

# Geophysical Society of Pittsburgh

Proudly Presents Tuesday, March 3, 2015
At
Cefalo's Restaurant, Carnegie, PA



## **Recent Trends in Design and Acquisition**

Stuart A. Wright
Dawson Geophysical Company

**Abstract:** The convergence of new acquisition equipment and novel design concepts has produced higher quality 3D seismic surveys that are cost effective means for reducing acquisition footprint. It is generally (though not completely) accepted that acquisition footprint is caused by irregular sampling of data traces in the source-to-detector-offset domain. Even in the world of prestack depth migration, uniform sampling in the offset domain is critical to the quality of the final 3D volume. In the not so distant past, limitations imposed by recording equipment required deep objective, square-patch, seismic surveys to be recorded with a fairly coarse receiver line spacing. Such a geometry will inevitably lead to poor sampling of source-to-detector offsets and – therefore – significant acquisition footprint. Today's nodal recording systems have removed this limitation thereby allowing design geophysicists to build on the work of John Quigley published in 1999.



Biography: Stuart Wright received a Bachelor of Science degree in Geology/Geophysics from Northern Arizona University in 1980. From 1980 to 1987 he worked in Denver, Colorado for Cities Service Company/OXYUSA as an exploration geophysicist. From 1987 to 2003 he worked for Western Geophysical Company, also in Denver, where he worked in a number of processing and design geophysicist positions. In 2003, he joined Dawson Geophysical Company as Manager of Geophysics, responsible for 3-D survey design, parameter testing and other acquisition issues. In 2007 he was promoted to the position of Vice President – Applied Geophysics. Stuart is the author or co-author of many papers including Fundamental 3-D Seismic Survey Design", "Seismic Data Acquisition in Mountainous Terrain" and Lodgepole 3-D Seismic: Design, Acquisition, and Processing". He is a member of the SEG (Session Chairman 2003, 2012, 2014, and "Key Contact" for Design and Acquisition Abstracts 2003, 2014, 2015), Denver Geophysical Society (2012 President), 3D Symposium Committee, and AAPG, and has been invited to speak about 3-D topics to geophysicists, geologists and engineers at professional societies across the country.

Tuesday March 3, 2015 Agenda

5:00 pm Social Hour sponsored by



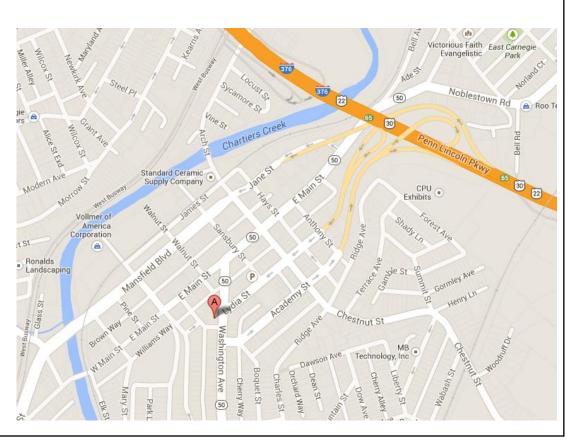
6:00 pm Dinner Buffet

7:00 pm Lecture

This months lecture will be held at:

#### Cefalo's

Banquet & Event Center 428 Washington Ave. Carnegie, PA 15106 412.276.6600



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