



# *Geophysical Society of Pittsburgh*



*Proudly Presents Tuesday, May 1st, 2018*

*At*

*Cefalo's Restaurant, Carnegie, PA*

## **2D Seismic Swaths Converted into a Pseudo 3D Seismic: An Appalachian Basin Case Study**

**Jianli Yang**

Seneca Resources

**Abstract:** 3D seismic can provide significant value to shale play development including optimum pad placement, well planning and effective geosteering. Given these benefits it is normally preferred to incorporate these data early in the planning process. However, due to acreage constraints and economic considerations, a regular 3D acquisition grid is not always feasible. Over a three year span, Seneca Resources acquired a series of 2D swath lines at a nominal cost and later merged these into one pseudo 3D survey through reprocessing. Special processing techniques have been applied to produce a fair quality 3D seismic volume which provided additional seismic data and geological information. The early 2D surveys helped with pad and well planning while the final 3D volume significantly aided our geosteering effort by reducing structural ambiguity as compared to the original 2D data. This presentation will discuss the advantages and limitations of merging 2D swath data into a 3D seismic volume as an alternative to conventional 3D seismic data.



**Biography:** Jianli Yang is a Geophysical Advisor with Seneca Resources where she has worked the Appalachian Basin since 2010. Jianli previously worked the Canadian Foothills for Talisman in Calgary. She earned an MS in Exploration Geophysics from the University of Calgary and an MS in Petrophysics from the China University of Petroleum. Jianli's primary focus has been the acquisition, processing and interpretation of 3D seismic data as it relates to the development of unconventional shale resource plays including the Marcellus, Geneseo and Utica. Jianli is a member of SEG and AAPG and was past vice president of GSP.

Please RSVP using the PayPal link on the Geophysical Society of Pittsburgh website at: [www.thegsp.org](http://www.thegsp.org) Cost: \$35 Members, \$40 Non-members (\$20 for Students), FREE for displaced employees. Meeting Location: 428 Washington Ave, Carnegie, PA 15106 (412) 276-6600.

## *Tuesday, May 1st, 2018 Agenda:*

*5:00 pm Social Hour (Beer and Wine) sponsored by:*



*6:00 pm Dinner Buffet*

*7:00 pm Lecture sponsored by:*

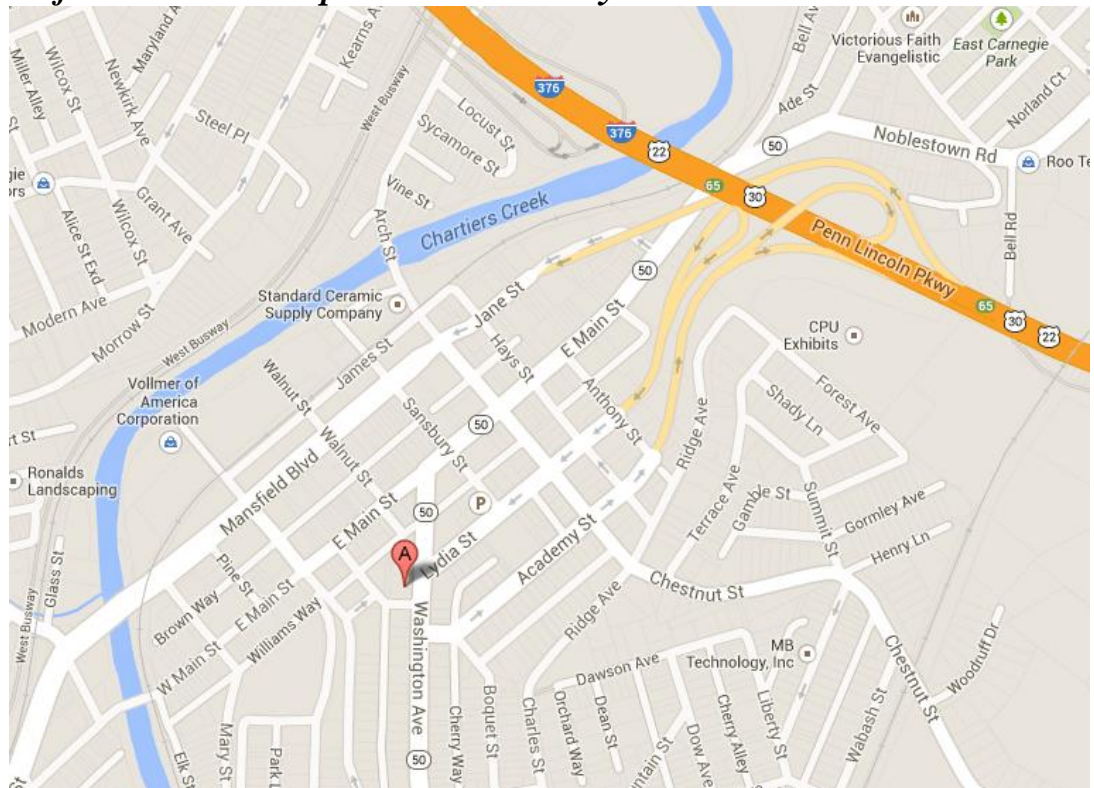


*To receive CEU certificate from this lecture please email: [emily.mcclain@williams.com](mailto:emily.mcclain@williams.com)*

*This months lecture will be held at :*

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