



Joint Session with SPE
Radisson Hotel – Greentree
13 December 2007

Bridging over Uncertainty: Past Performance into Forecasting

presented by

Dr. Sameh Macary
SPE Distinguished Lecturer
IPR Group of Companies

Abstract

Engineers tend to be more deterministic. With the ever growing challenges of decision making and risk assessment associated with huge investments, the “need” to realize many (or even all) objectives of the business endeavor becomes crucial. Expecting probable outcomes of a future process yet to leave them comfortable in using just determinism.

However, scientific/technical education drives us to spend more time and money to get closer to “The Answer”. This leads, naturally, to deterministic conservative estimates, possibly false precision and frequent surprises.

This presentation aims to design the concept of modeling the existing data into visualized tools to help in predicting the future. Engineers should use the Monte Carlo Simulation, Decision Trees, Data Bases, Expert Systems, Linear Programming, Design of Experiments and all types of Artificial intelligence to state their uncertainties not as discrete values, but as continuous ranges. G&G, reserves estimates, development plans, operations, IPR, and economics are vast areas to apply these techniques.

How high are the “highs” and how low are the “lows” and when they occur are difficult to predict. So let's put our past experience on an updated form to be an ongoing process to help currently in minimizing uncertainties and to include future knowledge.

One of the already proved approaches to tackle uncertainty is the multidisciplinary team. However, members of this team have to unify first their views, thoughts, and sometimes even units. They are also requested to use each available visualization tool experimenting sensitivity analysis to define the way for process optimization.

Author Biography

Dr. Sameh Macary currently works with the IPR Group of Companies. He worked for 8 years with GUPCO (the biggest Egyptian JV with AMOCO, then BP) and 3 years with DCS-Schlumberger as part-time consultant. Dr. Macary is the Production Department Head and Petroleum Engineering Professor in Egyptian Petroleum Research Institute (EPRI). Sameh graduated as a PE in 1981 from Cairo University with Honor and then was appointed as instructor for two years in the Engineering Mathematics & Physics Department. Mr. Macary Has M. Sc. (1985) and Ph. D. (1988) in Production & Reservoir Eng. from Azerbaijanian Institute of Oil & Chemistry. Dr. Macary served as the Tech. Prog. Chairman of the local Section for two years and currently is the publicity mentor; he's the representative of Egypt in the ME SPE Council. Sameh participated in organizing many of SPW ATW. He has 12 SPE Papers; has served in Gas Technology, Reservoir Engineering and Management Committees of Different ATCEs and SPE International Membership Committee. Recently, Dr. Macary was awarded the Regional Service Award for Reservoir Description and Dynamics in the Middle East.

For reservations to this informative and entertaining evening, please complete the attached reservation form.

[Please Note this meeting is a Lunch Meeting.](#)

WHAT IS THE PAPG?

PAPG is a non-profit organization founded in 1984 to provide a forum for Petroleum Geologists in the Pittsburgh Area to meet socially and discuss technical topics relative to the exploration and development of reserves in the Northern and Central Appalachian Basin. PAPG is an affiliated association with AAPG (American Association of Petroleum Geologists) and has representation in the House of Delegates. Educational opportunities are provided via field trips, seminars and AAPG Sectional meetings, sponsored solely by PAPG or in conjunction with the PTTC (Petroleum Technology Transfer Council), PGS (Pittsburgh Geologic Society) and SPE (Society of Petroleum Engineers).

Although PAPG is predominately a geologic organization, numerous industry professionals including geophysicists, engineers, lawyers and landmen are among PAPG's members and find the interaction at meetings and educational opportunities beneficial to their professions. PAPG also encourages student membership and participation.

Meetings are typically held monthly from September through May in locations within 50 miles of downtown Pittsburgh. From time to time, meetings are held in conjunction with SPE and PGS.

NEWS AND EVENTS

[Terry Engelder and Gary Lash Black Shale Paper](#)

The PAPG has received a draft version of Terry Engelder's talk he presented in October on natural fractures and joints in the Marcellus and other black Devonian Shales in PA and NY. He has agreed to allow us to post this on our website. To access, follow the link below:

[http://www.papgrocks.org/engelder\\$lash.pdf](http://www.papgrocks.org/engelder$lash.pdf)

[PAPG Website:](#)

The PAPG Website is now up and running. Visit the site at <http://www.PAPGrocks.org>.

Mark your calendar now for these upcoming events:

December 19th, 2007 -

PAPG-SPE Annual Christmas Party

Penn Brewery - North Side - Details coming soon.

January 23rd 2008 -

PAPG-SPE Meeting

Skip Hobbs - The Future of the Global Oil Industry: Resources, Challenges and the Geoscience Workforce

2008 AAPG Eastern Regional Meeting

- Scheduled for Pittsburgh - Planning under way

Have information you want to share with the organization?

Please contact the secretary to add the information to the next newsletter.

SPONSORS

PAPG wishes to thank the companies who have contributed to the PAPG 2007-08 season

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If you or your company would like to sponsor the PAPG and help support the continuation of our Meetings, Field Trips, and other events, we ask that you send a donation to the PAPG. Any contribution of \$100.00 or more by any group or individual will be recognized on our website, in the monthly newsletter, and at scheduled monthly meetings. We ask that you show your support for the PAPG by a contribution and your continuing attendance at the monthly meetings.

We appreciate your continued support.

[Contributions may be sent to: PAPG PO BOX 16352 GREENTREE PA 15242-0352](mailto:PAPG PO BOX 16352 GREENTREE PA 15242-0352)

NOTICE OF DECEMBER 2007 MEETING PITTSBURGH ASSOCIATION OF PETROLEUM GEOLOGISTS

DATE: Thursday 13, December 2007

PLACE: Radisson Hotel - Greentree
101 Radisson Drive
Pittsburgh, PA 15220
(412) 922-8400

TIME: 11:30 AM – Lunch (New York Deli)
12:30 PM – Speaker

TOPIC: “Bridging Over Uncertainty: Past Performance into Forecasting”

SPEAKER: Dr. Sameh Macary

COST: **\$30.00**
\$10.00 students
(Checks payable to SPE)

DINNER: New York Deli

RESERVATIONS: Call, email, fax, or mail this reservation form to:

Barbara A. Purks
412-787-5403 (phone)
412-787-2906 (fax)
bpurks@pittsburgh.oilfield.slb.com

NAME(S) _____

COMPANY

CONTACT THE PAPG

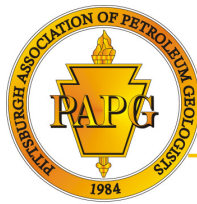
PAPG Officers:

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- AAPG Delegate:** **Doug Patchen** – Petroleum Technology Transfer Council
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Email: doug.patchen@mail.wvu.edu

PAPG 2007-2008 DUES

PAPG dues for the 2007-2008 season are now DUE!

*The membership form is attached to this newsletter. Please fill the form out **completely** so that we can ensure that we have your latest contact information. We are planning to publish a membership directory this year and your updated information is crucial.*



P·A·P·G

Pittsburgh Association of
Petroleum Geologists

An AAPG Affiliated Society

www.papgrocks.org

APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

PLEASE INDICATE YOUR MEMBERSHIP STATUS BY CHECKING THE APPROPRIATE BOX:

PROFESSIONAL - RENEWAL

STUDENT - RENEWAL

PROFESSIONAL – NEW MEMBERSHIP

STUDENT - NEW MEMBERSHIP

The **PITTSBURGH ASSOCIATION OF PETROLEUM GEOLOGISTS** membership year runs from JUNE 1 through MAY 31. Monthly meetings are usually held the second Thursday of the month from September through May.

Professional Dues are \$25.00 per year

Student Dues are \$10.00 per year

NEW APPLICATION: If you have never been a member of PAPG, please fill out the remainder of the form, obtain the signatures of two members to sponsor you, and mail check, payable to PAPG, to the address below.

RENEWAL: Please fill out the mailing address/directory information below if your contact information has changed and submit dues, payable to PAPG, to the address below.

Mail completed form and dues payment (checks only - Payable to PAPG) to:

Dave Boyer
Texas Keystone, Inc.
560 Epsilon Drive
Pittsburgh, PA 15238

MAILING ADDRESS / DIRECTORY INFORMATION – PLEASE COMPLETE ALL INFORMATION

NAME _____ DATE _____

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EMAIL: _____ **Please fill this in – help us save those mailing costs!**

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WOULD YOU BE INTERESTED IN PAPG PARTICIPATION?: Officer Speaker

**WOULD YOU LIKE YOUR CONTACT INFORMATION PLACED
IN THE MEMBERSHIP DIRECTORY (available to members only?)** Yes No

TWO SPONSORS REQUIRED for NEW MEMBERS

Name _____ Date _____

Name _____ Date _____