



Movement of the US Geoscience Community Towards a Flat Earth

C. Keane (1), M. Milling (1) and C. Martinez (1)

(1) American Geological Institute (keane@agiwb.org)

The geosciences in the United States have historically been driven by domestic needs and often resorted to importation of expertise to meet demand. During this time, US geoscience has experienced a number of major booms and busts, but today is, as a discipline, less dependent on the immediate fortunes of the natural resources industries, but less certain of the source of demand. Actual employment distribution has not changed substantially in the last fifteen years, with the petroleum industry remaining by far the single largest employer of geoscientists in the United States, and even more as a level of contributing to GNP. However, most of the geoscience professional ranks in industry were filled prior to and during the last major boom which ended in 1986. Most of this workforce is now heading into retirement and though total geoscience workforce demand is not likely to grow; substantial employment opportunities do and will exist as these individuals retire. However, this picture is more complicated than in the past. Most industries, both the traditional geoscience employers, such as petroleum, mining, and environment, and non-traditional, such as telecommunications, are increasingly global in their operations and perspectives.

Increasing globalization means that US graduates now compete not only against graduates from other schools in the US, but throughout the world. When coupled with preferences for not hiring people in as expatriates for overseas assignment, US graduates face an increasingly competitive, but rewarding job market. The proverbial leveling of the playing field is also seen in the rapid rise in international membership of traditionally American professional and scientific societies. This internationalization is hardly discouraged within the culture of science, and is one that US students will need to embrace to compete effectively in the future for employment in the geosciences.

Though industry and the profession itself have made major strides towards working

in the global environment, major adjustments are still needed within the US academy to the new realities of preparing students for future employment within a global discipline. Currently most US geoscience graduate programs are geared towards training students for the professoriate (of which new job opportunities are slower in coming than the private sector.) In particular, there are a suite of skill sets suggested by employers that geoscience programs could introduce into their curriculum to improve the competitiveness of their graduates in this new global marketplace.