

GARY P. CITRON

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EXPERIENCE

2003 – Present: Managing Partner, Rose & Associates, LLP

Responsible for planning and resourcing the efforts of a leading consulting firm in the field of E&P Risk Analysis. Rose & Associates now has a presence in Canada and Australia, with headquarters in Houston, Texas and domestic offices in Boston, Austin, San Ramon, Midland and Dallas. Led the firm to worldwide profitable growth with renown instruction, practical consulting and distinctive software solutions.

1999 – 2003: Associate and Partner, Rose & Associates, LLP

Teaching, consulting and software development in the field of E&P Risk Analysis.

1994 - 1999: Geophysical Associate, Amoco's Prospect Quality Team

Shared responsibility for standardized, comprehensive prospect assessments worldwide for portfolio analysis, resource prediction and risk calibration. Prospect assessments led to the quantification of possible size ranges and their associated risks. Also responsible for suggesting technologies that can further clarify risks for more informed decision making. Post appraisal of over 120 exploration wells led to further calibration of prospect risks and development of learning themes shared with the exploration community. Pioneered work on portfolio value prediction accuracy. Extensive consulting on prospect assessment and measurement techniques with exploration teams. Frequent interaction with various NOC energy ministries on the linkage between prospect assessment and portfolio analysis.

1993 - 1994: Team Consultant, Amoco's Worldwide Exploration Business Group

Coach to 17 managers transferring skills on feedback systems, work process improvement and group problem solving to help teams enhance performance and customer service. Also provided facilitation of strategic and business planning sessions and regular feedback to managers.

1989 - 1993: Resource Manager, Amoco's Offshore Business Unit (Gulf of Mexico)

Steward to over 20 western Gulf producing properties and supervisor to six geoscientists and three engineers. Mutually defined and appraised individual performance. Coordinated budgeting, development drilling, workovers and recompletions with partners on core properties. Responsible for OCS lease acquisition packages and negotiations of 3D seismic coverage. Directed divestments of non-core properties. Coordinated additions and revisions to reserve books.

- Contributed to our first strategic plan, which by 1993 led to over \$1.2 B in cash flow.
- Designed and supervised field study program, leading to property valuations, reservoir management plans and prospect prioritization.

- **Results include** over 25 MMBOE booked; 90% drilling success rate; and negotiations leading to: \$17MM in divestments, and premium sales / purchases of 3D surveys.
- By assigning drillers to resource teams, reduced 1993 drilling costs by 20%.

1987 - 1989: Exploitation Group Supervisor, Gulf of Mexico, Amoco

Supervisory responsibilities (as above) for ten geoscientists generating and drilling prospects in and around western Gulf producing properties. Coordinated with reservoir engineers to complete property evaluations.

- Over 50 MMBOE in resource additions.
- Negotiated Amoco's first major purchase of regional (250,000 acres) 3D seismic coverage and workstation to clarify structural framework around H. I. core properties.
- Designed regional mapping program that integrated stratigraphic sequences with their interval velocity data to extend Gulf shelf sand trends across flexure trend.

1985 - 1987: Geophysical Supervisor, South and offshore Louisiana, Amoco

Supervising a staff up to 17 technologists and geophysicists, responsible for geophysical processing and technical evaluations of prospects.

- Increased quality and quantity (by 50%) of evaluations with customer involvement on interpretive processing techniques such as refraction statics and subsalt imaging.
- Constructed velocity data system in south Louisiana to improve prediction of prospect sand quality and depth mapping.

1980 - 1985: Interpreting Geophysicist, Amoco

- Acquisition and processing of west Texas seismic data.
- Prospect generation in the Norphlet, Appalachian, Ouachita trends, and the central Gulf of Mexico.

RELATED EXPERIENCE, SERVICE & AWARDS

2005: AAPG Education Committee

2004: AAPG Certified and Texas Registered Petroleum Geologist

2001: Best Paper Award from the AAPG's DPA

1999: Member, AAPG's VPG Program

1998: Selected for participation to design criteria of long term Amoco portfolios

1996: Leader, operational results category (6.0), Baldrige assessment at Amoco

1992: Judge of oral presentations, 1992 AAPG annual convention

1992: Fund raising for University of New Orleans minority geoscience programs

1991: Ongoing recruitment of geoscience students via Targeted Selection

1988: Amoco's volunteer coordinator, local PBS membership drives

1976: Geological Field Assistant, U.S. Geological Survey, Denver

1972: Coordinator, on-campus voter registration, SUNY Buffalo

EDUCATION

- B.A. Geology, 1974, SUNY center at Buffalo
(**Magna Cum Laude, Pegrum Award**)
- M.S. Geology, 1976, Cornell University
Thesis: Idavada Ash Flows in the Three Creek Area, SW Idaho, and their Regional Implications.
(**Sigma Xi Grant Award**)
- Ph.D. Geology, 1980, Cornell University
Thesis: The Hidden Bay Pluton, Alaska,: Geochemistry and Tectonic Significance of Oligocene Magmatic Activity in the Aleutian Island Arc.
(**GSA Penrose Grant Award**)

PUBLICATIONS

Citron, G.P., MacKay, J.A., and Rose, P.R., in press (2006), Appropriate Creativity and Measurement in the Deliberate Search, talk delivered to the Geological Society of London's Special Conference on The Deliberate Search for the Stratigraphic Trap - - Where Are We Now?, May 11-13, 2004. Manuscript accepted for publication to the Journal of the Geological Society of London, 17 pp.

Citron, G.P., 2004, Lessons From Play Analysis, Paper presented at the 2004 John S. Herold Pacesetters Energy Conference, Greenwich Connecticut, September 2004.

Citron, G.P., Cook, D.M. and Rose, P.R., 2002, Performance Tracking as a Portfolio Management Learning Tool, AAPG 2002 Annual Meeting, March 10-13, 2002, eposter, pg A32.

Rose, P.R., and **Citron, G.P.,** 2001, Key Patterns of Corporate Organization and Culture Influencing Exploration Performance, Presentation for the Geological Society Dinner Meeting, May 2001.

Citron, G.P., and Rose, P.R., 2001, Challenges Associated with Amplitude-Bearing, Multiple-Zone Prospects, The Leading Edge, August, 2001, page 830-838.

Rose, P.R., and **Citron, G.P.,** 2000, The "Prospector Myth" vs. Systematic Management of Exploration Portfolios: Dealing with the Dilemma, Houston Geological Society Bulletin, v. 42, n. 10, p. 26-30.

Citron, G.P., Carragher, P. D., McMaster, G. M., Gardemal, J. M., and Jacobsen, D., 1997, Post Appraisal and Archival: Critical Elements in Successful Exploration Risk

Assessment: Invited paper at the first Landmark Worldwide Technology Forum, February 12-14, 1997.

Kay, S.M., Kay, R.W., **Citron, G.P.**, and Perfit, M.R., 1990, Calc-alkaline plutonism in the intra-oceanic Aleutian Arc, Alaska, *in* Kay, S.M., and Rapela, C.W., eds., *Plutonism from Antarctica to Alaska: Geological Society of America Special Paper 241*, p. 233-255.

Bonnichsen, B., and **Citron, G.P.**, 1984, The Cougar Point Tuff, southwestern Idaho and vicinity, *in* Bonnichsen, B., and Breckenridge, R.M., eds., *Cenozoic Geology of Idaho: Idaho Geological Survey Bulletin 26*, p. 255-282.

Kay, S.M., Kay, R.W., and **Citron, G.P.**, 1982, Tectonic controls on tholeiitic and calc-alkaline magmatism in the Aleutian Arc: *Journal of Geophysical Research*, v. 87, p. 4051-4072.

Citron, G.P., Kay, R.W., Kay, S.M., Snee, L.W., and Sutter, J.F., 1980, Tectonic significance of early Oligocene plutonism on Adak Island, AK: *Geology*, v. 8, p. 375-379.

Brown, L.D., Reilinger, R.W., and **Citron, G.P.**, 1980, Recent vertical crustal movements in the United States: Evidence from precise leveling, *in* Morner, N.A., ed., *Earth Rheology and Eustasy*. J Wiley, p. 389-405.

Citron, G.P., and Brown, L.D., 1979, Recent vertical crustal movements from precise leveling surveys in the Blue Ridge and Piedmont provinces, North Carolina and Georgia: *Tectonophysics*, v. 52, p. 223-238.

Reilinger, R.W., **Citron, G.P.**, and Brown, L.D., 1977, Recent vertical crustal movements from precise leveling data in southwest Montana, western Yellowstone National Park and the Snake River Plain: *Journal of Geophysical Research*, v. 82, p. 5349-5359.

Citron, G.P., and Turcotte, D.L., 1977, Curvature of the San Andreas Fault, California: *Comment: Geology*, v. 5, p. 324-325.

Internal Amoco PQT Publications (1994-1999)

- 29.102 Trap Definition: What It Is and What Factors Impact Risk Associated with it: Text of the Opening Speech at the First Amoco Symposium on Trap Definition, Sub Andean Basins.
- 29.104 External Calibration of RISK-Derived Mean Economic Field Sizes (MES) to Field Size Distributions: North Sea and Egypt
- 29.110 Resource Estimate, West of Shetland Islands (WOSI) Basin, UKCS Utilizing a Drilling Forecast Model

- 29.156 Calibration of Prospect Ranking Models Using the 1995 Drilling Portfolio
- 29.164 Discrepancy between the Average MES and the RISK2 PORTFOLIO Resource Estimation Method for Small Portfolios (with application to Bolivia)
- 29.165 WEBG Value Efficiency and Value Prediction Accuracy (VPA): Data from 1995 and the 3Q1996 Update
- 29.166 Lessons Learned from a Comparison of Acreage Evaluations: Bolivia, Eastern Venezuela, and Argentina.
- 29.170 Expert Choice as a Portfolio Assessment Tool
- 29.171 Trends in Calibration: 1990 - 1996
- 29.172 Portfolio Value Prediction Accuracy