#### THE PAST 100 YEARS - WHAT HAVE WE LEARNED

# John Felmy, American Petroleum Institute, 1220 L Street, Washington, DC 20005

The oil industry has progressed and evolved over the past 100 years. This paper will provide an overview of these changes and the lessons we can learn from them. Several case studies will be discussed, and we will take a look at "then" and "now" in the world of oil.

## AFTER DRAKE: PEOPLE, PLACES, AND PETROLEUM

# Kathy J. Flaherty, Pennsylvania Geological Survey, 400 Waterfront Drive, Pittsburgh, PA 15222-4745

Drake completed his successful oil well in August 1859. By the end of that first historic year, at least 5 additional oil fields had been discovered by other new drillers, and were producing oil in Pennsylvania. By the close of the 19th century, nearly 300 oil and gas fields were in production. A series of maps highlight annual field discoveries as we follow the trend of exploration, discovery, and development of petroleum in Pennsylvania's oil and gas producing region. Our tour slices through history starting in 1859, and we will pause occasionally to consider some of the influences on the fledgling petroleum industry. Careers and character of some entrepreneurs nudged the known limits of the oil region outward, while new uses for oil and gas helped to assure new markets. Solving problems at the well site required inventions and innovations in hardware that pressed machine shops to improvise. The young petroleum industry played a role in the War Between the States and the reconstruction that followed. We will focus on some of the less well-known oil and gas fields and the visionaries whose inspiration and determination led to successes in regions of Pennsylvania sometimes far from the Oil Creek Valley.

### PETROLEUM GEOLOGY HERITAGE AT RENSSELAER

Gerald M. Friedman, Department of Geology, Brooklyn College and Graduate School of the City University of New York, Brooklyn, NY; Northeastern Science Foundation, Inc., affiliated with Brooklyn College, Rensselaer Center of Applied Geology, Troy, NY; For correspondence: Northeastern Science Foundation, 15 Third Street, P.O. Box 746, Troy, NY 12181, USA; <a href="mailto:gmfriedman@juno.com">gmfriedman@juno.com</a>

In the 19<sup>th</sup> century Rensselaer geologists, especially Amos Eaton (1776-1842), Ebenezer Emmons (1800-1863), and James Hall (1811-1898) developed the stratigraphic framework of New York State geology which became the key to the Paleozoic and Mesozoic geology of North America. In fact, Amos Eaton discovered local gas and named the locality Gasport.

By 1948-1950 Rensselaer realized the prospect of the fuel problems and started a program known as Fuel Resources, headed by Roland F. Beers (1899-?). Beers specialty included geophysics, especially seismic and acoustics, radioactivity, exploration for petroleum, and geological aspects of electromagnetic wave propagation on the ground. Following Beers,