, HI, USA
TSOP The Society for Organic Petrology	September 14 - 18, 2020 37 <sup>th</sup> Annual TSOP Meeting - Xuzhou, China
	<b>September 16 – 23, 2020</b> ICCP Conference – Xuzhou, CHINA
LHF	<i>October 25 - 28, 2020</i> GSA Annual Meeting - Montréal, Québec, Canada

### TSOP Annual Meeting Photos View the albums of photos online at the <u>TSOP Photo Gallery!</u>

