

# On the Rocks



*A Newsletter of the Michigan Basin Geological Society*

2006-2007 Number 2

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

October 2006

## EVENTS

**October 16, 2006:** SPE will sponsor this month's talk by **Dr. Theo H. Fleisch** on the **The End of Stranded Gas: The Emergence of the Gas to Products Ratio.**

**November 8, 2006:** SPE will also sponsor the November meeting with a presentation by P.V. Suryanarayana, on **Is Underbalanced Drilling the Right Answer for your Reservoir?**

## DUES TIME STILL

Its time once again to renew your MBGS dues for the 2006-2007 season, please take the time to return the information below with your dues. **Your newsletter editor encourages distribution by e-mail** as a more timely and cost efficient way to receive your newsletter. Timely renewal helps your officers plan for the upcoming year and is the best way to ensure there will be no interruptions in receiving your On the Rocks newsletter. Please use the following dues notice.

### Michigan Basin Geological Society Dues Notice

Please fill out this form when paying your dues for 2006-2007. Dues are \$25.00 for active member and \$10.00 for students. **Make check payable to: MBGS**

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

E-Mail \_\_\_\_\_

Amount enclosed \_\_\_\_\_

Send Newsletter by e-mail \_\_\_\_\_ or Mail \_\_\_\_\_ @ address above

Mail your remittance to: Tom Hoane, 1748 Danby Lane SE, Grand Rapids, MI 49506

## 2006-2007 MBGS Officers

The Executive Committee meeting minutes are available on our website at [www.mbgs.org](http://www.mbgs.org)

PRESIDENT: ROBERT REYNOLDS,  
Reynolds Geological, LLC  
509 Hall Blvd. Mason, MI 48854  
517-676-9936, fax 517-676-8169,  
[reynoldsgeo@voyager.net](mailto:reynoldsgeo@voyager.net)

VICE PRESIDENT: MARK NIDA  
LEG, Public Service Commission  
PO Box 30221, Lansing MI 48909  
517-241-6136, fax 517-241-6121, [mcnida@michigan.gov](mailto:mcnida@michigan.gov)

SECRETARY: KEN PETRIE  
Aurora Energy  
1951 Penobscot Drive  
Okemos, MI 48864  
517-347-3043 [kmpetrie@yahoo.com](mailto:kmpetrie@yahoo.com)

TREASURER & PUBLICATIONS: TOM HOANE  
FMFM, DNR  
P.O. Box 30452, Lansing, MI 48909-7952  
Bus 517-241-3769, fax 517-373-2443 [hoanet@michigan.gov](mailto:hoanet@michigan.gov)

BUSINESS MANAGER: TOM GODBOLD  
OGS, DEQ  
P.O. Box 30256, Lansing, MI 48909-7756  
Ph: 517-241-1545, Fax 517-241-1595  
[godboldt@michigan.gov](mailto:godboldt@michigan.gov)

PAST-PRESIDENT: DR. ROBB GILLESPIE  
WMU Geology Department  
1123 Rood Hall, WMU, Kalamazoo, MI 49008  
269-378-5354, fax 269-387-5513 [robb.gillespie@wmich.edu](mailto:robb.gillespie@wmich.edu)

CO-FIELDTRIP DIRECTORS:  
MARK WOLLENSAK, CPG  
Hamp, Mathews & Assoc, Inc.  
15266 Ann Drive, Bath, MI 48808  
Ph: 517-641-7333 Fax 517-641-7337  
Cell 517-719-8321 [wollensak@voyager.net](mailto:wollensak@voyager.net)

and

LEONARD ESPINOSA, FMFM, DNR  
PO Box 30452, Lansing, MI 48909-7952  
Ph: 517-335-3248, Fax 517-373-2443  
[espinosl@michigan.gov](mailto:espinosl@michigan.gov)

NEWSLETTER EDITOR: TOM WELLMAN,  
FMFM, DNR  
PO Box 30452, Lansing, MI 48909-7952  
Ph: 517-373-7666, Fax 517-373-2443  
[wellmant@michigan.gov](mailto:wellmant@michigan.gov)

ELECTRONIC PUBLICATIONS:  
MARK WOLLENSAK

AAPG DELEGATES:  
DR. AUREAL CROSS, MSU,  
Dept. of Geol Sciences, 206 Natural Sciences Bldg, East  
Michigan State University:  
Lansing, MI 48824-1115, 517-335-4630/4639,  
[cross1@pilot.msu.edu](mailto:cross1@pilot.msu.edu)

Dr. WILLIAM, HARRISON,  
Western Michigan University  
616-387-8691  
[william.harrison\\_iii@wmich.edu](mailto:william.harrison_iii@wmich.edu)

## MEETING CANCELLATION POLICY

Monthly meetings will be automatically cancelled whenever the National Weather Service issues a "Storm Warning" for the Lansing area. If driving conditions are poor but a "Warning" has not been issued please contact any member of the Executive Committee for the status of the meeting.

## MICHIGAN BASIN GEOLOGICAL SOCIETY PUBLICATIONS

**Historical CD #1: Nine out-of-print publications from 1949 through 1965 and 1998**, Devonian to Silurian Rock Fieldtrips to MI, WI, IL and Ontario, 2000, \$15

**Historical CD #2: Four out-of-print publications from 1947, 1959, 1983 and 1991**, Northern Devonian and UP Fieldtrips in MI, 2001, \$10

**Historical CD #3: Six out-of-print publications from 1947, 1959, 1983 and 1991**, Northern Devonian and UP Fieldtrips in MI, 2001, \$12

**Special Price - Historical CD #1, #2 & #3, \$30**

**Stratigraphic Lexicon for Michigan**, 2001, prepared by MBGS and published by DEQ, 56 pp., chart, \$2.65 picked up or \$4 mailed, Can be ordered from MBGS or Geological Survey Div. of the DEQ

Price Includes postage, handling and any applicable sales tax. MBGS Members receive a 10% discount on MBGS publications.

Orders for publications should be prepaid in U.S. Funds and addressed to:  
MBGS - Publications  
c/o Dept. of Geological Sciences  
206 Natural Sciences Building  
Michigan State University  
East Lansing, Michigan 48824-1115

## MBGS Mug and Jacket Sale

The Michigan Basin Geological Society is offering mugs and jackets with the society logo for sale. The mugs are \$5.00 each. The jackets are \$60.00 each plus postage. Please contact Dan McGuire at: Phone (517) 772-5219, Fax (517) 772-7021, or [danmcguire@sensible-net.com](mailto:danmcguire@sensible-net.com). Remember to include the correct size of the jacket and the quantity of each item. Checks should be made out to the MBGS.

# SPE – MBGS Meeting

## Monday October 16, 2006

Location: Coyote Creek  
6951 Lansing Road,  
Diamondale, MI 48821

5:00 to 6:00 PM – Social Hour  
6:00 PM – Dinner  
Presentation after Dinner  
Cost (includes dinner): \$25.00 (Students \$15.00)

Topic: **“The End of Stranded Gas:  
The Emergence of the Gas to Products (GTP) Option”**  
by **Dr. Theo H Fleisch**

SPE Dinner Meeting Reservation

Name: \_\_\_\_\_

Number Attending: \_\_\_\_\_

Fee Enclosed: \_\_\_\_\_ Will Pay at Door: \_\_\_\_\_

Please make checks payable to **SPE** and return to Luke Dewig by October 13

Luke Dewig  
El Paso Corporation  
27725 Stansbury Blvd. Suite 200  
Farmington Hills, Michigan 48334  
tel: 248-994-4027 fax: 248-994-4127  
e-mail: [luke.dewig@elpaso.com](mailto:luke.dewig@elpaso.com)

# **The End of Stranded Gas: The Emergence of the Gas to Products (GTP) Option**

Dr. Theo H Fleisch

## **Abstract:**

The world has an abundant supply of low cost natural gas in remote locations. The monetization of these stranded gas resources requires new technologies and new, large markets. GTP technologies, including the well known GTL (Gas to Liquids) process, finally emerge as options to efficiently convert this resource into clean, high value fuels and chemicals. This change was brought about by technology developments over the last two decades. Over the last two years, we have seen financial project commitments of over \$20billion for GTL projects alone. Less well known are rapid advances in gas to chemicals (such as methanol) conversion technologies and increases in plant scales which significantly reduce manufacturing costs. These developments transition e.g. methanol from a chemical to a large scale, future fuel and chemical feedstock for other large scale chemicals such as olefins. Among the many methanol derivatives (olefins, gasoline, acetic acid, hydrogen, etc) there is great promise for dimethyl-ether (DME) which has the properties of LPG. DME is envisioned and already employed as a domestic heating and cooking fuel, power generation fuel and as a super clean diesel alternative.

This presentation will review the technologies, products and markets of the many GTP options. It will discuss the role of GTP in the context of existing gas monetization businesses, such as LNG and pipelines, as well as other emerging technologies such as CNG and gas by wire. Future developments of floating GTP applications for offshore associated gas scenarios will also be reviewed.

## **Biography:**

Dr. Theo Fleisch is a member of BP's Group Leadership and holds the position of Distinguished Advisor. Currently, he works in BP's new Global Gas To Products (GTP) group. His work focuses on the development and capture of low cost Gas To Market technologies, the development of commercialization strategies, evaluation of business opportunities and support of commercial ventures. Dr. Fleisch is well known for his leadership in GTP and his recognition of DME as a multi-source, multi-purpose clean fuel and chemical feedstock of the future. He holds a Masters and PhD summa cum laude degree in Physical Chemistry from the University of Innsbruck, Austria, had a postdoctoral assignment in Chemical Engineering at Purdue and has worked for 27 years in numerous technical and managerial positions in Amoco and BP. He has over 70 publications and 10 patents and has held many leadership positions in scientific and industrial organizations.

## Help Wanted: Manager of Oil and Gas Exploration

The R L R Group, is a management consulting firm specializing in executive search. We have been retained by a dynamic independent oil and gas, exploration and production company, to find a *Manager of Exploration*.

The parent company employs over 300 people and had sales in excess of \$ 375 million last year. They have 1.5 million acres of leasehold properties. We seek to find a geologist with minimum of a B.S. degree in Geology and proven experience in finding oil or gas east of the Mississippi River.

The successful candidate will manage 3 other geologist and report to the president of the Illinois based subsidiary. Our client is preparing to go public on the NYSE in the next six months. This position will pay 6 figures.

Please reply to:  
Bob Hebert  
Partner  
R L R Group  
[www.rlrgroup.com](http://www.rlrgroup.com)  
(281) 893-6128

## MICHIGAN BASIN GEOLOGICAL SOCIETY PUBLICATIONS

**Historical CD #1: Nine out-of-print publications from 1949 through 1965 and 1998**, Devonian to Silurian Rock Fieldtrips to MI, WI, IL and Ontario, 2000, \$15

**Historical CD #2: Four out-of-print publications from 1947, 1959, 1983 and 1991**, Northern Devonian and UP Fieldtrips in MI, 2001, \$15

**Historical CD #3: Six out-of-print publications from 1948, 1952, 1990 - 1995**, Northern Devonian and UP Fieldtrips in MI, 2001, \$15

**Historical CD #4: Six out-of-print publications from 1957, 1958, 1961, 1967, 1968 and 1970**, Northern LP and UP Fieldtrips in MI, 2004, \$15

**Historical CD #5: Five out-of-print publications from 1971, 1989, 2001**, Southern LP, MI and Ohio Fieldtrips and Oil & Gas Fields Vol. 1 & 2, 1969 & 1992, 2006, \$50

### Special Price - Historical CDs #1, #2 #3, #4 & #5 = \$75

**NE Lower Peninsula Geological Field Conference**, 2004, T. Black, M. Wollensak, 133 pp., illus., maps. On CD \$10

**Stratigraphic Lexicon for Michigan**, 2001, prepared by MBGS and published by DEQ, 56 pp., chart, \$2.65 picked up or \$4 mailed, Can be ordered from MBGS or Office of Geological Survey of the DEQ

Price Includes postage, handling and any applicable sales tax. Orders for publications should be prepaid in U.S. Funds and addressed to: MBGS - Publications, P O Box 18074, Lansing MI 48901-8074

## Petrolia and Oil Springs Tour

On Saturday 16 September MBGS members Kandiah Balachandran, Len Espinosa, Bill & Eloise Haller, Wayne Kukuk, Jack Westbrook, Mark Wolensak and his daughter Sarah, were given a grand tour of the birthplace of commercial oil production by Claudia and Bob Cochrane and Charlie Fairbank. In 1858 James Williams dug the first commercial oil well in North America. The tour included the Petrolia Discovery Outdoor Museum and the adjacent Fairbank farm. Both containing wells continuously operating from 1861. Among the things we saw were sheep grazing among the “jerker rods” at the Fairbank farm, in the ground tank batteries and separators, the “Canadian Drill Rig”, and the “Fitzgerald Rig”. Named after its builder, Frederick Ardell Fitzgerald, it is the largest pumping rig in the world, currently producing 220 bbl a month from 20 wells. 2008 will mark the 150<sup>th</sup> anniversary of the discovery so mark your calendars if you are interested in seeing this extraordinary “living history” in person.

