

H. Roice Nelson, Jr. – Finder - Expanded Resume

Qualification Summary



Howard Roice Nelson, Jr. (Roice) has over forty-seven years' experience as an explorer and a principal in both entrepreneurial and technical roles in the oil and gas and mineral exploration industries. Roice is an experienced interpretation geoscientist who has spent most of his career working in the international petroleum industry. The last few years he has done several exploration projects with mining geologists. As a seismic interpreter he has worked over 100 interpretation projects worldwide. Roice has proven success in using, creating, and building new tools and processes for the geological exploration industry. This started with summer internships with Pan American Petroleum (1970), and Amoco (1973), then employment with Mobil Oil in Dallas Texas (1974-1980). Roice was recruited to run a research laboratory at the University of Houston named the Seismic Acoustics Laboratory, which he grew from 33 sponsors (3 sponsors had just left because of no final reports) to 43 industry sponsors. In his three years at The University of Houston (1980-1982), Roice created or organized 5 research laboratories, including the controlling Allied Geophysical Laboratories (AGL), which is an ongoing industry sponsored research consortium at the University of Houston. While at the University, Roice wrote the article, "*Introduction to Interactive 3D*

Interpretation," Oil & Gas Journal, V. 79, No. 40, pp. 106-125, 1981; and *New Technologies in Exploration Geophysics*: Gulf Publishing Company, 281 pages, 1983; which forecast the impact of interactive interpretation technologies.

Roice left the AGL in November of 1982 to become the initial founder of Landmark Graphics Corporation. Roice designed Landmark's first interactive interpretation user interface and functionality, specifying software enhancements, new product requirements, and setting strategic direction. He procured sales and joint marketing agreements and created markets for Landmark in Australia, Canada, China, Europe (including Hungary when it was still behind the iron curtain), India, Latin America (Mexico, Venezuela, and Brazil), and the domestic United States. As the only oil company interpretation geophysicist initially on Landmark's staff, Roice had the opportunity to work on all of Landmark's customer's toughest interpretation problems. Roice has assisted and trained clients for his entire career, doing numerous training courses while at Landmark. Courses include: Best Practice methodologies; Interactive Interpretation Techniques; Interactive Sequence Stratigraphy; Information Management for Multi-Disciplinary Teams; Maps, Models, Immersion, and Collaboration; New Technologies in Exploration Geophysics; and Lightning Analysis Basics. Roice created a university program at Landmark Graphics Corporation which placed advanced interactive interpretation systems in many universities worldwide to support research and teaching. He taught courses on interactive interpretation and new technologies for Landmark and for IHRDC all over the world. Landmark was sold for U.S.\$560 million to Halliburton a few years after Roice left. The interactive seismic interpretation technologies developed and marketed by Landmark have changed the way all oil companies explore for new and extended hydrocarbon reserves.

He also created a consulting company (Walden 3-D, Inc., W3D, 1990). Roice left Landmark in 1993 to form HyperMedia Corporation and to consult on interpretation projects. Through Walden 3-D Roice worked closely with Roger N. Anderson of Lamont-Doherty Earth Observatory of Columbia University in New York. This work started with studies of temperature-pressure driven dynamic replenishment of Eugene Island 330 through the Global Basin Research Network, and has continued with the Lamont 4-D Seismic Consortium, the Lamont Portfolio Consortium, and the formation of C.E.S., LLC, and vPatch, Inc. In addition, Roice worked for BHP for about a year on their subsalt team. As a result of this team's work, BHP won leases on over 70 Federal Lease Blocks in the Gulf of Mexico.

HyperMedia attempted to commercialize a Unix, X-Windows, Motif, Client-Server, hypertext engine initially developed at Landmark in 1988. Although a site license was sold to Saudi Aramco for \$500,000 the company failed because competition was the free Mosaic and later Netscape software (1993), and because Roice guaranteed loans with Landmark stock which went from \$24 per share to \$8 per share. Roice also worked for the Bureau of Economic Geology for over a year. This work involved being the 3-D seismic interpretation geophysicist on collaborative teams with Corpoven and Lagoven (Venezuela oil companies now part of Pedevesa or Petroleos de Venezuela, SA), respectively doing a production drilling study in the Orinoco heavy oil province (providing over 165 drilling locations), and a regional stratigraphic interpretation in the southern half of Lake Maracaibo. In 1998 Roice merged some consulting work being done with the [University of Houston's VETL \(Virtual Environment Technology Laboratory\)](#) and Energy Innovations to form Continuum Resources International Corporation. Continuum developed human scale visualization environments, and placed facilities at Imperial College in London and CURTIN University in Perth (both part of the Landmark University Program) and built a facility in west Houston. Continuum was doing real-time collaboration in human-scale visualization environments between Perth, London, and Houston in 1999 sending state changes over standard ISDN. Roice left Continuum because of management and because oil companies did not want to let interpretation data out of their control.

In 2000 Roice formed an exploration company (Dynamic Resources Corporation, DRC) to utilize industry and proprietary tools and processes to explore for, develop, and produce natural resources: hydrocarbons, geothermal energy, minerals, etc. This company has built a portfolio of over 200 exploration opportunities. Since geology does not change in human lifetimes, Roice expects to get financing for these projects some time. In 2008 Roice and several friends created Dynamic Measurement LLC (DML), with the goal of leading out in a new passive electromagnetics branch in the exploration services industry, designed to explore for oil, gas, minerals, water, kimberlite pipes, etc. DML has 2 issued patent and an exclusive license to the best lightning databases available. DML has done 35 projects from California to New York and from North Dakota to South Texas. This new exploration technology, mapping geology by datamining lightning strike databases, has demonstrated great potential for oil & gas, mining, and even earthquake prediction.

In 2014 Roice and Andrea moved to their home town of Cedar City, Utah primarily to help Andrea's Mom, Maxine Shirts, who had just turned 90. Roice runs his three companies from his home, and business has been slow. He has given geology lectures at Enoch Elementary, North Elementary and East Elementary in Cedar, and a tour of Parowan Gap to 65 East Elementary 4th Graders. He also went to Bryce Canyon and gave a 2-hour lecture to 7th and 8th Grade students from Gateway Academy in Enoch. He has helped with several STEAM, STEM, Scout Expo, Children's Jubilee, Southern Utah Rock Club, and Mining Festival rock shows and demonstrations. Having grown up in Cedar Valley, on the farm Gateway Academy is now located, Roice understands the importance of water to this area. He has given several presentations to The Central Iron County Water Conservancy District and the Iron County Commissioners about water and particularly 2 untapped aquifers within the Cedar Valley Drainage Basin. Field trips with the Iron County Commissioners and others have demonstrated the opportunity for new water sources within the drainage basin (see <http://www.walden3d.com/IronCounty/CedarValleyWater/>).

CONTACT INFORMATION

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Roice Nelson CHRONOLOGY

Dynamic Measurement, LLC

Co-Founder/Manager

October 2008 - Present

DML established to exploit using lightning data as an on-shore and shelf NSEM (Natural Sourced Electromagnetic Method) exploration tool and to create a new branch in the geophysical services industry.

Dynamic Resources Corporation

Finder/President

January 2001 - Present

DRC established to generate and drill or mine prospects and commercialize new technologies.

Walden 3-D, Inc.

Finder/President

May 1990 - Present

W3D established as a new company incubator, doing geotechnical consulting and mini-urban design. Primary companies started include DML, DRC, Walden Visualization Systems, vPatch, Advanced Structures Incorporated, HyperMedia Corporation. Completed major seismic interpretation projects on 5 continents, and developed several unique information technologies including The Infinite GridSM, The Knowledge BackboneSM, The Concept MachineSM, and the Abbott Atlas.

Geophysical Development Corporation (GDC)

Vice President Interpretation

April 2004 – September 2007

– Business Development

Opened GDC China market, and helped build an integrated interpretation business. Interpretation for Ji Dong (3700 B/D, largest find in China in 10 years), Tarim (130 BCM, 3rd largest gas field in Xinjiang), Da Qing, Xing Jiang, and Tuha Chinese Oilfields. Created GDC's TilesTM Studies.

Continuum Resources International Corporation

Co-Founder

September 1997 - August 2000

Demonstrating real-time terabyte collaboration in London England, Perth Australia, and Houston.

Bureau of Economic Development, University of Texas at Austin

Consultant

1995 - 1997

3-D seismic interpretation geophysicist on collaborative teams working with Corpoven and Lagoven in Venezuela.

HyperMedia Corporation

Co-Founder

January 1991 - 2007

Designed, built, and produced a UNIX, X-Windows, Motif, Client-Server hypertext engine.

Landmark Graphics Corporation

Co-Founder

November 1982 - September 1992

Co-founder, only exploration geophysicist early on, established Landmark's University Program.

University of Houston's Allied Geophysical Laboratory (AGL)

Co-Founder

University of Houston's Seismic Acoustics Laboratory (SAL)

General Manager

January 1980 - November 1982

Managed the physical modeling facility at the SAL. Helped create and managed four new labs.

Mobil Oil Corporation

Geophysicist

July 1974 - January 1980

Interpretation and acquisition geophysicist.

Amoco Corporation and Pan American Corporation

Assistant Geophysicist

Summer 1973 & Summer 1970

Summer Intern and Assistant Geophysicist in Denver.

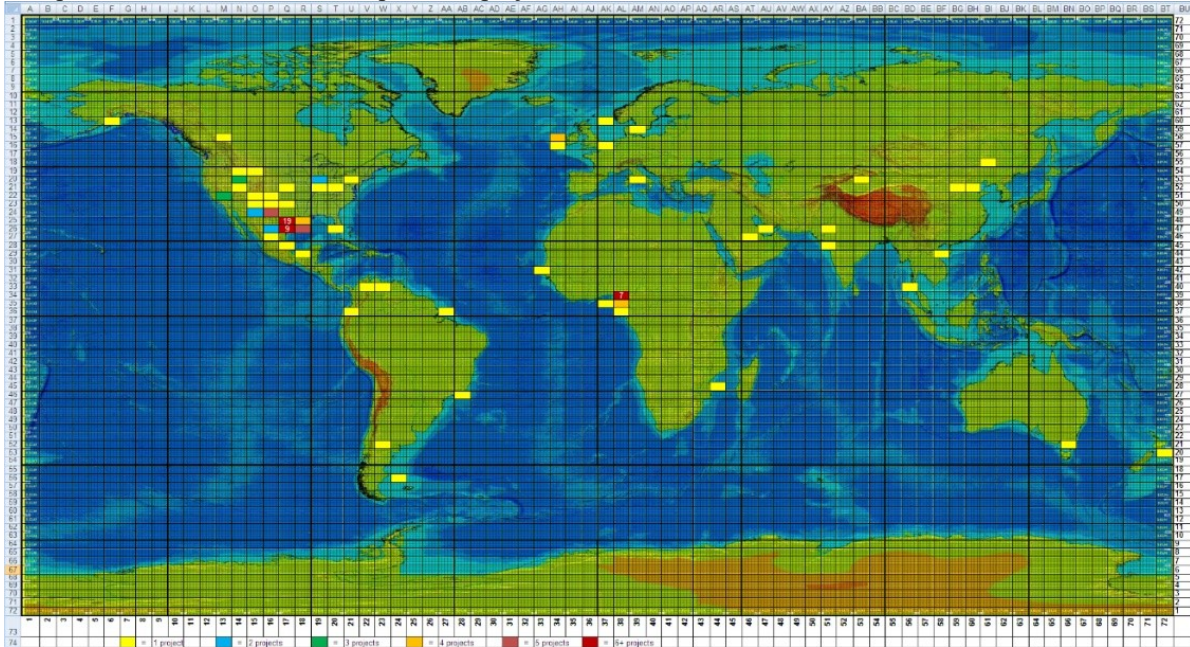
EDUCATION

1981, **MBA (Masters of Business Administration)**, Southern Methodist University (SMU).

1974, **B. S. Geophysics**, University of Utah.

PROJECT EXPERIENCE

The map below shows locations of exploration projects Roice has worked on since 1970.



W3D Infinite GridSM Spatial Resume showing Roice's interpretation project locations.

Work as a geoscientist has provided solid experience in seismic data acquisition, processing, and interpretation. His seismic data acquisition training included work on seismic field crews in:

- Rock Springs and Green River, Wyoming (made 8-mm film of field crews for training program);
- The Great Salt Lake;
- Kalamazoo, Michigan;
- offshore Nigeria;
- offshore The Cameroons.

Running 4 seismic crews for 1 1/2 years resulted in extensive field experience in:

- Hugoton, Kansas;
- Mesquite, Nevada;
- Alvar, New Mexico;
- Findley, Ohio;
- on an Opseis land telemetry crew in Sayre, Oklahoma;
- Cedar City, Utah;
- Seminole, Pecos, and Laredo, Texas; as well as
- Gillette and Big Piney, Wyoming.

These crews used a variety of sources, including:

- shear-wave vibrators;
- P-wave vibrators;
- shot hole, Poulter staked explosives, surface explosives; as well as
- high frequency air guns on a barge in the Great Salt Lake;
- regular air guns; and
- the various pressure and shear-wave piezoelectric elastic wave propagation through physical models at the SAL.

Half a dozen noise studies were conducted and interpreted. Six months of seismic processing experience was supplemented by processing the physical and numerical model data at the SAL.

Regional interpretation projects include:

- The Andaman Sea, Indonesia, Malaysia and Thailand, MEPSI (Mobil E&P Services, Inc., 1975. *
- Offshore Falkland Islands, Argentina, and Uruguay, and Pelotas Basin, Brazil, MEPSI, 1975. *
- Composite Report, 16.5 million acres offshore Brazil Service Contract Blocks, MEPSI, 1976. *
- The Gargano High, Italy, MEPSI, 1976. *
- 10x20 mile regional study of the Adua, Asabo, and Enang Area of OML 70, Nigeria, MEPSI, 1977. *
- Abu Dhabi Lease Evaluation, MEPSI, 1977. *
- First regional 2-D surveys shot with the same parameters connecting Mexico and US deep water fields, NOPEC, 2003.

Farm-In Evaluations*:

- Scripps Institute of Oceanography, La Jolla, California, obtained available government seismic and well data, particularly in the Andaman Sea, MEPSI, 1975.
- West Casamance Permit Shell Farmout, Senegal, MEPSI, 1976.
- Approached government ministries in Senegal and Mauritania for possible farm-in opportunities in West Africa and for permission for the Ted Nelson to collect regional seismic data, MEPSI, 1976.
- The Gulf of Kutch Reading and Bates in Tulsa, India, MEPSI, 1976.

Detailed seismic interpretation projects include:

- Greeley Basin, Colorado, Pan American, 1970. *
- Brady Unit, Sweetwater County, Wyoming, Pan American, 1970. *
- Great Salt Lake, seismic acquisition plan, Amoco, 1973. *
- Senior Thesis (University of Utah): "A Reflection Seismic Study of the Quaternary Sediments of Yellowstone Lake," 1974.
- Block F-7 Dutch North Sea, Mobil, 1975. *
- West Cameroon Blocks 308 and 309 and East Cameroon 262 in the Gulf of Mexico, Mobil, 1975. *
- Puerto Rico Reef Play, MEPSI, 1976. *
- Block II, Amazon Delta, Offshore Brazil, MEPSI, 1976. *
- Statfjord Field Reapportionment, Norwegian North Sea, MEPSI, 1977. *
- Potential in Peru and Chile, MEPSI, 1977. *
- Bright Spot studies in OML 70, Offshore MEPSI, 1977. *
- Dozens of projects with Landmark Graphics customers, including a year study of the Jiji sub basin for the Bohai Oil Field, People's Republic of China.
- Eugene Island 330 for the GBRN.
- Participation with interpretation team High Island A339/A340 and A563 for Pennzoil in Gulf of Mexico.
- Evaluation of 15 open blocks for BHP Petroleum in the Eugene Island area, Offshore Louisiana, for the 10 May 1995 lease sale (BHP won 2 blocks with a combined bid of \$508,470 for one of the prospects, and Chevron / LL and E; won the other key identified prospect with a bid of \$575,000).
- The Boling Salt Dome, Waller County, TX.
- A Wilcox play above the Arbuckle in Oklahoma.

Research, Processing, Velocity, Gravity & Magnetics, & Management at MOBIL/MEPSI*:

- 3-D plastic sheet model of Dutch North Sea Interpretation Project Block F-7 in the Dutch North Sea;
- Proposal paper for a feasibility study of developing hardware and software to do interactive seismic interpretation and simultaneously display the results in 3D.
- Limited BASIC and FORTRAN programming experience.
- Batch Processing seismic offshore Egypt.
- Processed 1 seismic line offshore Louisiana.
- Hale's refraction project offshore California.
- Helped build stacking velocity computer file for Lithovel Study, Gulf of Alaska.
- Interactive modeling, Gargano High, Italy.
- Gravity model across Andaman Sea.
- Liaison for MEPSI Geophysical Manager for three months; processed job requests, wrote cables, etc.

HONORS AND SOCIETIES

- President-Elect, President, Past-President, Cedar City Chapter of [Sons of Utah Pioneers](#), 2018-2021.
- [Paul Nelson's comments about growing up in an entrepreneurial household](#), Chief Architect of the Northrop Grumman Integrated Digital Enterprise (NGIDE) 2.0, Northrup Grumman, ONE, First Quarter 2021, page 34.
- GSH Journal, [A Conversation with Roice Nelson](#), (Geophysical Society of Houston), 29 Jan 2011, pages 18-22.
- CSEG Journal, [Think outside the box? – He doesn't even know there is a box!](#) (Canadian Society of Exploration Geophysics), Satinder Chopra and Penny Colton Interview July 2007, Jan 2008, pages 12-24.
- TLE, [H. Roice Nelson Jr.: Quixotic geophysics](#), Dolores Proubasta, The Leading Edge of The Society of Exploration Geophysicists (SEG), Jul 2003, pages 622-628.
- [American Association of Petroleum Geologists](#) (Associate Editor, Geobyte, 1985-1992).
- [Canadian Society of Exploration Geophysicists](#), 1984-1992.
- [Geophysical Society of Houston](#) (received [Honorary Membership for life, 1990](#)).
- [Houston Geological Society](#), 1999-2002.
- [Society of Exploration Geophysics](#) (Associate Editor, *Geophysics*, The Journal of the SEG, 1989-90; [Enterprise Award, 1999](#)), Life Member.
- Excellence of Poster Presentation: "The Stratigraphy, Sedimentology and Chronostratigraphy of the Mobil Bay Fan, Northeastern Gulf of Mexico, coauthored by D. Bradford Macurda, Jr. and Gary L. Jones, SEPM (Society for Sedimentary Geology), 07 March 1995.
- Resolution passed by unanimous consent of The Board of Directors of Landmark Graphics Corporation: "... recognizing that the success which the Company has attained has been in large measure do to Mr. Nelson's earnest efforts and untiring devotion ...," 12 January 1995.
- [World Future Society](#), 1990-1996.
- [Urban Land Institute](#), 1993-1996.
- [European Association of Exploration Geophysicists](#), 1981-1994
- Chinese Society of Scientists in 1989-1992
- Dallas Geophysical Society, 1976-1980
- Who's Who in the South and Southwest, 1979-1987 editions
- Society of Exploration Geophysicists Scholarship, 1973-1974
- Sun Oil Scholarship, 1973
- Missionary, [The Church of Jesus Christ of Latter-Day Saints](#), British Mission turned England East Mission, Canterbury, Ipswich, Norwich, Harlow New Town, Islington, Hyde Park, 1970-1972.
- Pan American Petroleum Scholarship, 1969-1970
- Phi Sigma Kappa scholarship award, 1969
- Phi Sigma Kappa (social fraternity)
- Phi Eta Sigma (freshman honorary fraternity)
- Honors at Entrance Scholarships, University of Utah (and Utah State university, turned down), 1968-1969

SCHOOLS ATTENDED

- Basin Analysis and Sedimentary Geology, Houston, TX, 1990.
- Vertical Seismic Profiling, A Short Course and Seminar, Southeastern Geophysical Society, New Orleans, LA, 25 March 1981.
- Three-Dimensional Display Techniques, Institute for Graphics Communications, Andover, MA, May 20-22, 1980.
- 3-D Seismic Technique School, SEG, Houston, TX, 18-19 September 1979.
- Carbonate/Sandstone Short Course, Mobil FRL, North Texas, 21-25 August 1978.
- Introductory Well Logging School, Mobil ESC, Dallas, TX, 16-18 August 1977.
- HCI School, Mobil ESC, Dallas, TX, 18-22, April 1977.
- Basic Well Logging School, Mobil ESC, Dallas, TX, 1-19 November 1976.
- Gravity and Magnetics School, Mobil ESC, Dallas, TX, 1 week, April 1975.
- Seismic Exploration II, Mobil ESC, Dallas, TX, 28 October - 8 November 1974.
- Mobil Oil Corporation, 1-year training, Dallas, TX, Lagos, Nigeria, and Kalamazoo, MI, 1974-1975.

- Mission: The Church of Jesus Christ of Latter-Day Saints, Southeast England, Oct 1970 - Nov 1972).
- N.S.F. Earth Sciences Program (Meteorology, Oceanography, and Geology), Oregon State University, Corvallis, OR, 7 weeks, summer of 1968.
- J.E.S.S.I. (Junior Engineers and Scientists Summer Institute), New Mexico State University, Las Cruces, New Mexico, two weeks summer of 1967.

ACTIVITIES

- U.S. Patent: "[Method for Determining Geological Surface and Subsurface Resistivity](#)," L.R. Denham, H. Roice Nelson, Jr., & D. James Siebert, United States Patent Office, US Patent 9,523,785 B2, Houston, TX, 20 Dec 2016.
- U.S. Patent: "[Method for Locating Sub-Surface Natural Resources](#)," H. Roice Nelson, Jr, Joseph H. Roberts, D. James Siebert, Wulf E. Massell, Samuel D. LeRoy, Leslie R. Denham, Robert Ehrlich, Richard L. Coons, United States Patent Office, US Patent 8,344,721 B2, Houston, TX, 01 Jan 2013.
- Chinese news releases, each tied to a project Roice did early interpretation on for Chinese clients:

First

Date: Oct 12, 2007 3:41 PM Subject: Dabei-3

The gas field, known as Dabei-3, boasts an estimated reserve of as much as 130 billion cubic metres, and will serve as an important backup supply source for the west-east gas pipelines," the unnamed source told the China Daily newspaper. PetroChina's Beijing office declined to comment but the official Xinhua news agency quoted officials in the Xinjiang as confirming the company had discovered 130 bcm of natural gas.

The discovery has the potential to be the third largest gas field in Xinjiang, after Kela-2 and Dina-2 gas fields, said Dai Jinxin, a researcher with the Research Institute of Petroleum Exploration and Development affiliated with PetroChina. "Gas fields with reserves of more than 100 bcm are considered giant gas fields even globally," Dai said. Since more exploration and evaluation are needed at the new field, it is too early to give any specific figures, the source added.

"We will drill more appraisal wells to determine the final reserve at a cost of around 200 million yuan (\$26.6 million)," the insider said.

Second

PetroChina joins Bohai payday By Upstream staff

PetroChina has made a significant oil discovery in the tidal and shallow water areas of Bohai Bay in northern China, the company said at a press conference. The Beijing-based integrated giant said "a series of significant breakthroughs and important developments were accomplished at the Jidong tidal and shallow water areas in Bohai Bay Basin".

With an initial daily output of 500 tonnes (3700 barrels), the Bohai Bay field is "the largest find in China in 10 years," said PetroChina's vice-chairman and president Jiang Jiemin at a press conference in Hong Kong yesterday. No other details on the field were revealed.

The company said it also made breakthroughs at "Baibao, Jiyuan and the surrounding areas of Sulige in the Erdos Basin, the northern part of Songliao Basin, the Sichuan Basin, and the northwestern rim of the Junggar Basin," China Daily reported. PetroChina said it now has six domestic oil and gas fields with annual output "breaking through 10 million tonnes of oil equivalent" including Daqing, Changqing, Tarim, Xinjiang, Liaohe and the Southwest oilfields.

Another large Chinese oil company CNOOC Limited yesterday revealed a large oil and gas discovery in Bohai Bay called Bozhong (BZ) 28-2E.

CNOOC Ltd said it had made four discoveries in the Yellow River Mouth Sag of Bohai Bay and hoped "to develop a large-scale cluster of oil and gas fields in the future".

20 March 2007 06:03 GMT | last updated: 20 March 2007 07:05 GMT

- Instructor, [Lightning Analysis Basics](#), 421-page manual:
 1. Iron Springs Resort, [19-21 January 2021](#)
- Instructor, "Interactive 3-D Seismic Interpretation Emphasizing Carbonates," H. Roice Nelson, Jr., Dubai Princess Hotel, Interadigm Course, 27 September 2011:
 1. [Introductions and Overview](#)
 - The Brain Exercise
 2. [Relating Seismic Acquisition, Processing, and Interpretation](#)
 - SketchUp Exercises
 - [SALNOR Workshop & Answers](#)
 3. [Seismic Interpretation Principles and Workflow](#)
 - [Contouring Exercise](#)
 - [Carbonate Outcrop Workshop](#)
 - [Carbonate Patterns Workshop](#)
 4. [Seismic Attributes](#)
 5. [Advanced Seismic Interpretation and Reservoir Characterization](#)
 6. [Seismic Exploration Breakthroughs](#)
- Arranged publication into Chinese of Fred J. Hilterman's book: "Seismic Amplitude Interpretation," [Cover, Bio, Preface](#), 29 Nov 2006.
- Co-authored with Carolyn Sumners, "Astronomy of the Ancient Americas," Houston Museum of Natural Science, Planetarium Show, Houston, TX, 03 January - 29 May 1992.
- Instructor, Landmark School: [Interactive Sequence Stratigraphy](#):
 1. Sydney, Australia, 25 February 1991
 2. Melbourne, Australia, 26 February 1991
 3. Perth, Australia, 28 February 1991
 4. Perth, Australia, 01 March 1991
 5. Jakarta, Indonesia, 4 March 1991
 6. Jakarta, Indonesia, 5 March 1991
- Instructor, Landmark School: [New Technologies in Exploration Geophysics](#): Before the Congreso Venezolano De Geofisica, Caracas, Venezuela, one day course for Venezuelan oil company managers, 20 October 1990.
- Instructor, Landmark School: [Interactive Interpretation Procedures](#):
 1. Public Schools:
 - New Orleans, LA, April, 1987.
 - London, England, 26-29 May 1986.
 - Washington D. C., October, 1985.
 - Denver, CO, 15-26 July 1985
 - London, England, 3-13 April 1985
 - Houston, TX, 1-12 April 1985
 - Calgary, Alberta, Canada, 19-27 February 1985
 - New Orleans, December 1984
 - Houston, TX, October 1984
 2. Private Schools:
 - Amoco, New Orleans, LA, August 1986
 - Orion Surveys, Kristiansand S., Norway, 27-28 February 1986
 - Placid, New Orleans, 19-21 November 1985
 - Texaco, New Orleans, 28-30 October 1985
 - Texaco, Los Angeles, CA, 24-26 June 1985
 - Marathon International, Houston, 22-25 April 1985
 - Shell Research, The Hague, 21-25 January 1985

- Instructor, IHRDC school: New Technologies in Exploration Geophysics:
 1. Public Schools:
 - Derah Dun, India, 16-20 December 1985.
 - Denver, CO, 5-7 September 1984.
 - London, England, 25-27 June 1984.
 - Derah Dun, India, 7-11 November 1983.
 - Caracas, Venezuela, 17-19 October 1983.
 - London, England, 6-8 June 1983.
 - Denver, CO, 18-20 May 1983.
 2. Private Schools:
 - Getty Oil, Houston, TX, 4-7 June 1984.
 - IFP, Paris, France, 29 February - 2 March 1984.
 - Bass Enterprises, Steamboat Springs, CO, 6 December 1983.
 - Caracas, Venezuela, October 1983.
- Guest Speaker, Pacific Coast Section of the SEG:
 1. Los Angeles, CA, 02 November 1988
 2. Bakersfield, CA, 01 November 1988
 3. Ventura, CA, 31 October 1988
- Guest Speaker, Pacific Coast Section of the SEG:
 1. Bakersfield, CA, 14 May 1985.
 2. Los Angeles, CA, 13 May 1985.
- Guest Speaker, Southeastern SEG, New Orleans, LA, 30 April 1985.
- Guest Speaker, CPS/SEG Joint Meeting, Beijing, People's Republic of China, 12-16 April 1985.
- Guest Speaker, Houston Geophysical Society's Modeling Symposium, Houston, TX, 10 May 1983.
- Co-Authored with Martha Ellyn Nelson, and helped put on a two-hour musical with twelve original songs, "Swedish Roots," Dallas First Ward, Dallas, TX, 1979, Maplewood II Ward, Houston, TX, 15 April 1983.
- Guest Speaker, Tulsa Geophysical Society's Seminar - "Computer Assisted Interpretation," Tulsa, OK, 21 March 1983.
- Guest Speaker, Austin Geological Society, Monthly Meeting, Austin, TX, 7 March 1983.
- Guest Speaker, Texaco, Thursday Research Seminar, Houston, TX, 2 December 1982.
- Guest Speaker, Distinguished Lecture Series, Southern Utah State College, Cedar City, UT, 5 August 1982.
- Guest Speaker, CDC Petroleum Executive Seminar, Minneapolis, MN, 12-14 July 1982.
- Lecturer, SAL 3-D Seismic Techniques School, Oxford, England, 15-17 June 1982.
- Lecturer, SAL 3-D Seismic Interpretation Workshop, Norwegian Petroleum Society, Kristiansand S., Norway, 10-12 March 1982.
- Lecturer, SEG 3-D Seismic Techniques School:
 1. Houston, TX, 9-10 December 1981
 2. Calgary, Alberta, Canada, 8-9 June 1981.
- Guest Speaker, CDC Petroleum Executive Seminar, Minneapolis, MN, 3-5 June 1981.

CO-ORGANIZED THESE SEG RESEARCH COMMITTEE WORKSHOPS

- Anderson, R. N., Lamont-Doherty Geological Observatory; Cathles III, L. M.; Nunn, J.; Nelson, Jr., H. R.; Klaveness, A., Klaveness Research; "Active Fluid Flow in Dynamic Sedimentary Basins," Workshop at SEG Sixty-Second Annual International Meeting and Exposition, New Orleans, LA, 25-29 October 1992.
- Bajorich, Mike, Amoco Research; Bowen, Bruce, TGS; Brumbaugh, Conoco; Dorn, Geoff, ARCO; Johnston, Dave, Exxon; Jones, Gary and Nelson, Jr., H. R., Landmark/LGC; "Sequence Stratigraphy," Workshop at SEG Sixty-Second Annual International Meeting and Exposition, New Orleans, LA, 25-29 October 1992.
- Cauldwell, Jack; "Lithology Determination," SEG Research Committee Summer Workshop, St. Louis, MO, 29 July - 1 August 1991.
- Kirk, Rob; and Nelson, Jr., H. R.; "Petroleum Exploration Sequence Stratigraphy," Workshop at ASEG 8th Conference and Exhibition, Sydney, Australia; 22-24 February 1991.

- Nelson, Jr., H. R.; Stark, Tracy J.; Wyatt, Kay Dautenhahn; Dorn, Geoffrey A.; Ottolini, Richard A.; Massell, Wulf F.; Sovelius, Paul E.; and Shanks, John L.; "Scientific Visualization;" Society of Exploration Geophysicists Sixtieth Annual International Meeting & Exposition; San Francisco, CA; 28 September 1990.
- Nelson, Jr., H. R.; and Hugg, James W.; "Sequence Stratigraphy," Society of Exploration Geophysicists 58th Annual International Meeting and Exposition; Anaheim, CA; 03 November 1988.
- Wyatt, R. D.; Nelson, Jr., H. R.; Wassen, C. B.; "Interval Velocity Determination;" Society of Exploration Geophysicists Annual International Meeting and Exposition; Houston, TX; 11-15 October 1987.
- Treitel, Sven; Hoover, Gary; Paul, Don; Hilterman, Fred J.; Skerl, Damir; Hewitt, Marvin R.; Elliott, Sheldon E.; and Nelson, Jr., H. R. who gave a presentation titled: "The Role of Technology Transfer," Research Committee Symposium; Annual SEG Convention; Houston, TX; November 1986.

PROFESSIONAL PRESENTATIONS

260. "[Regional Lightning Analysis](#)," [Supporting Animation](#), Les R. Denham, Dr. Dan Ebrum, and H. Roice Nelson, Jr., Hart Energy, to be published approximately 06 July 2021.
259. "[Rainbird Village](#)," Colleen Dick, Harrison Quigley, H. Roice Nelson, Jr., Plans for Permaculture Development near Cedar City, 12 May 2021.
258. "[Bavinger House and Lighting](#)," Friends of Kebyar Journal, v35.2 No. 90, Dec 2020.
257. "[Lightning Analysis – Creating Geo-Frameworks](#)," ([PowerPoint animations](#)), Sun City Rock-On Geology Club, 12 Oct 2019.
256. "[Untapped Aquifers – Cedar Valley Drainage Basin](#)," H. Roice Nelson, Jr., Notes for Iron County Commissioners: Untapped Aquifers Field Trip, 08 Mar 2019
255. "[Recent advances in remote sensing technologies for hydrocarbon exploration and environmental evaluation](#)," Yongye Li, Roice Nelson, William Jeffery, Douglas Foster, Dominique Dubucq, Michel Verliac, Khalid Soofi, and Ira Leifer, The Leading Edge, pages 554-555, July 2019.
254. "[Does Lightning Strike Twice? – Longer On-Line Version](#)" H. Roice Nelson, Jr., Les R. Denham, Dr. Jim Siebert, & Kathleen S. Hagggar, GEO ExPro Volume 15 number 5 pages , London, England, 22 Oct 2018.
253. "[Lightning Analysis at South Carolina Superfund Site](#)," (PowerPoint) Kathleen S. Hagggar & H. Roice Nelson, Jr., SEG 2018 Annual Convention – Remote Imaging Workshop, Anaheim, CA, 19 Oct 2018.
252. "[Harris County, Texas Lightning Analysis Fault Interpretation](#)," L. J. Berent & H. Roice Nelson, Jr., SEG 2018 Annual Convention – Remote Imaging Workshop, Anaheim, CA, 19 Oct 2018.
251. "[Remote Imaging and Lightning Analysis](#)" ([Abstract](#), [PowerPoint animation](#)), H. Roice Nelson, Jr., Les R. Denham, and Dr. Jim Siebert, SEG 2018 Annual Convention – Remote Imaging Workshop, Anaheim, CA, 19 Oct 2018.
250. "[Dynamic Measurement Seeking \\$600,000 To Build a New Branch in the Geophysical Services Industry](#)," ([PowerPoint animation](#)) H. Roice Nelson, Jr., Les R. Denham, Dr. Jim Siebert, Michael F. Reed, Louis J. Berent, & Kathleen S. Hagggar, SEG 2018 Annual Convention – JaWS (Juice a Winning Startup – Shark Tank), Anaheim, CA, 16 Oct 2018.
249. "Integrated EM technologies map contamination plumes, seeps, geohazards - faults and possible migration pathways - at Barite Hills / Nevada Gold Fields EPA Superfund Site in South Carolina, USA: [Left](#), [Middle](#), [Right](#)," Kathleen S. Hagggar, H. Roice Nelson, Jr., & Louis J. Berent, 2018 AAPG Annual Convention, Salt Lake City, Utah, 22 May 2018.
248. "Mapping Subsurface Faults with Lightning and Resistivity: [Left](#), [Middle](#), [Right](#)," Louis J. Berent & H. Roice Nelson, Jr., 2018 AAPG Annual Convention, Salt Lake City, Utah, 22 May 2018.
247. "[Mining and Oil & Gas Applications of Lightning Analysis](#)," Dr. D. James Siebert, Kathleen S. Hagggar, Louis J. Berent, & H. Roice Nelson, Jr., Vaisala's Bi-Annual ILDC/ILMC Convention, Ft. Lauderdale, FL, 13 Mar 2018.
246. "[Lightning data analysis provides geologic insights at South Carolina EPA Superfund Site](#)," Kathleen S. Hagggar, Dr. D. James Siebert, Louis J. Berent, & H. Roice Nelson, Jr., Vaisala's Bi-Annual ILDC/ILMC Convention, Ft. Lauderdale, FL, 13 Mar 2018.
245. "[Shocking Path of Least Resistance Shines Light on Subsurface by Revealing the Paths of Water and the Presence of Faults: Stacked EM Case Studies over Barite Hills Superfund Site in South Carolina -or- 3 EM Case Studies over a superfund Site / Former Gold Mine, South Carolina, USA](#)," Kathleen S. Hagggar, H.

- Roice Nelson, Jr., and Louis J. Berent, AGU (American Geophysical Union), New Orleans, LA, 13 Dec 2017.
244. "[How to Test Fractured Quartz Monzonite Aquifer; How to Test Cretaceous Aquifer](#)," H. Roice Nelson, Jr., 5-page answer to Paul Cozzens' question "How do you test these proposed new aquifers?", 17 Aug 2017.
 243. "[Lightning Risk Points](#)," H. Roice Nelson, Jr., The Leavitt Group, Cedar City, Utah, 28 Jun 2017.
 242. "[An Unconventional Tool for Unconventional Exploration – AAPG Poster 2614153](#)," Louis J. Berent & H. Roice Nelson, Jr., 2017 AAPG Annual Convention, Houston, Texas, 05 Apr 2017.
 241. "[Calibrating Apparent Resistivity Traces, Lines, and Volumes Derived from Lightning Strike Data in South TX – AAPG Poster 261411](#)," Kathleen S. Hagggar, H. Roice Nelson, Jr., Louis J. Berent, & Les R. Denham, 2017 AAPG Annual Convention, Houston, Texas, 05 Apr 2017.
 240. "[Harnessing Lightning in the Hunt for Hydrocarbons – AAPG Poster 2614175](#)," Louis J. Berent & H. Roice Nelson, Jr., 2017 AAPG Annual Convention, Houston, Texas, 04 Apr 2017.
 239. "[Memorial, Richard L Coons](#)," The Leading Edge, page 362, April 2017.
 238. "[Geology and Water: The Framework of Southern Utah](#)," H. Roice Nelson, Jr., The Iron County Historical Society Monthly Meeting, Cedar City, Utah, 08 Mar 2017.
 237. "[Lightning Analysis: creating geo-frameworks](#)," H. Roice Nelson, Jr., University of Utah Geoscience Department invited presentation to faculty and students, Salt Lake City, Utah, 03 Mar 2017
 236. "[Lightning Analysis: creating geo-frameworks](#)," H. Roice Nelson, Jr., Southern Utah Rock Club Monthly Meeting, Cedar City, Utah, 02 Mar 2017.
 235. "[Interview on Empire-Broadcasting Radio Network](#)," H. Roice Nelson, Jr. by Michael David, New York, New York from Cedar City, Utah, 05 Jan 2017.
 234. "[Lightning Analysis for Mapping Faults and Identifying Exploration Sweetspots](#)," H. Roice Nelson, Jr., 201 SEG Convention HPC Visualization Theater, Dallas, TX, 17-18 Oct 2016.
 233. "[Using Lightning Databases to derive Rock Property and Lightning Attribute Maps and Volumes](#)," H. Roice Nelson, Jr. & Dr. Jim Siebert, presentation to students and professors tied to joint geothermal grant , application, SMU (Southern Methodist University) University Presentation, Dallas, TX, 14 Oct 2016.
 232. "[Lightning Analysis for Mapping Faults and Identifying Exploration Sweetspots](#)," H. Roice Nelson, Jr., Rocky Mountain + Pacific Coast AAPG Meeting, Las Vegas, NV, 04 Oct 2016.
 231. "[The History of Seismic Interpretation Workstations](#)," H. Roice Nelson, Jr., DHI (Direct Hydrocarbon Indicator) Consortium Meeting, The Woodlands, TX, 22 Sep 2016.
 230. "[Lightning Sparks Interest in the Unconventional Mapping of Active Subsurface Faults](#)," Louis J. Berent & H. Roice Nelson, Jr., 2016 GCAGS (Gulf Coast Association of Geological Societies) Oral Presentation, Corpus Christi, TX, 19 Sep 2016.
 229. "[New Lightning Attribute Volumes Compared to the BEG's Stratton 3D Seismic Survey](#)," Kathleen S. Hagggar, Les R. Denham, and H. Roice Nelson, Jr., 2016 Gulf Coast Association of Geological Societies (GCAGS), Corpus Christi, TX, 19 Sep 2016.
 228. "[The Cedar Valley Aquifer and The Cedar Valley Drainage Basin](#)," Gary Farnsworth Player & H. Roice Nelson, Jr., Cedar City Rotary Club, Cedar City, Utah, 06 Sep 2016.
 227. "[The Cedar Valley Aquifer and The Cedar Valley Drainage Basin](#)," Gary Farnsworth Player & H. Roice Nelson, Jr., Presentation to the Board of Commissioners of the County of Iron, State of Utah, Parowan, Utah, 11 Jul 2016.
 226. "[Lightning Sparks Interest in Unconventional Exploration!](#)," Whiting Petroleum Webinar, Cedar City UT to Midland, TX, Roice Nelson & Louis Berent, 03 Mar 2016.
 225. "[Introduction: Using Lighting Databases to obtain resistivity information for geothermal exploration](#)," H. Roice Nelson, Jr., Dr. Jim Siebert, and Les R. Denham, DOE HADES (Hot And Deep Energy Seminar) Lunch 'N Learn Webinar, Cedar City, UT to Denver, CO and Pittsburg, PA, 19 Jan 2016.
 224. "[Lightning, A Shockingly Unconventional Technology for Exploration](#)," D. James Siebert, Louis J. Berent, & H. Roice Nelson, Jr., West Texas Geological Society Bulletin, Volume 55, Number 3, pages 16-17 & 20-23, Jan 2016.
 223. "[A New E&P Tool - Lightning Database](#)," H. Roice Nelson, Jr., DML University Program Webinar for Texas A&M Graduate Students, on-line from Cedar City, Utah to College Station, Texas, 06 Oct 2015.
 222. "[Lightning, A Shockingly Unconventional Way to Conduct Exploration](#)," Louis Berent & Roice Nelson, 2nd Annual Texas Hydro-Geology Workshop, Cave Without A Name, Boerne, TX, 25 Sep 2015.
 221. "[Rock Properties from Lightning Databases: Transforming Geotechnical Operations and Accelerating the Time-to-Value](#)," H. Roice Nelson, Jr. & Dr. Jim Siebert, Landmark LIFE (Landmark Innovation Forum and Exposition), Houston, TX, 25-26 Aug 2015.

220. "[Optimizing West Desert Drilling Locations with Maps and Rock Property Volumes Derived from Lightning Databases](#)," H. Roice Nelson, Jr., CICWCD Board Meeting (Central Iron County Water Conservancy District), Cedar City, UT, 18 Jun 2015.
219. "[Geologic Frameworks derived from Lightning Maps and Resistivity Volumes](#)," Kathleen S. Haggar, Louis J. Berent, & H. Roice Nelson, Jr., 2015 AAPG Annual Convention, Denver, CO, 02 Jun 2015
218. "[Aquifers, Faults, Subsidence, and Lightning Databases](#)," K. S. Haggar, L. Denham, & H. R. Nelson, Jr., Louisiana Remote Sensing & GIS Conference, Baton Rouge, LA, 12 May 2015.
217. "[Aquifers, Faults, Subsidence and the Lightning Data Base ... and Lagniappe](#)," K. S. Haggar, L. Denham, & H. R. Nelson, Jr., NOGS Lunch (New Orleans Geological Society), New Orleans, LA, 04 May 2015.
216. "[Lightning - A Shockingly Unconventional Technology for Exploration](#)," Jim Siebert, Louis Berent, & Roice Nelson, 2014 SW-AAPG Convention, Wichita Falls, TX, 14 Apr 2015.
215. "[Deriving Exploration Maps and Rock Property Volumes from Lightning Databases](#)," H. Roice Nelson, Jr. & Dr. D. James Siebert, Introductory Presentation at Brigham Young University, Provo, UT, 22 Jan 2015.
214. "[Plan, Build, and Protect - Remotely Mapping Geology with Naturally Sourced Electromagnetic Analysis \(NSEM\)](#)," Kathleen S. Haggar & H. Roice Nelson, Jr., New Orleans Division - U.S. Army Corps of Engineers, New Orleans, LA, 19 Dec 2014.
213. "[SLFPA-W Geologic Facts-of-Life: Flood Protection in Coastal Louisiana](#)," Kathleen S. Haggar & H. Roice Nelson, Jr., Technical Review SLFPA-W (South Louisiana Flood Protection Agency – West), New Orleans, LA, 17 Dec 2014.
212. "[Using Resistivity from Lightning Databases in Exploration](#) - 5 Resistivity Volume movies: [George Bush Park.gif](#); [North Houston.gif](#); [cube display.gif](#); [log-correlation movie.gif](#); and [seismic-resisivity movie.gif](#), Kathleen S. Haggar & H. Roice Nelson, Jr., Joint Lafayette Geological Society (LGS) & Lafayette SIPES Lunch, Lafayette, LA, 19 Nov 2014.
211. "[Aquifers, Faults, Subsidence, and Lightning Databases](#)," Kathleen S. Haggar, Les R. Denham, and H. Roice Nelson, Jr., 2014 Gulf Coast Association of Geological Societies (GCAGS), Lafayette, LA, 07 Oct 2014.
210. "[Using Lightning Data Analysis as a geologic framework for Exploration and Planning](#)," H. Roice Nelson, Jr., Southern Utah University Science Center Room 122, Cedar City, Utah, 22 Sep 2014.
209. "[Enhancing Reservoir Characterization using Lightning Strike Data](#)," H. Roice Nelson, Jr., Dr. Jim Siebert, and Les R. Denham, LIF: Landmark Innovation Forum, Houston, TX, 04 Sep 2014.
208. "[Cedar Valley Water – Field Trip Notes](#)," Gary F. Player – Geologist, H. Roice Nelson, Jr. – Geophysicist, Field Trip for Brent Hunter, Paul Monroe, and Spencer Jones, Central Iron County Water Conservancy District (CICWCD), Cedar City, Utah, 18 Jul 2014.
207. "[Lightning Maps and Resistivity Volumes](#)," First Announcement Resistivity Volumes, Barker, TX, 20 May 2014.
206. "[Mapping Faults and Natural Resources with Lightning Data Bases](#)," H. Roice Nelson, Jr., Xie Zhishuang (Steven), D. James Siebert, L.R. Denham, CPS-SEG 2014 Conference: Advancing Geophysical Innovation, Beijing, China, 21 Apr 2014.
205. "[The Technology and Economics of Lightning Analysis](#)," H. Roice Nelson, Jr. & Kathy S. Haggar, Southwest Louisiana Geophysical Society, Lafayette, LA, 16 Apr 2014.
204. "[Telluric and Earth Currents, Lightning Strike Locations, and Natural Resource Exploration](#)," H. Roice Nelson, Jr., Les R. Denham, and Dr. Jim Siebert, 2014 AAPG Annual Convention, Houston, TX, 09 April 2014.
205. "[Lightning, A New Key for Pipeline Protection](#)," Jim Siebert (and silent author, Roice Nelson), Pipeline & Gas Journal, Vol. 241 No. 2, 18 Feb 2014.
203. "[Finding Faults with Mother Nature](#)," Rhonda Duey, Executive Editor's interview with Roice Nelson and Jim Siebert, Hart Energy, Houston, TX, 03 Feb 2014.
206. "[Analytics, Aquifers, Faults, and Lightning Databases](#)," H. Roice Nelson, Jr. & Kathy S. Haggar, Baton Rouge Geological Society, Baton Rouge, LA, 13 Dec 2013.
205. "[There is a difference between an education and obtaining a degree, from the perspective of an old car. 3-D seismic, and lightning data analysis](#)," H. Roice Nelson, Jr., SUU Research Symposium, Cedar City Utah, 18 Nov 2013.
204. "[Lightning Data and Resource Exploration](#)," L.R. Denham, H. Roice Nelson, Jr., D. James Siebert, 2013 Annual SEG Convention, Houston, TX, 18 Sep 2013.
203. "[Lightning Strikes - A New Exploration Tool?](#)" Ken Milam, Explorer Correspondent's interview with H. Roice Nelson, Tulsa, OK, [AAPG Explorer, June 2013](#), pages 26 and 28.

202. "[Lightning Data: a new geophysical data type](#)," H. Roice Nelson, Jr., D. James Siebert, L.R. Denham, 2013 AAPG Annual Convention, Pittsburg, PA, 20 May 2013.
201. "[Yes, lightning does strike twice in the same place!](#)," H. Roice Nelson, Jr., Introductory presentation at University of Utah, Salt Lake City, UT, 19 Mar 2013.
200. "[Lightning data - the new EM "seismic" data](#)," H. Roice Nelson, Jr., D. James Siebert, L.R. Denham, 2012 SEG Convention Workshop - invited by Dr. Kurt Strack, Las Vegas, NV, 08 Nov 2012.
200. "[Clarification of the term 'Aged Peat'](#)", H. Roice Nelson, Jr., Report for Humatech Inc., 05 February 2013.
199. "Lightning Data – a new tool for geophysical exploration," H. Roice Nelson, Jr., D. James Siebert, and L.R. Deham, Dynamic Measurement LLC, Abstract prepared for 2012 AAPG, 03 April 2012.
198. "Interactive 3-D Seismic Interpretation Emphasizing Carbonates," H. Roice Nelson, Jr., Dubai Princess Hotel, Interadigm Course, 27 September 2011.
197. "[Rock Property Data Volumes from Well Logs](#)," L. R. Denham, Interactive Interpretation & Training, and H. Roice Nelson, Jr., Geokinetics Processing & Interpretation, Poster Paper, AAPG Annual Convention, Los Angeles, CA, 2007.
196. "[AVO and Seismic Processing Implications from a Regional Database of Velocity and Other Acoustic Rock Property Trends](#)," H. R. Nelson, Jr., Geophysical Development Corporation, S.D. LeRoy, Earthview Associates, Inc., L.R. Denham, Interactive Interpretation and Training, Inc., P.J. Desai, M.E. Guthrie, and M.A. Dunn, Geophysical Development Corporation, Poster Paper, EAGE, 07 June 2006.
195. "[Water and Energy Alternatives – 50 Proposed Studies](#)," H. Roice Nelson, Jr., Central Iron County Water Conservancy District (CICWCD), Cedar City, Utah, 06 Jun 2006.
194. "[Water and Energy Alternatives](#)," H. Roice Nelson, Jr., Central Iron County Water Conservancy District (CICWCD), Cedar City, Utah, 04 May 2006.
193. "[Rock Property Classification Trends](#)," H. Roice Nelson, Jr., Geophysical Development Corporation, and Samuel Mentemeier, Anadarko Petroleum Corporation, Poster at 2006 Spotfire Energy Forum, Westchase Hilton, Houston, TX, 2006.
192. "[Cedar Valley Water](#)," H. Roice Nelson, Jr., Central Iron County Water Conservancy District (CICWCD), Cedar City, Utah, 19 Sep 2005.
191. "[Mining the database](#)," Brian Locke, Samuel Mentemeier, and Brian O'Neill, Anadarko Petroleum, and H. Roice Nelson, Jr., Geophysical Development Corporation, Harts E&P, September 2005, pp. 47-48.
190. "[Classification of Rock Property Trends in the Gulf of Mexico using GDC Data in DecisionSite](#)," H. Roice Nelson, Jr., Geophysical Development Corporation, Anadarko Lunch and Learn, The Woodlands, TX, 14 Mar 2005.
189. "[Exploring for Hidden Pay](#)," (42 MB PowerPoint) Southwest Louisiana Geophysical Society, Lafayette, LA, 09 Nov 2004.
188. "[Visualizing Rock Properties from the Gulf of Mexico](#)," Fred J. Hilterman, University of Houston, Lac Nguyen, NASA's Johnson Space Center, Mike Dunn, Carlos Venegas, and H. Roice Nelson, Jr., Geophysical Development Corporation, SEG Visualization Theater, Denver, CO, 2004.
187. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at BYU, Provo, UT, 15 March 2002.
186. LeRoy, Sam; Benzing, Bill; Nelson, Jr., H. Roice; "[Mapping and Imaging of Geopressure Geometry Will Focus Exploration and Development on Remaining Upside Reserves](#)," Presentation given at Corpus Christi SIPES Luncheon, Corpus Christi, TX, 26 February 2002.
185. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at Houston Geological Luncheon, Houston, TX, 28 November 2001.
184. Nelson, Jr., H. Roice; "Introduction to Immersive Reality," Presentation given at OTC, #13005, 3 May 2001.
183. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at SIPES, Corpus Christi, TX, 27 February 2001.
182. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at GCAGS, Houston, TX, 26 October 2000.
181. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at World Future Society Annual Meeting, Houston, TX, 24 July 2000.
180. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at TCDDM III (Tools for Community Design and Decision Making III), Stuart, Florida, 30 November - 02 December 2000.
179. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at RCSIG I, Houston, TX, 01 February 2000.

178. Nelson, Jr., H. Roice; "Advanced Pattern Finding," White Paper, copies available on request, Houston, TX, 02 November 2000.
177. Nelson, Jr., H. Roice; "The Walden 3-D Design Process," White Paper, copies available on request, Houston, TX, 29 September 2000.
176. Nelson, Jr., H. Roice; "The Impending Obsolescence of Maps," Presentation given at Geophysics 2000 and Beyond, HARC, The Woodlands, TX, 28 October 1999.
175. Nelson, Jr., H. Roice; "Potential of the RCSIG," Presentation given at RCSIG II, 14 September 2000.
174. Nelson, Jr., H. Roice; Loftin, R. Bowen; Maples, Creve; "Immersive Collaboration," Presentation given at Landmark Worldwide Technology Forum, Houston, TX, August 1999.
173. Duncan, Peter M.; Nelson, Jr., H. Roice; Uden, Richard; "Practical Exploration Applications of Dynamic Immersive Environments," Presentation given at SEG, Calgary, Canada, 09 August 2000.
172. Duran, F. R. Rick; Winston, Jeff; Nelson, Jr., H. Roice; "Tools for Better Planning," Presentation given at Utah Rural Summit, Southern Utah University, Cedar City, Utah, 8-10 September 1999.
171. Lin, Ching-Rong (Jim); Loftin, R. Bowen; Nelson, Jr., H. Roice; "Interaction with Geoscience Data in an Immersive Environment," Presentation given at Vis '99, Taipei, Taiwan, July 1999.
170. Nelson, Jr., H. Roice; Amason, Johnny M.; Anderson, Roger N.; Hume, Jeffrey M.; Mars, Robert J.; Monk, David J.; Ridyard, David; Uden, Richard C.; "Immersive Environments: A new type of geotechnical map," Presentation given at AAPG, San Antonio, 12 April 1999.
169. Amason, Johnny M.; Lin, Chong-Rong (Jim); Mars, Robert J.; Nelson, Jr., H. Roice; Smith, Terrance L.; Wicks, David H., "Developing Oil & Gas Industry Solutions for Human Scale Display, Immersion, Visual Databases, Spatial Integration, and Collaboration," Presentation given at The High Performance of Visualization & Computing Summit, SGI, Moody Gardens, Galveston, TX, 18 January 1999.
168. Hume, Jeff; Nelson, Jr., H. Roice; "Data Manipulation Critical to Cure Information Overload," Offshore, pp. 82-83, 110, December 1998.
167. Anderson, Roger N.; Boulanger, Albert; Amaefule, Jude; Forrest, Mike; Howell, III, John I.; Nelson, Jr., H. Roice; Rumann, H. A.; "Quantitative Tools Link Portfolio Management with Use of Technology," Oil & Gas Journal, pp. 48-49, 52-54, 30 November 1998.
166. Lin, Chong-Rong (Jim); Mars, Robert J.; Amason, Johnny M.; Nelson, Jr., H. Roice; "Human Scale Display, Immersion, and Collaboration," White Paper, copies available on request, October, 1998.
165. Lin, Chong-Rong (Jim); Amason, Johnny M.; Nelson, Jr., H. Roice; "Immersion," White Paper, copies available on request, October 1998.
164. Nelson, Jr., H. Roice; Monk, David; Uden, Richard; Renner, Linda; "True Spatial Integration," White Paper, copies available on request, October 1998.
163. Nelson, Jr., H. Roice; "ROOMS: Reservoir Object Oriented Management Systems," Presentation given at 4-D Seismic 98, International Workshop, Aberdeen, Scotland, 08 June 1998.
162. Nelson, Jr., H. Roice; "[Building and Maintaining Virtual Teams](#)," Global Contingency of Information Managers from Conoco, Los Alamedas Restaurant, Houston, TX, 18 Jun 1995.
161. Loftin, R. Bowen; Amason, Johnny M.; Chen, David T.; Lin, Ching-Rong (Jim); Geisler, Erik; Nelson, Jr., H. Roice; "Practical Application of Virtual Environments in Exploration and Production," Presentation given at AAPG Conference, Salt Lake City, UT, 20 May 1998.
160. Nelson, Jr., H. Roice; "Immersive Environments: a new media for the 21st century," Presentation given at SGI Visualization Summit, Oslo, Norway, 08 May 1998.
159. Nelson, Jr., H. Roice; "Immersive Environments: state-of-the-art geotechnical solutions," Presentation given at SGI Visualization Summit, Oslo, Norway, 06 May 1998.
158. Guevara, E. H., Brink, G. J., Zeng, Hongliu, Sparlin, M. A., Barba, R. E., Jr., Holtz, M. H., Etherington, Randall, Nelson, H. R., Jr., Van Wyk, N. J. S., Von Lunen, E., Bullen, G., Fouad, Khaled, Dunlap, D. B., Martinez, C., Remington, L. E., Camposano, C. L., Moya, R. M., and de Salazar, M. S., 1997, Exploration opportunities in Lagoven S.A., Blocks B, C, and D, South Lake Maracaibo, Venezuela: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for PDVSA, Maracaibo, Venezuela, unpaginated.
157. Brink, G. J., Guevara, E. H., Nelson, H. R., Jr., Remington, L. E., Myer, L. R., Sparlin, M. A., Martinez, C., Zeng, Hongliu, Von Lunen, E., Dunlap, D. B., Moya, R. M., and Camposano, C. L., 1997, Sequence stratigraphic framework of South Lake Maracaibo, Venezuela, based on 3-D seismic and well data: The University of Texas at Austin, Bureau of Economic Geology, contract report prepared for Lagoven S.A., 3 volumes, 120 p.

156. Nelson, Jr., H. Roice; "Hypertext Documentation," Presentation given at The Bureau of Economic Geology Technology Forum, Austin, TX, 21 May 1997.
155. Anderson, Roger N.; Nelson, Jr., H. Roice; "Advanced Visualization Techniques for Exploration and Production," Presentation given at OTC, #8275 pp. 63-66, Houston, TX, May 1997.
154. Nelson, Jr., H. Roice; et. al.; "Mindwalks: Visualizing Geology, Process, Status, and Exploration," Presentation given at 2nd Annual VR in Geosciences Conference, Houston, TX, 1-2 May 1997.
153. Nelson, Jr., H. Roice; Bavinger, Bill A.; "The Visualization of Production: Above the Surface," Presentation given at 2nd Annual VR in Geosciences Conference, Houston, TX, 1-2 May 1997.
152. Nelson, Jr., H. Roice; Bavinger, Bill A.; "Exploring on the Internet," White Paper, copies available on request, April 1997.
151. Nelson, Jr., H. Roice; "Virtual Seminars," Computers & Geosciences, Vol. 23, No. 5, pp. 601-606, 1997.
150. Liu, Yutao; He, Wei; Anderson, Roger N.; Ebrom, Dan; Loftin, R. Bowen; Nelson, Jr., H. Roice; "[Virtual Reality in Geosciences](#)," Virtual Seminar presented to Statoil in Stavanger, Norway from Houston, TX, 12 December 1996.
149. Resley, Bill; Nelson, Jr., H. Roice; "[Subsurface Integration School](#)," Virtual Seminar presented 16 September 1996.
148. Turner, Kenneth R.; Nelson, Jr., H. Roice; "[The Philosophy of Synergism in Kenneth R. Turner's Art](#)," Virtual Seminar presented 29 August 1996.
147. Bavinger, Bill A.; LeRoy, Sam D.; Nelson, Jr., H. Roice; "[Visualization of Production](#)," Virtual Seminar presented 21 August 1996.
146. Nelson, Jr., H. Roice; "[HTML and hypermedia-based Documentation](#)," Virtual Seminar presented 14 August 1996.
145. LeRoy, Sam D.; Nelson, Jr., H. Roice; "[Petroleum Play Life Cycle - Financial & Technical Risk](#)," Virtual Seminar presented 24 July 1996.
144. Nelson, Jr., H. Roice; "[Preparing and Presenting Virtual SeminarsSM](#)," Virtual Seminar given simultaneously to: GeoQuest in Houston, TX; EarthView in Houston, TX; The University of Oregon in Eugene, OR; and Winona State University, Winona, MN from Houston, TX 09 July 1996.
143. Nelson, Jr., H. Roice; "[Virtual Reality in Geosciences](#)," Virtual Seminar presented at 1st Annual VR in Geosciences Conference organized by Ostfold Research Foundation, Halden, Norway 15:45-16:45 PM from Houston, TX 8:45-9:45 AM, Tuesday, 25 June 1996.
142. Nelson, Jr., H. Roice; "[3-D Seismic Evaluation of Proposed Salt Caverns](#)," Virtual Seminar presented at EAG Energy Innovations Booth in Amsterdam, The Netherlands from Houston, TX, 03-06 June, 1996.
141. Nelson, Jr., H. Roice; "[Phase Displays of 3-D Seismic Data](#)," Virtual Seminar presented at EAG Energy Innovations Booth in Amsterdam, The Netherlands from Houston, TX, 03-06 June, 1996.
140. Nelson, Jr., H. Roice; "[Integrating Interpretations - Multiple 3-D Seismic Surveys](#)," Virtual Seminar presented at EAG Landmark Graphics Booth in Amsterdam, The Netherlands from Houston, TX, 03-06 June, 1996.
139. Nelson, Jr., H. Roice, Hume, Jeff; "[How to Shoot a Cheaper, Better 3-D Survey](#)," Virtual Seminar presented at EAG Energy Innovations Booth in Amsterdam, The Netherlands from Houston, TX, 03-06 June, 1996.
138. Nelson, Jr., H. Roice; "[Integrating Multiple Seismic Surveys to Interactively Interpret a Salt Dome Flank](#)," Virtual Seminar presented to students at The University of California at Santa Cruz from Houston, TX, 08 May 1996.
137. Nelson, Jr., H. Roice (Walden 3-D, Inc.), and Brassow, Carl L. (Secure Environmental Management Inc.), "[Integrating Multiple Seismic Surveys to Interactively Interpret a Salt Dome Flank](#)," Texas Natural Resource Conservation Commission Hearing on disposing of petrochemical hazardous waste in salt caverns in the Boling Dome, [follow-up meeting ~20 June 2001](#).
136. Nelson, Jr., H. Roice; "Creating and Implementing a Knowledge Backbonesm for the Learning Organization," Presentation given at Unocal, BP, Fletcher Challenge Petroleum, and others, October 1995.
135. Slatt, Roger M.; Thomasson, M. Ray; Romig, Philip; Pasternack, Eric; Boulanger, Albert; Anderson, Roger; Nelson, H. Roice Jr.; "[Visualization Technology for the Oil and Gas Industry: Today and Tomorrow](#)," [AAPG Bulletin \(1996\) 80 \(4\): 453-485](#).
134. Nelson, H. Roice Jr.; "[Visualization a Petroleum Enterprise in the Information Domain](#)," [Fifth Archie Conference, May 15-18, 1995](#).
133. Ethetton, Laura Kay; Hume, Jeff; Littlewood, Merrill; Nelson, Jr., H. Roice; Pappas, Evan; Rego, Charley; Shaughnessey, Dan; Taylor, Blaine; and Turpening, Walt; "[An Interactive Information Infrastructure](#)," HyperEdge Expert Association Breakfast Meeting, Westlake Club, Houston, TX, April, 6, 1995.

132. Nelson, Jr., H. Roice; Shaughnessey, Dan; "Building a Reservoir Information Management System (RIMS) with hypermedia Technology," Landmark Graphics Worldwide Technology Forum, Houston Marriott Westside Hotel, Houston, TX, November 29, 1994.
131. Macurda, Jr., D. Bradford; Nelson, Jr., H. Roice, Jones, Gary L.; "The Stratigraphy, Sedimentology, and Chronostratigraphy of the Mobile Bay Fan, Northeastern Gulf of Mexico," American Association of Petroleum Geologists Annual Convention, Denver, CO, June 14, 1994.
130. Nelson, Jr., H. Roice; "How Best Practices can make members of the HyperEdge Expert Association money now and later," HyperEdge Expert Association Breakfast Meeting, Westlake Club, Houston, TX, April 21, 1994.
129. Nelson, Jr., H. Roice; Taylor, Blaine W.; "Best Practices," HyperEdge Expert Association Breakfast Meeting, Westlake Club, Houston, TX, March 17, 1994.
128. Nelson, Jr., H. Roice; "History of HyperMedia Corporation," 1st HyperEdge Expert Association Breakfast Meeting, International House of Pancakes, Houston, TX, September 9, 1993.
127. Macurda, Jr., D. Bradford; Nelson, Jr., H. Roice; Jones, Gary L.; "The Stratigraphy and Paleooceanography of Cretaceous Carbonate Buildups, Porcupine Basin, Offshore Ireland," interactive poster presentation, Society of Exploration Geophysicists Sixty Third Annual International Meeting & Exposition, New Orleans, LA, October 28, 1993.
126. Macurda, Jr., D. Bradford; Kolla, V.; and Nelson, Jr., H. Roice; "The Systems Tracts of the Zambezi Delta, Mozambique," Canadian Society of Petroleum Geologists, Calgary, Alberta, Canada, May 28, 1992.
125. Nelson, H. R., Jr.; Warner, Craig L.; Gary, S. Parker; Anderson, Roger N.; Rollwitz, William T.; Integrated Exploration, Society of Exploration Geophysicist Sixty First Annual International Meeting & Exposition, Houston, TX, November 15, 1991.
124. Anderson, Roger N.; Cathles III, Lawrence M.; Nelson, Jr., H. Roice; "'Data cube' depicting fluid flow history in Gulf Coast Sediments," Oil & Gas Journal, November 4, 1991.
123. Nelson, H. R., Jr.; 1er. Foro Informaico Para La Industria Petrolera, Pemex, Villahermosa, Mexico, "Entrando al Siglo XXI: Bsqueda de Hidrocarburos" / "Entering the 21st Century Looking for Hydrocarbons," October 1, 1991.
122. Nelson, H. R., Jr.; Stark, Tracy J.; Wyatt, Kay Dautenhahn; Dorn, Geoffrey A.; Ottolini, Richard A.; Massell, Wulf F.; Sovelius, Paul E.; and Shanks, John L.; "Scientific Visualization," Society of Exploration Geophysicists Sixtieth Annual International Meeting & Exposition, San Francisco, CA, September 28, 1990, published in Geophysics: The Leading Edge of Exploration, October, 1991.
121. Kolla, V., Macurda, Brad, and Nelson, H. R., Jr., "The Systems Tracts of the Zambezi Delta, Mozambique," 8th Annual SEG Research Workshop on Lithology: Relating Elastic Properties to Lithology at all Scales, St. Louis, Missouri, July 28-August 1, 1991.
120. Mastoras, S., Huxohl, C., and Nelson, H.R., Jr., "Visualization of Map and Seismic Attributes," EAEG, Florence, Italy, May, 1991.
119. Nelson, H. R., Jr.; "Landmark and the Future of Oil and Gas Exploration," Annual Landmark University Partnership Meeting, Brookhollow Marriott, Houston, TX, April 25, 1991.
118. Kolla, V., Macurda, D.B., Jr., Nelson, H.R., Jr., "The Systems Tracts of the Zambezi Delta, Mozambique," poster presentation at the 1991 AAPG Convention, Dallas, Texas, April, 1991.
117. Anderson, R. N., and Nelson, H. R., Jr., "Active Fluid Flow in the Eugene Island Area, Offshore Louisiana," The Leading Edge of Geophysics, Vol. 10, No. 4 April, 1991.
116. Mastoras, S. and Nelson, H.R., Jr., "Visualization of Map and Seismic Attributes," Houston Geotech Technical Conference, Houston, Texas, February 18, 1991.
115. Macurda, D. B., and Nelson, H. R., Jr., "The Seismic Stratigraphy and Facies of a Transitional Continental Rise, Porcupine Basin, Offshore Ireland," submitted to Geophysics, February, 1991.
114. Macurda, D. B., and Nelson, H. R., Jr., "The Stratigraphy of a Mio-Pliocene Contourite Drift, Porcupine Basin, Offshore Ireland," submitted to AAPG Bulletin, February, 1991.
113. Macurda, D. B., and Nelson, H. R., Jr., "Interactive Estimation of Stratal Continuity in Deep Water Sequences," submitted to Geophysical Prospecting, February, 1991.
112. Nelson, H. R., Jr., "Interpreting a Ground-Penetrating Radar Survey of a Steep Appalachian Watershed", Houston Geological Society, November 14, 1990.
111. Nelson, H. R., Jr., "The New Interpreter," North America Landmark Users Group Annual Meeting, November 1, 1990.
110. Nelson, H. R., Jr., "The Advantage of Using Interactive Workstations," Association of Mexico of Geophysics and Exploration, IV Symposium of Geophysics, Mexico City, Mexico, September 20, 1990.

109. Nelson, H. R., Jr., "A Crisis in Geoscience Education," 1990 Annual Landmark University Partnership Research Conference, Houston, TX, February 12, 1990.
108. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan, Offshore Ireland: A Case History," Seismic Interpretation Series, Vol. 1, pp. 59-65, 1989.
107. Mallon, K. M., Chan, A. W-K., Nelson, H. R., and Jones, G. L., "Interactive Geological Subsurface Interpretation Using Well Logs on a Geophysical Workstation - A Case History," The Eleventh Geophysical Convention of Turkey, Istanbul, September 18-22, 1989.
106. Mallon, K. M., Chan, A. W-K., Nelson, H. R., and Jones, G. L., "Interactive Geological Subsurface Interpretation Using Well Logs on a Geophysical Workstation - A Case History," Abstract of the 11th Geophysical Convention of Turkey, Jeofizik, Vol. 3, No. 2, pp. 149-151, September, 1989.
105. Nelson, H. R., Jr., "Integration of Interactive Geoscience Applications," CSEG/CSPG Symposium, Computer Applications Technology in Oil and Gas Exploration, June 15, 1989.
104. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of the Morphology of Upper Tertiary Contourites, Porcupine Basin, Offshore Ireland," AAPG Annual Convention, San Antonio, TX, April 23-26, 1989.
103. Nelson, H. R., Jr., "Imaging the Subsurface with Geophysical Workstations," Seminar sponsored by Geological Sciences, William and Flora Hewlett Foundation, Houston, TX., April 13, 1989.
102. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Estimation of Stratal Continuity in Deep Water Sequences," Poster Presentation, Correlation in Hydrocarbon Exploration, Norwegian Petroleum Society, University of Bergen, Bergen, Norway, October 3-5, 1988.
101. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan, Offshore Ireland: A Case History," The Leading Edge of Exploration, pp 28-34, October, 1988.
100. Nelson, H. R., Jr., "Geophysical Work Station in Production Geology," SPE Formation Evaluation, Beijing, China, June, 1988.
99. Nelson, H. R., Jr., (Chairman) Interpretive Processing - Case Histories, European Association of Exploration Geophysicists, The Hague, June 10, 1988.
98. O'Brian, B., Mastoras, S., and Nelson, H. R., Jr., "Interactive Overthrust Interpretation," CSEG, Calgary, AL, May 1988.
97. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan, Offshore Ireland: A Case History," Julich, Germany, February 24-26, 1988.
96. Macurda, D. B., and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan, Offshore Ireland: A Case History," Workshop on Quantitative Dynamic Stratigraphy, CSM, Golden, Colorado, February 14-18, 1988.
95. Macurda, D. B., and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan, Offshore Ireland: A Case History," San Antonio SEG, San Antonio, January 12, 1988.
94. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan, Offshore Ireland: A Case History," Southeastern Geophysical Society, New Orleans, LA., January 5, 1988.
93. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan Offshore Ireland, A Case History," Coastal Bend SEG, Corpus Christi, TX., December 15, 1987.
92. Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan Offshore Ireland, A Case History," Houston Geophysical Society, Houston, TX, December 14, 1987.
91. Donihoo, K., Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan Offshore Ireland, A Case History," The Pacific Coast Section of the SEG, Los Angeles, CA, December 10, 1987.
90. Donihoo, K., Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan Offshore Ireland, A Case History," The Pacific Coast Section of the SEG, Ventura, CA, December 9, 1987.
89. Donihoo, K., Macurda, D. B. and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan Offshore Ireland, A Case History," The Pacific Coast Section of the SEG, Bakersfield, CA, December 8, 1987.
88. Nelson, H. R., Jr., Brede, C. E., and Bayless, J., "Integrating Seismic and Subsurface Data: An Interactive Interpretation Case History from Sterling County, Texas," SEG's Fifty-Seventh Annual International Meeting & Exposition, Interactive Poster Presentation, New Orleans, LA, October 14, 1987.
87. Macurda, D. B., Jr., and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan Offshore Ireland, A Case History," SEG, Fifty-Seventh Annual International Meeting & Exposition, Interactive Poster Presentation, New Orleans, LA, October 11-15, 1987.
86. Nelson, H. R., Jr., Brede, C. E., and Bayless, J., "Integrating Seismic and Subsurface Data: An Interactive Interpretation Case History from Sterling County, Texas," Fourth Annual SEG Summer Research Workshop, The Interpretation of Reflection Seismic Data, Austin, TX, August 9-12, 1987.

85. Macurda, D. B., Jr., and Nelson, H. R., Jr., "Interactive Interpretation of a Submarine Fan Offshore Ireland, A Case History," Technical Program and Abstracts of Papers, 49th Annual Meeting EAEG, Belgrade, Yugoslavia, June 11, 1987.
84. Donihoo, Kevin, Nelson, H. R., Jr., and Brede, C. E., "Integrating Seismic and Subsurface Data: An Interactive Interpretation Case History from Sterling County, Texas," SEG's Third Annual Gulf Coast Exploration and Development Meeting and Exposition, April 14, 1987.
83. Nick, C. J. and Nelson, H. R., Jr., "Interactive Fault Interpretation and Seismic Amplitudes," Oil & Gas Journal, pp. 67-71, April 6, 1987.
82. Nelson, H. R., Jr., "New Technologies and Exploration," CSEG Technical Luncheon Meeting, Calgary, Alberta, Canada, March 9, 1987.
81. Todd, Richard and Nelson, H. R., Jr., "Seismic Amplitudes from Interactive Fault Interpretation," Oil & Gas Journal, Geophysical Issue, November, 1986.
80. Denham, J. I., and Nelson, H. R., Jr., "Map Displays from an Interactive Interpretation," Geophysics, v. 51, No. 10, pp. 1999-2006, October, 1986.
79. Nelson, H. R., Jr. and Hildebrand, H. A., "Interactive Fault Interpretation, Chinese Petroleum Society Conference on Exploration in Complex Areas, Urumqi, China, August 20, 1986.
78. Nelson, H. R., Jr., and Hildebrand, H. A., "Interactive Fault Interpretation," EAEG Annual Meeting, Ostend, Belgium, June 3-6, 1986.
77. Nelson, H. R., Jr., and Hildebrand, H. A., "Real-Time Contouring and Interactive Interpretation," presented at CSEG, Calgary, Canada, May 15, 1986.
76. Nelson, H. R., Jr., Bhattacharya, G. P., Tappmeyer, D. M., and Jurzabek, D. C., "Geophysical Workstations in Production Geology," Sun Exploration and Production, Gulf Coast SEG, New Orleans, LA., April 22, 1986.
75. Ennis, C.E., Mouton, J.O., Chiranky, L., and Nelson, H.R., Jr., "Geophysical Workstations in Production Geology", SEG Second Gulf Coast Exploration and Development Meeting & Exposition, New Orleans, Louisiana, April 22, 1986.
74. Nelson, H. R., Jr., Bhattacharya, Ganges P., Tappmeyer, Daniel M., and Jurzabek, David C., "Geophysical Workstations in Production Geology," SPE International Meeting on Petroleum Engineering, Beijing, China, March 17-20, 1986.
73. Ennis, C.E., Mouton, J.O., Chiranky, L., and Nelson, H.R., Jr., "Geophysical Workstations in Production Geology", SPE Seminar, Beijing, China, March 17, 1986.
72. Nelson, H. R., Jr., "Modeling and Interactive Interpretation," Norwegian Petroleum Society Bi-Annual Conference on Practical Aspects of Modeling in Exploration and Development, Kristiansand S., Norway, March 3-5, 1986.
71. Donihoo, K. and H. R. Nelson, Jr., "New Technologies in Exploration Geophysics," California SEG Local Chapter Presentations, February, 1986.
70. Ennis, C.E., Mouton, J.O., Chiranky, L., and Nelson, H.R., Jr., "Geophysical Workstations in Production Geology", CDC Seminar on New Developments and Technology In Exploration Interpretation, Houston, Texas, July 17, 1985.
69. Nelson, H.R., Jr., and Hildebrand, H.A., "Interactive 2d and 3d Interpretation on a Microcomputer", First Annual Gulf Coast Exploration and Development Meeting, April 16, 1985.
68. Nelson, H. R., Jr., and Hildebrand, H. A., "Applications of Landmark Workstations in Interactive Processing and Interpretation," 1985 CPS/SEG Joint Meeting, April 12-16, 1985.
67. Simson, S.F., and Nelson, H.R., Jr., "Seismic Stratigraphy Moves Towards Interactive Analysis", World Oil, three-part series, December 1984, January 1985, and February 1985.
66. Simson, S. F. and Nelson, H. R., Jr., "Seismic Stratigraphy Moves Towards Interactive Analysis," World Oil, December, 1984.
65. 64a. Denham, J.I. & Holmes, J.D. (Nelson, H.R., Jr.), "Interactive Seismic Interpretation," in Proceedings of the Second Australian Petroleum Geophysics Symposium, pp. 338-57; ASEG, Victorian Branch, 1984.
64. Nelson, H.R., Jr., "The Use of Microcomputers in Seismic Interpretation", American Oil and Gas Reporter, October 9, 1984.
63. Nelson, H.R., Jr., "Seismic Interpretation and Microcomputer Economies-Of-Scale", EAEG London, UK, June 19 - 22, 1984.

62. Cole, R. A., and Nelson, H. R. Jr., "Interactive Computer Graphics and the Interpretation of Three-Dimensional Seismic Surveys", Society of Petroleum Geologists China - SEG Joint Seminar on Seismic Interpretation, Zhou Xian, Peoples Republic of China, May 8 through 13, 1984.
61. Nelson, H. R., Jr., "Interactive 3d Interpretation of the SALNOR-7 Physical Model Data Set", SAL Semi-Annual Progress Review, April 26, 1984.
60. Nelson, H. R., Jr., "Animation, A Tool for Evaluating Multi-Dimensional Data Sets", SEG/USN Joint Technical Symposium, U.S. Navy Research Facility, March 13-14, 1984.
59. Nelson, H. R., Jr., "Interactive Computer Graphics, 3d Seismic Data, and Reservoir Prediction", Norwegian Petroleum Society Seminar 6941, Reservoir Prediction Using Geophysical Methods, February 27-29, 1984.
58. Nelson, H. R., Jr., Hildebrand, H. A., and Mouton, J. O., "Color Softcopy, Animation and Interactive User Interface in Interpretation Station Design", Geophysics, (1984) v. 49, p. 664.
57. Nelson, H. R., Jr., Hildebrand, H. A., and Mouton, J. O., "Color Softcopy, Animation and Interactive User Interface in Interpretation Station Design", 53rd Annual International SEG Convention, Las Vegas, NV, September, 1983.
56. Senti, R. J. et al, "Special Report Geophysical Activity in 1982", The Leading Edge, v. 2, No. 8, pp. 41-64, August, 1983.
55. Tatham, R. H., Goolsbee, D. V., Massell, W. F., and Nelson, H. R., Jr., "Seismic Shear-Wave Observations in a Physical Model Experiment", Geophysics, v. 48, No. 6, pp. 688-701, June, 1983.
54. Nelson, H. R., Jr., "North Sea Physical Model Construction, Data Acquisition, and Interpretation", OTC Proceedings, paper no. 4511, pp. 555-562, May, 1983.
53. Wade, C. J., Sekharan, K. K., and Nelson, H. R., Jr., "Building and Using a Physical Model of Gulf Coast Growth Faults", SAL Semi-Annual Progress Review, V. 11, p. 55, April, 1983.
52. Gardner, T. N., and Nelson, H. R., Jr., "Interactive Graphics Developments in Energy Exploration", IEEE Computer Graphics and Applications, v. 3, No. 2, pp. 33-44, March/April 1983.
51. Nelson, H. R., Jr., "Interactive Workstation," Computer Assisted Interpretation - 1983, Geophysical Society of Tulsa, March 21, 1983.
50. Fisher, D. A., Gardner, G. H. F., Nelson, H. R., Jr., Verm, R. W., "Interactive 3d Display and Interpretation of a Complex Physical Model", 36th Annual Midwest SEG Meeting and Exposition, Denver, CO, March 6-9, 1983.
49. Nelson, H. R., Jr., "A Workstation Approach to Interactive Interpretation", Image Processing Laboratories (IPL) 1st Annual Meeting, University of Houston, Houston, TX, January 28, 1983.
48. Nelson, H. R., Jr., **New Technologies in Exploration Geophysics**, Gulf Publishing Company, 281 pp., 1983 (later book was published in Chinese).
47. Fisher, D. A., Gardner, G. H. F., Nelson, H. R., Jr., and Verm, R. W., "Interactive 3d Display and Interpretation of a Complex Physical Model", SEG Technical Program Abstracts and Biographies, Dallas, TX, paper S8.4, pp. 105-107, October, 1982.
46. Agbo, S. A., Gardner, G. H. F., and Nelson, H. R., Jr., "Modeling of Velocity Distribution Using Liquid Models", SAL Annual Progress Review, V. 10, pp. 44-67, October, 1982.
45. Vajapey, S., and Nelson, H. R., Jr., "Vertical Seismic Profiles of Simple Physical Models", SAL Annual Progress Review, V. 10, pp. 68-86, October, 1982.
44. McDonald, J. A., and Nelson, H. R., Jr., "An Investigation of a Thinning Wedge Using Physical Models", SAL Annual Progress Review, V. 10, pp. 87-99, October, 1982.
43. Sekharan, K. K., Ladzekpo, D., Kamal, S., and Nelson, H. R., Jr., "Using a 3-D Milling Machine to Build Physical Models", SAL Annual Progress Review, V. 10, pp. 100-105, October, 1982.
42. Shah, K. K., and Nelson, H. R., Jr., "The AGL Genisco SpaceGraph Driver", SAL Annual Progress Review, V. 10, pp. 229-236, October, 1982.
41. Wade, C. J., et al, "Comprehensive Physical Model Catalog", SAL Annual Progress Review, V. 10, pp. 424-432, October, 1982.
40. Wade, C. J., et al, Comprehensive Physical Model Catalog, First Edition, 862 pp., 1982.
39. Nelson, H. R., Jr., "Industry/University Relations Effect Exploration", World Oil, pp. 93-105, August, 1982.
38. Nelson, H. R., Jr., "Improved Exploration Efficiency with Managed Data Bases", World Oil, pp. 149-161, July, 1982.
37. Gardner, T. N. and Nelson, H. R., Jr., "Interactive Graphics Developments in Energy Exploration", NCGA Convention, Anaheim, CA, June 13-17, 1982.
36. Nelson, H. R., Jr., Gardner, T. N., and Verm, R. W., "Interactively Displaying a Disc Full of Seismic Traces", EAEG Convention, Cannes, France, June 7-11, 1982.

35. Nelson, H. R., Jr., Wade, C. and Karim, A., "Technical Service Review and Facility Improvements", SAL Semi-Annual Progress Review, May, 1982.
34. Nelson, H. R., Jr., and Shah, S., "SALSAD - Evaluating the Saddle Problem with a Physical Model", SAL Semi-Annual Progress Review, May, 1982.
33. Nelson, H. R., Jr. and other project contributors, "SALNOR - North Sea Model: Building, Data Acquisition and Interpretation", SAL Semi-Annual Progress Review, May, 1982.
32. Nelson, H. R., Jr., and Verm, R., "Interactively Mixing the Display of Horizontal and Vertical Seismic Sections", SAL Semi-Annual Progress Review, May, 1982.
31. Nelson, H. R., Jr., Fisher, D. A. and Verm, R., "Interactive Display and Interpretation of a Complex Physical Model after 3d Migration", SAL Semi-Annual Progress Review, May, 1982.
30. Nelson, H. R., Jr., "Interactive Interpretations Comes of Age", World Oil, pp. 197-216, May, 1982.
29. Nelson, H. R., Jr., and G. H. F. Gardner, "Description and Evaluation of SALNOR Interpretation Workshop", SAL Semi-Annual Progress Review, May, 1982.
28. Nelson, H. R., Jr., "Will True 3d Display Devices Aid Geologic Interpretation", World Oil, pp. 129-136, April 1982.
27. Nelson, H. R., Jr., "Interactive Graphics Enhances Seismic Data Display", World Oil, pp. 76-82, March, 1982.
26. Nelson, H. R., Jr., "Activities at the University of Houston's Allied Geophysical Laboratories with a Summary of New Developments in 3-D Display Devices", SEG/USN Joint Technical Symposium, U.S. Navy Mississippi Research Facility, March 22-16, 1982.
25. Nelson, H. R., Jr., Modeling Resolves Complex Seismic Events, World Oil, pp. 61-70, February, 1982.
24. Nelson, H. R., Jr., "New Vector Super Computers Promote Seismic Advancements", World Oil, pp. 155-160, January, 1982.
23. Nelson, H. R., Jr., "3d Seismic Techniques Aid Exploration, Development", World Oil, pp. 115-120, December, 1981.
22. Nelson, H. R., Jr., "Trends in Multichannel Seismic Recording Systems", World Oil, pp. 135-142, November, 1981.
21. Agbo, S., Nelson, H. R., Jr., "Calibration of Old Materials and New Liquid Model Materials", SAL Annual Progress Review, November, 1981.
20. Fisher, D. A., Nelson, H. R., Jr., and Verm, R. W., "Using Data from Complex Physical Models to Teach Interactive Interpretation Methods", SAL Annual Progress Review, November, 1981.
19. Khosla, D., Nelson, H. R., Jr., "Tank and System Modifications and Technical Service Review", SAL Annual Progress Review, November, 1981.
18. Nelson, H. R., Jr., Gardner, T. N., Verm, R. W., and Steiner, C. T., "Interactively Displaying Data from a Disc Full of Seismic Traces", SAL Annual Progress Review, November, 1981.
17. Tatham, R. H., Goolsbee, D. V., Massell, W. F., and Nelson, H. R., Jr., "Seismic Shear-Wave Observations in a Physical Model Experiment", SAL Annual Progress Review, November, 1981.
16. Nelson, H. R., Jr., "New Technologies Will Meet Exploration Needs", World Oil, pp. 179-200, October, 1981.
15. Nelson, H. R., Jr., Hilterman, F. J., and Gardner, G. H. F., "Introduction to Interactive 3-D Interpretation", Oil & Gas Journal, V. 79, No. 40, pp. 106-125, 1981.
14. Harris, L. D. and Nelson, H. R., Jr., "Three-Dimensional Display and Analysis of Seismic Volume Images", SEG Technical Papers, Los Angeles, CA, paper S7.3, V.4, pp. 2037-2045, October, 1981.
13. Massell, W. F., Winningham, D. J., and Nelson, H. R., Jr., "Interactive Geophysical Analysis with 3d Color Graphics", at 51st Annual SEG Convention, Los Angeles, CA, paper S7.4, October, 1981.
12. Nelson, H. R., Jr., Gardner, T. N., and Hilterman, F. J., "Interpretation of Physical Model Tank Data with the Raster Segment Generator", SEG Technical Papers, Los Angeles, CA, paper S18.7, V. 6, pp. 3619-3634, October, 1981.
11. Tatham, R. H., Massell, W. F., Goolsbee, D., Nelson, H. R., Jr., "Seismic Shear-Wave Observations in a Physical Model Experiment", SEG Technical Papers, Los Angeles, CA, paper S3.1, V. 3, pp. 1695-1733, October, 1981.
10. Nelson, H. R., Jr., Technical Service and 3-D School for Consortium Members, SAL Semi-Annual Progress Review, May, 1981.
9. Hilterman, F. J., Nelson, H. R., Jr., and Gardner, G. H. F., "Physical Modeling: An Aid for Production Geophysicists", OTC Proceedings, paper No. 4022, pp. 139-147, May, 1981.

8. Nelson, H. R., Jr., Hilterman, F. J., and Gardner, G. H. F., "Introduction to Interactive 3d Interpretation", SEG Technical Papers, V. 1, pp. 415-458, November, 1980 (see also abstract, Geophysics, V. 46, No. 4, pp. 409).
7. Gardner, T. N., Hilterman, F. J., and Nelson, H. R., Jr., "Interpretation of Physical Model Tank Data with the Raster Segment Generator", SAL Annual Progress Review, v. 6, pp. G1-G12, November, 1980.
6. Harris, L. D. and Nelson, H. R., Jr., "Three-Dimensional Display and Analysis of Seismic Volume Images", SAL Annual Progress Review, v. 6, pp. F1-F11, November, 1980.
5. Nelson, H. R., Jr., "Technical Service", SAL Annual Progress Review, v. 6, pp. R1-R4, November, 1980.
4. Nelson, H. R., Jr. and Hilterman, F. J., "Improvements in the Physical Modeling System Hardware and Software", SAL Annual Progress Review, v. 6, pp. B1-B13, November, 1980.
3. Nelson, H. R., Jr., "Technical Services", SAL Annual Progress Review, v. 5, pp. 1-4, May, 1980.
2. Nelson, H. R., Jr., Hilterman, F. J., and Gardner, G. H. F., "[Introduction to Interactive 3d Interpretation](#)", SAL Semi-Annual Progress Review, v. 5, pp. 149-192, May, 1980.
1. Nelson, H. R., Jr., "A Reflection Seismic Study of the Quaternary Sediments of Yellowstone Lake", Senior Thesis, GGSC - 397, University of Utah, May, 1974.

INTERESTS

Family (10 children, 17 grandchildren, and have held [The Annual Nelson Grandkids Summer Science Camp](#) each summer since 2010); art (commissioned 14 original paintings from [Kenneth R. Turner](#)); choir (have sung in Cedar City Messiah 4 years, bringing [Ken Turner's Christian Collection to the Cedar City Messiah in 2015](#), also sing with the [Cedar City Master Singers](#)); cosmology; creativity; entrepreneurship; genealogy (Temple and Family History Consultant since moving back to Cedar City in 2014); geotechnical integration (built a [digital model of all of the wells in Cedar Valley in September of 2005](#)); [gardening](#); [guitar](#); history (President-Elect, President, Past-President [Cedar City Chapter of Sons of the Utah Pioneers](#), also member of Iron County Historical Society); hypermedia; literature; making a difference; music; outdoors (ran over 120 miles between 18 March 2019 and 24 April 2019, and 1,028 miles from 06 Nov 2019 to 09 Nov 2020); pattern finding; people; presentations; reading; religious traditions; seismic acquisition and interpretation (2-D and 3-D); writing ([Prime Words \[Stanzas\]](#), [An Open Mind, Stand Back Up](#)); writing songs (see [psalmscountdown.net](#) for 430 recorded songs, including putting 156 Psalms moving the scriptures to the music of my songs); and the World-Wide-Web (designed and built a UNIX, MOTIF, client-server, class-menu driven, hypertext engine with hyperlinked overlays for geological interpretations 1988-1994), then prototyped what I envision as a database driven [spatially indexed web pages for Iron County](#), emphasizing [water issues in the Cedar Valley Drainage Basin](#)).

Experiences in England in 1970 led to starting a project with a good friend and an architect, Raymond Gardner, that eventually became Walden 3-D, Inc. The basic goal continues to be to make a difference. The initial vision statement was "Building 3-D Intelligent Cities," and it has evolved to "Designing Responsive Environments" (for urban and rural planning activities), and to "Creatively Combining Concepts" (for oil & gas exploration activities).

My strength is spatial relationships. My vocation, geophysics and geology, is a series of spatial problems. My avocation, urban planning, is also a series of spatial problems. Urban Planning interests have resulted in [The Urban Machinesm](#), several urban planning projects described at [www.walden3d.com](#), and starting in 2021 involvement in [Rainbird Village](#) (see [our-people](#)).

RELIGIOUS BACKGROUND: The Church of Jesus Christ of Latter-Day Saints

This section is included for completeness, specifically because church assignments have trained me and enhanced my natural interest in working with and teaching youth, leading field camps, and opening minds. Church volunteer work has expanded to community service, including: representing The Southern Utah Rock Club with rocks from my collection at the Children's Jubilee at the Heritage Center on the 9th of February 2019; a geology STEM lecture to all 4th Grade Students at Enoch Elementary the 22nd of March 2019; a lecture at Ruby's Inn at Bryce Canyon to 65 7th and 8th Grader students from Gateway Academy on the 23rd of March 2019; lecture on geology, petroglyphs, and dinosaur footprints to 85 4th Grader students from East Elementary at Parowan Gap on the 2nd of April 2019; etc.

- Hillcrest Ward, Cedar City, Utah, 2014-present: Minister/Home Teacher; Cedar City Temple Worker since 14 Dec 2018; Temple and Family History Consultant since 28 Dec 2014, Family History Leader since 14 Jul 2019; Stake Blood Drive Coordinator for Hillcrest Ward 2014-2020.
- Nottingham Country Ward, Katy, Texas, 1984-2014: Home Teacher; Houston Temple Worker (17 Feb 2009- 20 Jun 2014); Ward Employment Specialist; Sunday School Teacher; Primary Teacher; Cub Scout Pack Committee Chairman; Teachers Quorum Advisor; Priest Quorum Advisor and Young Men's President; 2nd and 1st Councilor in Bishopric; Stake Missionary; Assistant High Priest Quorum Advisor; Venturing Crew Advisor (16-18-year-old scout leader); Ward Activities Committee Chairman.
- Maplewood 2nd Ward, Houston, Texas, 1980-1984: Home Teacher; Priest's Quorum Advisor (16-18-year-old young men) and Young Men's President; Elder's Quorum President.
- Dallas 1st Ward, Dallas, Texas, 1974-1979: Home Teacher; Teacher's Quorum Advisor (14-16-year-old young men); Elders Quorum President; Ward Clerk; Ward Executive Secretary.
- Voluntary Missionary Service in the British Mission (renamed England East Mission), 1970-1972: Canterbury, Ipswich, Norwich, Harlow New Town; Islington, and Earls Court Districts.
- University of Utah Student Wards, Salt Lake City, Utah, 1968-1970, 1973-1974: Home Teacher; Institute Choir at General Conference in April 1969; Elders Quorum Instructor.
- 5th generation member, but converted in 1968 at age 18, after growing up in a family with little interest in religion.

As a geoscientist, I love to study data and to go to the field and look at rocks and derive new insights. I love to create new opportunities (businesses) and watch how they impact friends and family. I have had a wonderful life: reading, writing, learning, teaching, camping, traveling, presentations, guitar, singing, Science Camps, hiking, running dinners, discussions, moving rocks, going to movies, watching television, etc. However, the emotionally satisfying and fulfilling parts of my life have not been found at school or at work or even with friends, but have been found with grandkids, my wife, my children (birth and step-children), with my prayers, my faith, my knowledge of our Savior and of His prophets, and of the truths the gospel is built on.