THE SOCIETY FOR ORGANIC PETROLOGY

# NEWSLETTER

Vol. 21, No. 2 June, 2004 ISSN 0743-3816

**Twenty-first Annual TSOP Meeting**

## *Sydney, Australia*

**early registration continues until July 14**

TSOP

The Society for Organic Petrology

# TWENTY-FIRST ANNUAL MEETING

# *Organic Matter Down Under*

## Sydney, Australia

### 27 September – 1 October, 2004

The 21st Annual Meeting of TSOP will be held at the Crowne Plaza Hotel, Coogee Beach, a beach-side conference venue conveniently located with respect to Sydney Airport, the city centre and the University of New South Wales.

**Some Conference Themes:**

- Non-marine source rocks
- New techniques in organic petrology and geochemistry
- Coal in sustainable development

**Provisional Program:**

| | |
|---|---|
| Sunday, September 26 | – Field Trip: Joadja oil shale (torbanite) deposit |
| Monday, September 27 | – Short course, registration, icebreaker reception |
| Tuesday, September 28 | – Technical sessions, TSOP business lunch |
| Wednesday, September 29 | – Technical sessions, conference dinner |
| Thursday, September 30 | – Technical sessions, field trip departure |
| Friday, October 1 | – Field trip: coal geology of the Hunter Valley |

***Plan your travel now!*** ***See article on pages 10 -15 and www.tsop.org***

And mark your calendars for next year (see page 5):

**2005 TSOP Meeting**

**11-14 September**

**Louisville, Kentucky**

Co-convenors Maria Mastalerz and Jim Hower

**The Society for Organic Petrology**

**TSOP** is a society for scientists and engineers involved with coal petrology, kerogen petrology, organic geochemistry and related disciplines. The Society organizes an annual technical meeting, other meetings, and field trips; sponsors research projects; provides funding for graduate students; and publishes a web site, this quarterly Newsletter, a membership directory, annual meeting program and abstracts, and special publications.

Members are eligible for **discounted subscriptions** to the Elsevier journals *International Journal of Coal Geology* and *Review of Paleobotany and Palynology*. Subscribe by checking the box on your dues form, or using the form at www.tsop.org. You will then be billed by Elsevier. Contact Peter Warwick <pwarwick@usgs.gov>if you do not receive a bill or have any other problems with a subscription. For **subscription at the member rate** to **AGI**'s *Geotimes*, see page 20 or your dues form.

**TSOP** is a Member Society of AGI and an AAPG Associated Society.

# The Society for Organic Petrology Newsletter

**ISSN 0743-3816**

**published quarterly**



**DEAD-LINES:** **September issue: August 25**
**December issue: December 1**

Writers, Photographers and Associate Editors Needed!

The TSOP Newsletter welcomes contributions from members and non-members alike. Submission methods: Text is preferred in WordPerfect, MS Word, RTF or plain text format. Photos as slides or prints (will be returned after use) or as digital files (300 dpi preferred) without strong compression on CD-ROM or as e-mail attachments (if larger than 5 MB, please e-mail me first ). Zip disks are discouraged.

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## Address Changes

Please report any changes in address or contact information to:

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### Society Membership

The TSOP Newsletter (ISSN-0743-3816) is published quarterly by The Society for Organic Petrology and is available 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:

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

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**TSOP OFFICERS 2003 - 2004**

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| Research Committee: | Suzanne Russell |

# President's Column

from Bob Finkelman

Greetings from Africa! For the past three months I have been working in southern Africa as a U.S. Embassy Science Fellow. This was a once-in-a-lifetime opportunity that I just could not pass up. Because of difficulties in accessing reliable Internet facilities I have been unable to discharge my responsibilities to TSOP as efficiently as I would have wanted. However, my fellow Board members have pitched in to keep the organization moving forward. For this I am grateful.

Although the primary focus of my activities in Africa has been to promote the concept of Medical Geology – the impacts of geologic materials and geologic processes on animal and human health – a very significant portion of my time has been devoted to coal. Coal is critical to South Africa. More than 90% of their electricity is produced from coal combustion (second only to Poland). Coal is South Africa's second most valuable commodity, generating sales of some $4.5 billion dollars. South Africa is among the world's top five coal producers and is the second largest coal exporter, earning about $3 billion dollars in foreign exchange. South Africa is the world's leader in converting coal to chemicals, including 30% of the country's liquid fuels. Millions of people in South Africa still rely on coal for their residential fuel needs. Despite the importance of coal to the South African economy and society, there is no formal coal education available in the country: a sorry situation that exists (or will soon exist) in many other coal-producing countries.

There is a growing awareness and acknowledgement here that something must be done to correct this situation. I have been talking with representatives from government, industry, and academia about possible solutions. A Centre of Excellence in Coal Science has been proposed, as has a Medical Geology/Coal Science Research Center. Both suggestions have met with favorable receptions. I see opportunities for TSOP and TSOP members to play important roles in helping to provide essential training and education in South Africa and in other places around the world where coal is still King.

Bob Finkelman

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# TSOP Graduate Student Research Grant Applications

by Suzanne Russell

A total of six applications have been received for the 2004 TSOP Graduate Student Research Grant. The applications have been submitted by students attending universities in the U.S.A. and Canada, with two submissions from Miami University, Ohio. This is the fewest number of applications received in the last several years. The applicants consist of one Master's candidate and five PhD candidates. The Student Research Grant will be awarded at the TSOP Annual Meeting in Sydney.

The 2004 applicants' research topics and institutions follow:

University of British Columbia, Vancouver: Sequence stratigraphy and methane gas potential of the lower Cretaceous Moosebar and Buckinghorse shales, N.E. British Columbia.

Indiana University, Bloomington: Fuel source of combustion residues from the Cretaceous-Tertiary boundary.

University of Kentucky, Lexington: Tertiary lignite depositional systems of Western Kentucky: a petrographic, palynologic and biomarker study.

Miami University, Ohio:
1) Reconstruction of paleoclimate and paleovegetation in the Northwest of China.
2) Investigation of microbially mediated clay mineral reaction.

Stanford University, Stanford: Geochemistry of organic matter as a proxy for late Quaternary depositional history of the Gulf of Santa Catalina ❄

**STUDENTS!**

**See http://www.tsop.org/students.htm**

**for TSOP travel funding for the Sydney meeting and other supported student activities.**

# 2005 TSOP Meeting Louisville, Kentucky

The 2005 TSOP meeting will be held in September in Louisville, Kentucky. Pre-meeting activities include a $CO_2$ sequestration workshop to be held on Sunday morning, September 11th, and a field trip to the Falls of the Ohio <http://www.fallsoftheohio.org/> on Sunday afternoon.

The core of the meeting will be on Monday and Tuesday, the 12th and 13th, at the Brown Hotel <http://www.brownhotel.com/>. Tom Algeo and Sue Rimmer are planning a symposium on dispersed organics. A reception will be held at the Louisville Slugger Museum <http://www.sluggermuseum.org/flash5.html> on Monday evening. A post-meeting field trip to an underground mine will be run as a one-day excursion on Wednesday, September 14th.

Jim Hower & Maria Mastalerz

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# 2004 Organic Geochemistry Gordon Conference

The 2004 Gordon Conference on Organic Geochemistry, to be held August 8 -13 in New Hampshire, will include discussion sessions on:

Recent Advances in Analytical Chemistry of Complex Organic Matter

Old Carbon in the Recent Environment

Microbial Contributions to Organic Matter in the Water Column and Recent Sediments

See the conference web site at
http://www.grc.uri.edu/programs/2004/orggeo.htm

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# 2005 AAPG Convention

AAPG will hold its 2005 Annual Convention June 19 - 22 in Calgary, during Alberta's centennial year. It will be hosted by the Canadian Society of Petroleum Geologists, and AAPG's Canada Region. See http://www.aapg.org/calgary/

Most of the themes listed in the technical program should be of interest to TSOP members, including

Exploration of Mature Basins
Exploration of Continental Margin Settings and Frontier Basins
Holistic Analysis of Petroleum Systems
Tectonic Systems and Basin Evolution
Depositional Systems in Time and Space
Mudrocks and Hydrocarbons

and more.

Short course program topics are planned to include:
Interpreting Organic Geochemical Data and
Advances in Coalbed Methane.

A technology-related trip is planned to include a visit to a coalbed methane operation

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## Carbon Materials & Organic Chemicals

ACS Fuel Chem will host symposia at the ACS Philadelphia meeting August 22 - 26, 2004, including Carbon Materials and Organic Chemicals from Coal. Early registration deadline is July 27.
http://oasys.acs.org/acs/228nm/fuel/program.html ❄

# ICCP Prepares for September Meeting

The 56th Annual Meeting of the International Committee for Coal and Organic Petrology will be held September 12-18, 2004, in Budapest. The meeting venue is the Geological Institute of Hungary (MÁFI). A one-day symposium is planned for September 15th on **"Environmental management implications of organic facies studies."** A field trip will visit an open pit mine in Late Miocene lignite. ❄

**See the web site of the International Committee for Coal and Organic Petrology at**

**http://www.iccop.org**

## An International Conference:

# Geologic Problem Solving with Microfossils

The North American Micropaleontology Section of SEPM will host a conference on **Geologic Problem Solving with Microfossils**. To be held March 6 - 11, 2005, at Rice University in Houston, Texas, it will include oral and poster sessions and invited papers. A plenary dinner will be held at the Houston Museum of Natural Science, and a field trip will examine Upper Cretaceous Stratigraphy of Central Texas. Abstract deadline is October 14, 2004. See http://www.sepm.org/microfossils2005.htm for more information and to download a printable flyer. ❄

**New web site for AAPG - EMD**

The Energy Minerals Divsion of AAPG has introduced a new web site at http://emd.aapg.org/index.cfm

# Carbon 2004 July 11 - 16 Providence, Rhode Island

The 2004 meeting will be hosted by the American Carbon Society and will be held on the historic campus of Brown University in Providence, Rhode Island (USA). http://www.carbon2004.org/ ❄

# GSA Annual Meeting November 7 - 10, 2004 Denver

Geological Society of America Coal Geology Div. < http://www.isgs.uiuc.edu/coalsec/GSA/page6.html > will sponsor two topical sessions at the Denver GSA annual meeting.

**T62- Wild Coal Fires: Burning Questions with Global Consequences** is chaired by Glenn Blair Stracher, East Georgia College and Ed Heffern, Cheyenne, Wyo.

**T63- Raton Basin: From Coal to Coalbed Methane** is chaired by Gretchen K. Hoffman, New Mexico Institute of Mining and Technology and Christopher J. Carroll, Colorado Geological Survey. The session will be dedicated to Charles Pillmore.

Deadline for submitting an abstract for these or the general coal session is July 13. Abstracts can be submitted online at http://www.geosociety.org/meetings/2004/Techprog.htm

A Field trip co-sponsored by the Coal Geology Division will address **Structural Implications of Underground Coal Mining in the Mesaverde Group, Somerset Coal Field, Delta and Gunnison Counties, Colorado** on Fri. and Sat., Nov. 5–6. Organized by Christopher J. Carroll, Colorado Geological Survey, it will visit two underground coal mines: Bowie #2 and West Elk Mines. Cleat, faults and soft-sediment deformation will be observed, and "We will show how early faults can rotate coal cleat, providing a tool for locating hidden faults in advance of mining."

An additional Pre-Meeting Field Trip on Saturday, Nov. 6, will examine the **Glenwood Springs, Colorado, Coal Fire - Observations, Discussion, and Field Data Collection Techniques.** ❄

# Lost and Found Publications

by Jim Hower

## *Interdisciplinary Studies of Peat and Coal Origins*

(Geological Society of America Microform Publication No. 7, 1977)

http://www.caer.uky.edu/publications/gsapub7/gsapub7.shtml

In the mid-1970's, the Geological Society of America experimented with publication on microfiche cards, with no accompanying paper version. One such publication was *Interdisciplinary Studies of Peat and Coal Origins* (Microform Publication No. 7), edited by Peter Given and Art Cohen. The GSA abandoned the format by the early-1980's, in effect orphaning the existing microfiche publications. In addition, the format does not appear to have the permanence of paper, with every microfiche copy encountered having numerous scratches and other imperfections of the cards.

Geology being a historical science, we recognize that there can be value in older publications. For this reason, we considered it to be worthwhile to reproduce the publication in a modern format, making the long out-of-print book available to a new generation of coal geologists. The reproduction is, for most pages, from the original unpaginated copy borrowed from Art Cohen. No microfiche copy examined was satisfactory for the reproduction of the text, tables, and line drawings (as an example, compare the title page, copied from the microfiche, with any of the chapters). Photographs could not be satisfactorily reproduced in any case.

Thanks go to the Geological Society of America and to Art Cohen for granting permission to reprint the book on the internet. The pdf files of the individual chapters are available at <http://www.caer.uky.edu/publications/gsapub7/gsapub7.shtml>. The contents of the book are as follows:

**Publication Announcement**

## Metal Contaminants in New Zealand

From Sources and Transport to Effects on Ecology and Human Health

**Edited by: Tim Moore, Amanda Black, Jose Centeno, Jon Harding, Dave Trumm**

To be published by

**resolutionz press**

December 2004

Tim Moore reports that the book is being published on a non-profit basis with support from local government bodies. It contains 22 papers covering aspects of metal contaminants including Sources, Transport, Effects on Ecology and on Human Health. This includes papers on coal from an environmental perspective. There will be a limited number of copies available. So if you are interested in purchasing one, please provide your contact details to:

metals@resolutionz.biz
or call
Dr. Jane Shearer 03 326 7303

**The volume will contain:**

**Preface**
**Contents**
**Acknowledgements**

*Chapter Numbers:*

### BACKGROUND AND PERSPECTIVE

1. J. Cavanagh and J. Coakley: **Environmental Policy: NZ Perspective**
2. R.B. Finkelman: **Sources of metals and trace elements in our environment: A brief overview**
3. Candace Martin: **Sources and impacts of metals associated with fertilizers.**
4. Mauricio Taulis: **Metal contaminants in leachate from sanitary landfills**
5. C.R. Ward, Z. Li and D. French**: Geological sources of metals in coal and coal products**

### GEOLOGICAL SOURCES

6. Dave Craw, Kevin Brown, Jenny Webster-Brown: **Metal mine and geothermal contributions to metals in New Zealand**
7. James Pope: **Geochemistry of Waiotapu Stream: A small stream in receipt of geothermal discharge**
8. T.A. Moore, C.M. Nelson, Z. Li, and R.B. Finkelman: **Concentration and source of metals and trace elements in New Zealand coal beds**
9. Andrew de Joux, Tim A. Moore: **Geological controls on source of Ni in West Coast streams**
10. D. Falconer and D. Craw: **Fluvial quartz pebble conglomerates as a source of acid rock drainage and metals: A case study from Belle-Brook, Southland**

### TRANSPORT OF METALS

11. Jenny Webster-Brown **Transport and attenuation of metals in surface waters affected by mining**
12. Jenny Webster-Brown and Dave Craw: **Examples of trace metal mobility around historic and modern mines in New Zealand**
13. Amanda Black, Dave Trumm and Phil Lindsay: **Past and present coal mining contributions**
14. Dave Trumm, Amanda Black, and Kerry Gordon: **Acid mine drainage remediation at an abandoned West Coast coal mine**

### EFFECTS ON ECOLOGY

15. Jon Harding: **Impacts of metals and mining on stream communities**
16. Ian Boothroyd: **Protection of aquatic ecological values at Golden Cross Mine, North Island, New Zealand**

### EFFECTS ON HUMAN HEALTH

17. Jose Centeno, Marion Gray and Jeff Fowles **Pathology of metal exposure**
18. A. Luckman and David Slaney: **Occupational Exposure to Metals and Associated Health Effects**
19. Marion Gray: **Prostate cancer Cadmium, Zinc and Selenium.**
20. Jose Centeno: **Arsenic Poisoning and Cancer.**
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*Articles on the history of TSOP and organic petrology are solicited for this Newsletter. Consider the following as historical background. We thank Dr. Andrew Sicree of The Pennsylvania State University's Earth and Mineral Sciences Museum for loan of the source material. – Editor.*

*An excerpt from*

## NOTICE OF THE ANTHRACITE REGION

*In the Valley of the Lackawanna and of Wyoming on the Susquehanna*

BY BENJAMIN SILLIMAN, M.D., LL.D.

**JULY, 1830**

*reprinted from The Register of Pennsylvania, Edited by Samuel Hazard, Vol. VI, July 1830 - January 1831, p. 74-75.*

### *Vegetable Remains.*

In visiting several of the mines of the Susquehanna and Lackawanna, the naturalist is gratified, by seeing the vast deposits of vegetable impressions and remains which accompany the coal, usually in the slate that forms the roof, and occasionally in that of the floor; they exist also, although, in a smaller degree in the sandstone, and sometimes, but much more rarely even in the coal itself. There are instances where they fill the slate for a space of ten feet in thickness, and making due allowance for the compression which they have undergone, the original deposits, must have occupied a vastly greater thickness, than their relics do now. The impressions are very perfect, indicating repose and calm, at the time of their deposition, and excluding the possibility of transport from distant countries; there are many species of ferns, none of them, as is said, modern, and most or all tropical; there are impressions, sometimes several feet long and broad, of the bark of gigantic vegetables; some botanists say they are palms; occasionally there are entire limbs carbonized; frequently, broad leaves are found of six or seven inches or more in diameter; culmiferous plants are numerous, and so are the aquatic algæ, and rushes; the leaves of the plants are usually in full expansion, the most delicate parts of their structure being exactly preserved, or copied,; and according to Mr. Cist, flowers of a stellated form, are occasionally found. Prof. Hitchcock, believed that he had found a flower with unfolded petals, and so it appeared to me.

The inferences to be drawn from the vegetable remains are very interesting, but there is not time to discuss them fully on the present occasion, or to apply the facts to account for the origin of coal; a subject sufficiently difficult. We cannot however hesitate to say, that vegetable life, on a great scale, attended the formation of this coal, and both preceded, accompanied, and followed that event; that the causes which established its existence were repeated many times, and continued to operate, during the deposition of the successive strata; that a sedimentary rock, namely the slate, in a loose and impressible form, was deposited with the vegetables, and enveloped, covered and preserved them, that a fragmentary rock succeeded, composed of pebbles, rounded or angular, or of sand cemented firmly—the ruins of previously existing formations; that the causes which produced these rocks were also many times repeated, and of course, that all the causes which produced such deposits as the various ones now mentioned, were at different times, alternate, successive, and concomitant.

### *Origin of Coal.*

Is the anthracite coal of vegetable origin? Does the fibrous charcoal, frequently found between its layers, owe its origin to the vegetable skeleton? There seems no more reason to doubt the latter fact, than that the vegetable impressions found in and upon the coal and its rocks, have the same origin. But did the mass of coal arise from vegetables? This has been admitted by many persons with respect to bituminous coal, but, I have heretofore been inclined to attribute anthracite coal to a direct mineral creation; the opinion of its vegetable origin appears however to me less improbable, since I have seen with my own eyes, the incontrovertible and abundant proofs of vegetable life in these mines. We are obliged, from the facts here seen, to go a great extent, in admitting vegetation in connexion with this coal. But if we seek to trace the entire masses to vegetable matter, how shall we admit the existence and accumulation of the enormous quantities that must have grown or been collected on the spot, to form such stupendous beds, ten, twenty and thirty feet in thickness, and repeated, again, and again, with all their attendant rocks and impressions. But, the plants, from ferns and liliputian vegetables to those of great size, did grow, and were deposited, in connection with these coal strata; for there we find their unquestionable and exuberant remains; and they were produced again and again; for we find them in the different deposits, as the coal strata succeed each other at different depths. As the vegetables, whose organized forms or impressions we actually find did exist in these places, could there, by any possibility, have been enough accumulated to form the coal beds? If it is difficult to answer in the affirmative, perhaps it is not quite certain that we must reply in the negative; at least, it is not, I must confess, quite so certain, as I once thought it to be.

But supposing the vegetable matter to have existed in sufficient quantity to have formed the coal; why if so formed, is there in general, no appearance of ligneous structure, of vegetable organization in the coal itself? On this point, it may be suggested that the vegetable matter may have been so decomposed as to lose in a great degree, its organization; it may have been suspended or deposited in water along with the same earthy matters which form the accompanying rocks, and particularly the coal slate, and this earthy matter may have been deposited along with and among the particles as well as the masses of coal: now in minute proportion as we actually find it in burning even the purest anthracite, the form and structure of whose layers, is delicately exhibited by the earthy skeleton, commonly called ashes, which remains: now, the earthy matter may have prevailed to a greater degree and then the coal is more impure, less combustible, and affords a more abundant residuum: again the earthy matter may have prevailed still more and then the deposit is a carbonaceous slate—and lastly the carbon may have been supplanted by the earthy matter, and then the seams of slate would be formed as we actually find them in the coal beds. Without some such process, it seems difficult to account for the varying proportions of earth and carbon, which we find blended in the anthracites; the extremes being the purest coal on the one hand & slate on the other, and between these there appear to be innumerable mixtures or combinations of earth and coal in different proportions.

Perhaps the reason why the vegetables found in the slate retain their organized form, is found in the fact that the fine sedimentary earths, the silicious and argillaceous of which the slate is composed, may have enveloped the plants too suddenly, to permit them to undergo decomposition, and thus to exhibit an impalpable carbon; while their forms would, of course, be distinctly impressed upon the yielding plastic matter of the slate, rendered soft perhaps by diffusion in water.—Pressure is also to be taken into account in reasoning upon the probable obliteration of the organic structure; this force would operate in proportion to the progress of the accumulation, whether of coal strata, or of those of superincumbent rock.

Many other considerations present themselves in relation to this subject; such as the time when, and in which, these deposits were made, the original position of the strata, whether flat or inclined, if flat, by what force raised or depressed: if inclined, how the materials were prevented from accumlation in thicker masses at the lowest curvature, or point of declination, &c. Internal fire may have raised and distorted and modified the coal beds after they were formed, but it seems more difficult to admit, that coal strata have been in actual ignition.

# *Twenty-first Annual TSOP Meeting*

# *Sydney, Australia*

## *September 26 – October 1, 2004*

by the
2004 Annual Meeting Organising Committee

Coogee Beach, with the Crowne Plaza meeting venue in the background. Photo by Colin Ward.

As outlined in the previous issue of the Newsletter, the 21st Annual Meeting of the Society for Organic Petrology will be held in Sydney, Australia, between Sunday September 26 and Friday, October 1, 2004. This will be the first Annual Meeting of the Society to be held outside North America, and emphasises the role of TSOP as a truly international organisation.

Sydney is well known as an international venue, with spectacular scenery, world-famous buildings and a wide range of activities for visitors to enjoy. Technical sessions and social events for the meeting will be held at the Crowne Plaza Hotel, an integrated accommodation and meeting facility directly opposite one of Sydney's main surfing beaches, only 15 minutes from Sydney Airport and a short distance from the attractions around the city centre.

### Technical Program Update

The response to the call for papers to be presented at the Sydney meeting has been fantastic. A total of 86 technical papers have been accepted for oral or poster presentation, with authors drawn from all continents of the world (except Antarctica). A full list is provided elsewhere in this Newsletter. Thanks to everyone who responded, Sydney looks like being host to a memorable TSOP meeting.

The papers to be presented in Sydney will cover a wide range of topics, including organic petrology and geochemistry in relation to petroleum generation, developments in coal characterisation, utilisation and environmental impact, advances in coal-bed methane geology, fundamental research in organic petrology, and the application of new organic petrology techniques. Keynote papers will be given by Romeo Flores, US Geological Survey (coal-seam gas), Andrew Scott, Royal Holloway, University of London (organic petrology), and Bob Davis, Woodside Energy Limited (petroleum source rocks). By arrangement with the Coalfield Geology Council of New South Wales, Claus Diessel will present the 5th Kenneth Mosher Memorial Lecture at the meeting, with a discussion on the role of coal petrology in on-shore sequence stratigraphy. Alan Cook, as President of ICCP, will also address the meeting.

Because of the extended deadline for receipt of abstracts, the closing date for Early Bird registration has been extended to July 14th. Registration forms, accommodation details and other information on the meeting are available from the TSOP web site at:

**http://www.tsop.org/mtgsyd.htm**

## Student Travel Assistance

Thanks to a generous donation from Pennsylvania State University and an allocation from TSOP Council, financial assistance is available to help full-time students attend the Sydney meeting. Further details of the scheme and other items of interest to students are also provided on the meeting web site. Closing date for applications is June 30, 2004. Contact TSOP Councillor Zhongsheng Li (ZS.Li@unsw.edu.au) for additional information if required.

## Pre- and Post-Meeting Field Trips

Two field trips to different parts of the Sydney Basin have been arranged to complement the technical sessions. The pre-meeting field trip, on Sunday, September 26, will visit the oil shale (torbanite) deposit at Joadja, in the beautiful Southern Highlands of New South Wales. As well as providing opportunities to examine and sample this unusual, alginite-rich material, the itinerary will include the historic village, mining and processing sites from which the deposits were worked during the 19th Century. If time permits, the group will also visit a nearby winery to sample some of the other produce of the region.

The post-meeting field trip will visit the city of Newcastle, 160 km north of Sydney. After an overnight stop at a beach-side hotel, the group will examine a number of well-exposed coastal outcrops showing different types of coal-bearing sedimentary successions, including fluvio-deltaic, alluvial fan and volcanic-influenced deposits, before returning to Sydney in the late afternoon of Friday, October 1.

## Short Course - Mineral Matter in Coal

The short course for the 2004 meeting will be held at the University of New South Wales on Monday, September 27, returning to the meeting venue at Coogee in time for registration and the icebreaker reception. The program will cover the nature and origin of minerals and other inorganic constituents in coal, and the range of techniques that can be used in evaluating the abundance and constitution of this mineral matter. It will also discuss experience with using different techniques, and the application of mineral matter studies to particular aspects of coal evaluation, utilisation and environmental management. For further information contact Colin Ward (C.Ward@unsw.edu.au).

Computer processing of X-ray diffraction data, to be included in the short course on mineral matter in coal.

## Partners' Program

If you are coming to the TSOP Meeting, why not think about bringing your partner? Accompanying persons can join a group and take a ferry ride across the beautiful harbour and visit Sydney's great zoo.


Cadman's Cottage, the oldest preserved building in Australia, to be included in the Partners' Program tour of The Rocks area in conjunction with the TSOP meeting

See kangaroos, koala bears, monkeys, lions, and many other animals and birds, as well as the spectacular Sydney harbour scenery. For those who have an interest in history we have planned another day at "The Rocks". This area is situated right in the heart of Sydney. The TSOP Partners group will do a walking tour and see and hear the story of early settlement life. The area is filled with beautiful old buildings, souvenir shops, coffee lounges, a magnificent old church and plenty of pubs. To finish the day we will do a tour of the Sydney Opera House. A day filled with history and culture, good for children as well as the adults. Don't forget your walking shoes and a camera.

Further information is available from Kathie Ward (kathieward2003@yahoo.com.au), who will be pleased to help potential registrants in planning other things for the family to do before, during or after the meeting.

## TSOP 2004 - ORGANIC MATTER DOWN UNDER
## List of Papers

To date over 85 papers have been submitted and accepted for presentation at the Sydney meeting.

It's an exciting line-up, with **Keynote Speakers** including:

- Emeritus Professor Claus F.K. Diessel, who will give the Kenneth Mosher Lecture on *Coal Petrology in Sequence Stratigraphy*
- Mr. Bob Davis (Woodside Energy): *From Chemistry to Kinetics: does one expulsion mechanism fit all coals?*
- Dr. Romeo M. Flores (US Geological Survey): *Potential $CO_2$ Sequestration and Enhanced Recovery of Coalbed Methane in Subbituminous Coals in the Powder River Basin, United States*
- Professor Andrew Scott (Royal Holloway, University of London): *Observations and Experiments on the Origin and Formation of Inertinite Group Macerals*
- Speaker to be confirmed: *The role of coal in a sustainable energy future – challenges, opportunities and prospects.*

**Although session themes and final titles are still being organised, we have a diverse range of submitted papers in the line-up as follows (including poster and oral presentations):**

### *Coal Seam Methane and $CO_2$ Sequestration*

Jinxing Dai, Weiwei Dinga, Jian Lib, and Guangyou Zhub: *Gas pores in Permo-carboniferous coal of Dongpu Depression and its implication to the hydrocarbon generation and accumulation, Bohai Bay Basin, China*

Shenfei Qin, Yan Song, Xiuyi Tang and Guoyou Fu: *The 12C accumulative effect and mechanism in coalbed methane*

Bernhard Krooss, Andreas Busch and Yves Gensterblum: *Investigation of preferential sorption behaviour of $CO_2$ and $CH_4$ on coals by high-pressure adsorption/desorption experiments with gas mixtures*

Andreas Busch, Yves Gensterblum, and Bernhard Krooss: *$CO_2$ and $CH_4$ sorption kinetics on coal: Experiments and potential application in CBM/ECBM modeling*

Xingjin Wang: *The Effects of Coal Rank on the Variation in Permeability of Coal Seam Reservoirs during CBM Production*

T.A. Moore, G.R. Gillard, R. Boyd, R.M. Flores, G.D. Stricker and C.M. Galceran: *A mighty wind: determining the methane content of New Zealand coal seams*

Peter D. Warwick: *Bacterial Reduction of $CO_2$: The Primary Origin of Low-rank Coal Gas in the Northern Gulf of Mexico Coastal Plain, USA*

P.J. Crosdale and L.W. Gurba: *World activities, R&D and uncertainties in relation to $CO_2$ sequestration into unmineable coal seams*

Lila W. Gurba; Andrew Gurba; Jeff Wood, and Colin Ward: *Gas Drainability and Outburst Risk Assessment Based on the Distribution of Micro-markers in Coal Seams*

M. Faiz, N. Sherwood, N. Russell, A. Saghafi and I. Wang: *How do petrology and burial history affect coal seam gas reservoir properties? An example from the Sydney Basin, Australia*

Steven Scott, Bruce Anderson, Peter Crosdale, Julie Dingwall and Garry Leblang : *Coal Petrology and Coal Seam Gas Contents of the Walloon Subgroup – Surat Basin Qld*

A. Saghafi and M. Faiz: *$CO_2$ Storage Properties of Sydney Basin Coal*

S.J. Pope, K.D. Gordon, J.G. Pope, S. Hayton and D.A. Manhire: *Coal Seam Gas Exploration In New Zealand Lignites*

Romeo M. Flores: *Potential $CO_2$ Sequestration and Enhanced Recovery of Coalbed Methane in Subbituminous Coals in the Powder River Basin, United States*

Chris Boreham, John Draper and Janet Hope: *Origin of Jurassic coal seam gas, SE Queensland*

Dave Mathew: *Developing a coal seam gas project from reservoir face to customer plant– understanding the critical issues.*

## *Organic Petrology and New Techniques*

Y.Ujiie: *The relationship between statistical Thermal Alteration Index (stTAI) and vitrinite reflectance (Ro) influenced by various geological phenomena*

Fredy Arango A, Alejandro Restrepo, and Astrid Blandón: *Application of image analysis in the palynofacies of coal and associated shales*

Grzegorz Lis, Maria Mastalerz, Arndt Schimmelmann, and Artur B.Stankiewicz: *FTIR parameters as maturity proxies in kerogen type II*

G. O'Brien, B. Jenkins and H. Beath: *Coal Grain Characterisation of Flotation Feed*

Zhongsheng Li, Peter Fredericks, Llew Rintoul and Colin Ward: *Application of Attenuated Total Reflectance Micro-Fourier Transform Infrared (ATR-FTIR) Analysis to the Study of Coal Macerals and Coal Maturation Processes*

Colin R. Ward and Zhongsheng Li: *Comparison of Elemental Composition of Macerals in Some Australian Coals Determined by Electron Microprobe to Equivalent Whole-coal Ultimate Analysis Data*

David French, Alan R Butcher, Al Cropp, and Paul Gottlieb, Terry Wall and Raj Gupta: *QEMSCAN - A New Tool for the Characterisation of Coal and Mineral Matter*

Nick Moore: *Vitrinite – Inertinite Reflectance and Fluorescence of coals*

Andrew Scott: *Observations and Experiments on the Origin and Formation of Inertinite Group Macerals*

John C.Crelling and Peter Filip: *The Organic Petrology of Carbon-Carbon Aircraft Brakes*

Ken B Anderson, John C. Crelling and Fabien Kenig: *An Unusual Low-Fluorescence Algal Kerogen from the Canadian High Arctic*

P.K. (Muki) Mukhopadhyay, D.J. Mossman and D. Jarvie: *Petrology and Geochemistry of Carbonaceous Chondrites (Meteorites) and Archaean Terrestrial Rocks (>2.0 Ga): Implications for Hydrocarbon Prospects in Mars?*

J. W. Smith and J. R. Smith: *A Geochemical/ Mathematical Approach to Vitrinite Reflectance*

H. Sanei, F. Goodarzi, and L.D. Stasiuk: *The step-by-step organic petrology of recent lake sediments during the sequential pyrolysis process*

## *Organic Geochemistry and Source Rock Studies*

Henrik I. Petersen: *The effective oil window of coals: variations related to composition and coal age*

Henrik I. Petersen, Lars H. Nielsen, Claus Andersen, Anders Mathiesen, Hans P. Nytoft, Pham V. Tiem and Vu Tru: *Petroleum potential and maturity modelling of the northern Song Hong Basin, Vietnam*

Xianming Xiao, Dehan Liu, Paul G. Kralert, Yongchun Tang and Zhiguang Song: *Timing of multiple phases of hydrocarbon generation and accumulation/ migration in early Palaeozoic strata in the Lunnan Low Uplift of the Tarim Basin, People's Republic of China*

Xiao Xianming, Hu Yunxia , and Song Zhiguang : *Gas Potential of Bitumen in the Sinian Strata from the Middle Sichuan Paleo-Uplift, Sichuan Basin, P. R. China*

Jinxing Dai, Guangyou Zhu, Shengfei Qin and Yunpeng Wang: *The distribution of coal-measure-related gas fields in China*

Shengfei Qin and Jinxing Dai: *The formation and occurrence of oil and gas from coal and its controlling factors in the Kuche Depression of Tarim Basin*

Gareth Chalmers and R. Marc Bustin: *Organic Matter Distribution in Lower Cretaceous Shales of Northeastern British Columbia, Canada.*

Bob Davis, Steve Noon and John Harrington: *Influence of Depositional Environment on the Petroleum Potential of Tertiary Indonesian Coals*

C.E. Barker, M.J. Pawlewicz, M. D. Lewan, C. L. Carlson and Ank Webbers: *Update on the Influence of Extractable Organic Matter on Vitrinite Reflectance: Implications to Liquid Hydrocarbon or Bitumen Impregnation as a Suppression Mechanism*

N.S.Lavrenko*: Trace elements in oil shales in the European north of Russia*

Astrid Blandón, Georges Gorin, Fredy Arango and Alejandro Restrepo: *Potential for hydrocarbon generation in sub-bituminous coals of the Tertiary Amaga Formation in Central Colombia: a multidisciplinary study based on coal petrography, palynofacies and Rock-Eval pyrolysis*

Wan Hasiah Abdullah: *Oil-prone mangrove derived coaly constituents of NW Borneo*

Wan Hasiah Abdullah: *Maceral and textural association in the oil-generating coals of Sarawak*

Jun-Chin Shen, Cheng-Lung Kuo, and Chih-Hsien Sun: *Hydrocarbon Potential and Evolution of Concentrated Type III Kerogens in Western Taiwan*

Zhong Ningning and Bao Jianping: *Geochemical Characteristics of Terrestrially Sourced Oil from Jurassic Coal-bearing Strata in the Santanghu Basin, Northwest China*

Abdul Wahab Saleh Alaug: *Source rock evaluation of Al-Jawf sector, Sab'Atayn Basin, Yeman*

Nguyen Binh Thi Thanh and Nakayama Kazuo: *A study on hydrocarbon potential of carbonaceous mudstones in the Liard basin, northeast British Columbia*

Prasanta K. (Muki) Mukhopadhyay, Paul J. Harvey and D. Jack Macdonald: *Petroleum Systems of the Carboniferous Sediments of onshore Nova Scotia and Feasibility of CO2 Sequestration*

R. Sykes, L.R. Snowdon, P.E. Johansen, S.D. Killops, C. Chagué-Goff, K.M. Bartram and A. Markwitz: *Effects of Marine Influence on the Petroleum Generation Characteristics of Humic Coals: Eocene Mangahewa Formation, Taranaki Basin*

R. Sykes, L.H. Lin, C.L. Kuo and K. Manzano-Kareah: *Comparison of the Petrography and Petroleum Geochemistry of Tertiary Coals from New Zealand and Taiwan*

Chris Boreham and Avon McIntyre: *Carbon-isotope stratigraphy of Late Jurassic to Cretaceous kerogens in the Otway Basin, southern Australia.*

Jon H. Pedersen, Dag A. Karlsen, Jan E. Lie and Harald Brunstad: *Atypical source rocks and petroleum of the Norwegian Continental Shelf*

Li Jian, Luo Xia, Dai Jinxing, Li Zhisheng, Ma Chenghua and Liu Zhaolu: *Characteristics of carbon isotope compositions of gasoline compounds such as benzene and toluene and natural gases and correlation of gases with their source rocks in large-medium gas fields of China*

Luo Xia, Li Jian, Dai Jinxing, Hu Guoyi, Lui Zhaolu and Ma Chenghua: *Application of C5 - C8 parameters to identify the source and its migration direction of natural gas in Ordos Basin*

Jun-Chin Shen and Wuu-Liang Huang: *Hopanoid Distributions in Coals and Coaly Shales from Northwestern Taiwan with a Newly Calculated Maturity Parameter*

S.H. Wu, C.H. Sun, and C.L. Kuo: *The Characteristics of Alkylphenanthrenes and Dibenzothiophene in Condensates and Source rocks from Chinshui Anticline, Northwestern Taiwan*

D.Boushnev, N.Burdelnaya, O.Valiaeva and V. Saveliev*: Benzene-flow pyrolysis of sulphur-rich kerogen of Upper Jurassic oil-shale of Russian Platform*

Kuili Jin and Luwu Yan*: Source rock classification and the basic structure of coal and kerogen*

Nobuyori Takeda, Hideki Nishita, Yasushi Hamada, Larry Carbonel, Evelyn E. Cortez, Leticia S. Pangilinan and Filomena B. del Rosario*: Sampling and analysis of oil slicks on the sea surface*

Herbert Volk, Simon George, Manzur Ahmed and Richard Sykes*: Variation of molecular maturity parameters in iso-rank, marine-influenced coals: A systematic study on extracts of Eocene Taranaki coals*

Craig P. Marshall, Emmanuelle J. Javaux, Andrew H. Knoll and Malcolm R. Walter*: Exploring the Phylogenetic potential of micro-Fourier transform infrared (FTIR) spectroscopy of Proterozoic acritarchs*

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Walter Pickel, Simon George, Herbert Volk, and Manzur Ahmed: *Solid Bitumen - Evidence for Petroleum Migration in the Eastern Papuan Basin. An approach by means of organic petrology and organic geochemistry*

## *Coal Characterisation and Resources for Sustainable Development*

Krishna K. Sappal: *Organic Petrology and Trace Elements Distribution of Selected Permian Coal of India*

Joseph Donovan, Bruce Leavitt, Paul Ziemkiewicz, Tamara Vandivort, and Eberhard Werner: *Flooding of Abandoned Underground Pittsburgh Seam Coal Mines*

Alv Orheim, Trond Brekke, Gerd Bieg, Venche Horseide, Jørgen Stenvold: *Geochemical affinities applied in coal exploration and exploitation. Case study from Spitsbergen, Norway*

Alv Orheim, Gerd Bieg, Trond Brekke, Jørgen Stenvold: *Composition and characterisation of Tertiary coals in Spitsbergen, Norway - Improving the exploration play models.*

Tang Yuegang, Ren Deyi, Liao Libing and Zhao Fenghua: *Study on Surface Characteristics of Different Coal Pyrites and their Components*

Binbin Wang, Robert B. Finkelman, Harvey E. Belkin and Curtis A. Palmer: *A Possible Health Benefit of Coal Combustion*

Rita Susilawati and Colin R. Ward: *Metamorphism of Mineral Matter in Coal from the Bukit Asam Deposit, South Sumatra, Indonesia*

Zhongsheng Li, Colin R. Ward and Lila W. Gurba: *Occurrence of calcium and aluminium in the macerals of lignite from Leigh Creek Coalfield (Telford Basin), South Australia*

K. L. Pinetown and C.R. Ward: *Quantitative Evaluation of Minerals in Coal Deposits in the Witbank and Highveld Coalfields and the Potential Impact on Acid Mine Drainage*

Alexandra N. Golab and Adrian C. Hutton: *Petrography, Mineralogy and Geochemistry of Thermally Altered Coal in Permian Coal Measures, Hunter Valley, Australia*.

Richard Sakurovs, Elizabeth Gawronski and Lindsay Burke: *Influence of coking conditions on the determination of the amount of reactive inertinite in coals*

G.R. Holdgate, I. Cartwright, M.W. Wallace and S.J. Gallagher: *Yallourn Coal Seam – the Last Coal in Australia*

Harvey E. Belkin, Robert B. Finkelman, Qichao Wang, Binbin Wang, and Baoshan Zheng: *Mercury in China coals*

Fenghua Zhao, Zhiyuan Cong and Yuegang Tang: *The geochemistry of Rare Earth Elements in Acid Mine Drainage from Sitai Coalmine, Shanxi Province, North China*

Mariusz Minkina, S»awomira Pusz, Leokadia Róg and Richard Sakurovs: *Maceral composition of coal and coke reactivity and strength*

Raphael Wüst: *Artificial coalification of low-ash – mineral free - peat material and implications for mineral compositions of coals*

Alison Burke and Joan Esterle: *Palaeobotanical Investigation of Coal Band Cyclicity in the Permian-age Goonyella Middle Seam, Bowen Basin, Australia*

James C. Hower, Maria Mastalerz, Agnieszka Drobniak, and Cortland Eble: *The environmental impact of trace element contents of Western Kentucky and Indiana coals*

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| 2. | *Fluorescence - microscopical changes of liptinites and vitrinites during coalification and their relationship to bitumen generation and coking behavior,* TSOP Special Publication No. I (English translation by Neely Bostick, without photomicrographs) M. Teichmüller, 1984 | $ 5 |
| 3. | *Influence of Kerogen Isolation Methods on Petrographic and Bulk Chemical Composition of a Woodford Shale Sample,* TSOP Research Committee Report, October 1989 | $ 20 |
| 4. | *Fluorescence Microscopy Workshop Lecture Notes*, 1989 TSOP Meeting | Sold Out |
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| 11. | *Organic Geochemistry,* 8th TSOP Meeting, Lexington, KY, 1991; Vol. 20, No. 2, 1993 | $10 |
| 12. | 8th TSOP Meeting Field Trip Guidebook, Lexington, KY, 1991 | $ 5 |
| 13. | *Organic Geochemistry,* 10th TSOP Meeting, Norman, OK, 1993; Vol. 22, No. 1, 1994 | $10 |
| 14. | *Energy & Fuels*, ACS symposium on kerogen/macerals; Vol. 8, No. 6, 1994 | $10 |
| 15. | 12th TSOP Meeting Field Trip Guidebook, The Woodlands, TX, 1995 | $ 5 |
| 16. | *Organic Geochemistry*, 11th TSOP Meeting, Jackson, WY, 1994; Vol. 24, No. 2, 1996 | $35 |
| 17. | *International Journal of Coal Geology* (IJCG), 12th TSOP Meeting, The Woodlands, TX, 1995; Vol. 34, Nos. 3-4, 1997 | $15 |
| 18. | IJCG, 13th TSOP Meeting, Carbondale, IL, 1996;Vol. 37, Nos. 1-2, 1998 | Sold Out |
| 19. | IJCG, Special Issue: Appalachian Coalbed Methane; Vol. 38, Nos. 1-2, 1998 | $20 |
| 20. | IJCG, 14th TSOP Meeting, Lexington, KY, 1997;Vol. 39, Nos. 1-3, 1999 | $25 |
| 21. | IJCG, Special Issue: Applied Topics in Coal Geology; Vol. 41, Nos. 1-2, 1999 | $25 |
| 22. | IJCG, 15th TSOP Meeting, Halifax, Nova Scotia, 1998; Vol. 43, Nos. 1-4, 2000 | $25 |
| 23. | IJCG, 16th TSOP Meeting, Snowbird, Utah, 1999; Vol. 46, Nos. 2-4, 2001 | $25 |
| 24. | IJCG, 17th TSOP Meeting, Bloomington, Indiana, 2000; Vol. 47, Nos. 3-4, 2001 | $25 |
| 25. | IJCG, 18th TSOP Meeting, Houston, Texas, 2002; Vol. 54, Nos. 1-2, 2003 | $30 |

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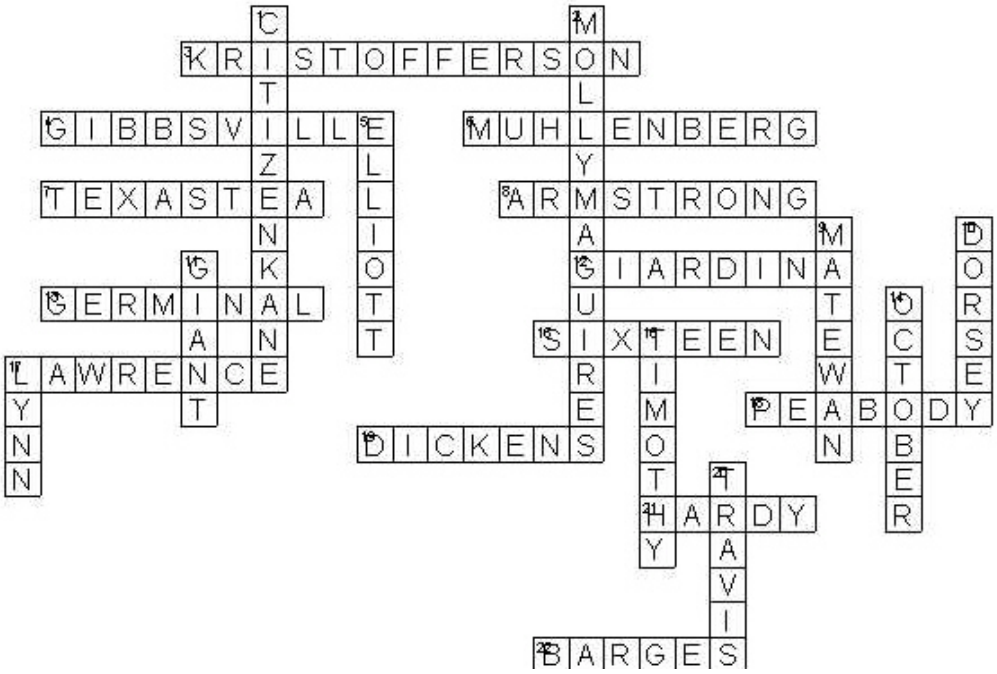
# Solution to last issue's puzzle

# Coal (and a little oil) in the Arts

a crossword puzzle from an anonymous contributor



## Across

3. Kris ___, writer of "Me & Bobby McGee" with line "From the coalmines of Kentucky . . . "
4. Pseudonym for anthracite coal town Pottsville in O'Hara's "Appointment in Samarra"
6. Kentucky county John Prine longs to return to in song "Paradise"
7. Pseudonym for oil in theme to TV's "Beverly Hillbillies" (2 words)
8. Louis ___, American jazz great, performer of "Coal cart blues"
12. Author of "Storming Heaven," novel of mine wars in southern West Virginia
13. Emile Zola's 1885 novel of class struggle in French coal mining region
15. ___ tons of Number 9 coal, song popularized by Tennessee Ernie Ford
17. D.H. ___, early-20th century writer of "Women in Love", novel set in coal town
18. In John Prine's song "Paradise," "Mr. ___'s coal train has hauled it away"
19. Brtiish novelist, coal references in "Bleak House"
21. Victorian novelist, included coal references in novels, including "The Mayor of Casterbridge"
22. "Coal ___": painting by Vincent van Gogh

## Down

1. Orson Welles movie beaten beaten for 1941 Best Picture Oscar by Welsh coal mining film "How green was my valley" (2 words)
2. 1969 movie, starring Sean Connery, about labor wars in Pennsylvania Anthracite Fields
5. "Billy ___": 2000 movie set in coalfields of northern England
9. John Sayles' 1987 movie of 1920 massacre in Mingo County, West Virginia
10. Lee ___, singer of 1966 hit "Working in a coal mine"
11. 1956 movie set in Texas oil field, James Dean's last movie
14. "___ Sky": 1999 movie based on book "Rocket Boys," set in coalfields of West Virginia
16. '70's minor pop hit about cannibalism in coal mine
17. Loretta ___, Kentucky-born singer knwon as the "Coal Miner's Daughter"
20. Merle ___, writer of "Dark as a dungeon"

# Calendar of Events

## 2004

July 11 - 16, 2004: Carbon 2004, Brown University, Providence, Rhode Island. http://www.carbon2004.org/

July 14 - 15, 2004: 16th Annual Meeting of the British Organic Geochemical Society (BOGS), University of Nottingham.
http://www.nottingham.ac.uk/scheme/research/fuelandenergy/bogs04.htm

August 20 - 28, 2004: 32nd International Geological Congress, Florence, Italy, including G-04.05 Organic Geochemistry. http://www.32igc.org/home.htm

August 22 -2 6, 2004: American Chemical Society Meeting, Philadelphia, Pennsylvania, including symposia sponsored by the Fuel Chemistry Division.
http://oasys.acs.org/acs/228nm/fuel/program.html

Sept. 12 - 18, 2004: 56th Annual Meeting of **ICCP,** Budapest, Hungary. [NOTE these corrected dates.] Including a one-day symposium on "Environmental management implications of organic facies studies."
http://www.mafi.hu/ICCP/index.html

Sept. 13 - 17, 2004: 21st International Pittsburgh Coal Conference, Osaka, Japan.
http://www.engrng.pitt.edu/~pccwww/

**Sept. 27 - Oct. 1, 2004:** 21st Annual **TSOP** Meeting, TSOP: **Organic Matter Down Under**, Sydney, Australia. See pages 2, 10 - 15 and
http://www.tsop.org/mtgsyd.htm

Oct. 12 - 14, 2004: AAAPG-2004, 6th International Conference on Petroleum Geochemistry and Exploration in the Afro-Asian Region, Beijing, China.

Nov. 7 - 10, 2004: Geological Society of America Annual Meeting, Denver. Including sessions co-sponsored by Coal Geology Division.
http://www.isgs.uiuc.edu/coalsec/GSA/ and
http://www.geosociety.org/

## 2005

March 6 - 11, 2005: An International Conference: Geological Problem Solving with Microfossils. Rice University, Houston, Texas.
http://www.sepm.org/microfossils2005.htm

March 13 - 17, 2005: American Chemical Society Meeting, San Diego, California.

April 11 - 15, 2005: World of Coal Ash, Lexington, KY, USA. Abstract deadline September 1.
http://www.worldofcoalash.org

June 19 -22, 2005 AAPG Convention, Calgary, Alberta. See page 5 and http:www.aapg.org/calgary/

August 28 - Sept. 1, 2005: American Chemical Society Meeting, Washington, D.C.

**Sept. 11 - 14, 2005:** 22nd Annual **TSOP** Meeting, Louisville, Kentucky, USA. See page 5.

Sept. 12 - 16, 2005: 22nd International Meeting on Organic Geochemistry (IMOG), Sevilla, Spain.
http://www.eaog.org/meetings/meetings.html

Sept. 18 - 23, 2005: 57th Annual Meeting of **ICCP**, Patras, Greece. Followed by a three-day excursion.
http://www.iccop.org/57AnnualMeeting.htm

Oct. 16-19, 2005: Geological Society of America Annual Meeting, Salt Lake City.