Schweiz. Vereinigung von Petroleum-Geologen und –Ingenieuren

Association Suisse des Géologues et Ingénieurs du Pétrole

Associazione Svizzera dei Geologi e Ingegneri del Petrolio

Swiss Association of Petroleum Geologists and Engineers

The Swiss Association of Petroleum Geologists and Engineers (VSP/ASP)
– as part of its 2009–2010 Lecture Programme –
presents a talk by

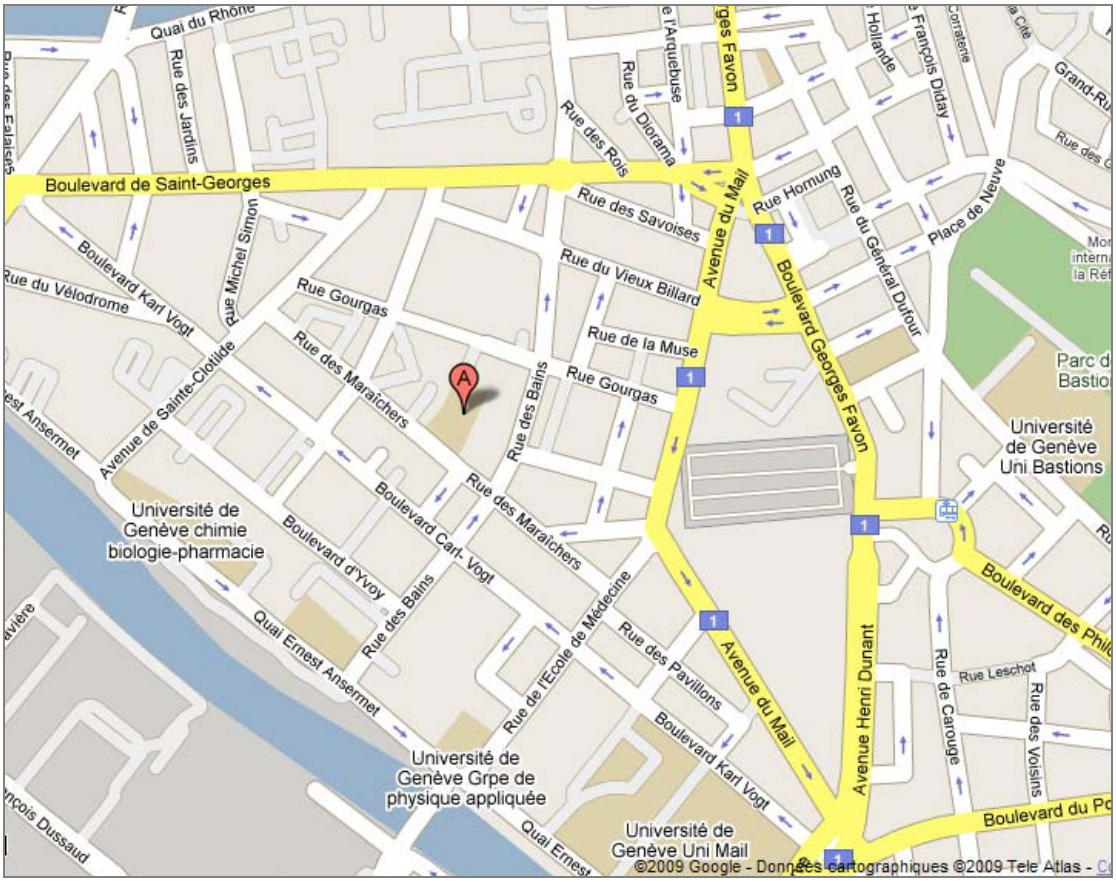
Dr. Peter Burri

The Reach of World Oil and Gas Resources –
the impact of technology

Wednesday, 4 November 2009, 18h00
University of Geneva, Department des Sciences de la Terre, Auditorium 1
13, Rue des Maraichers
1205 Genève

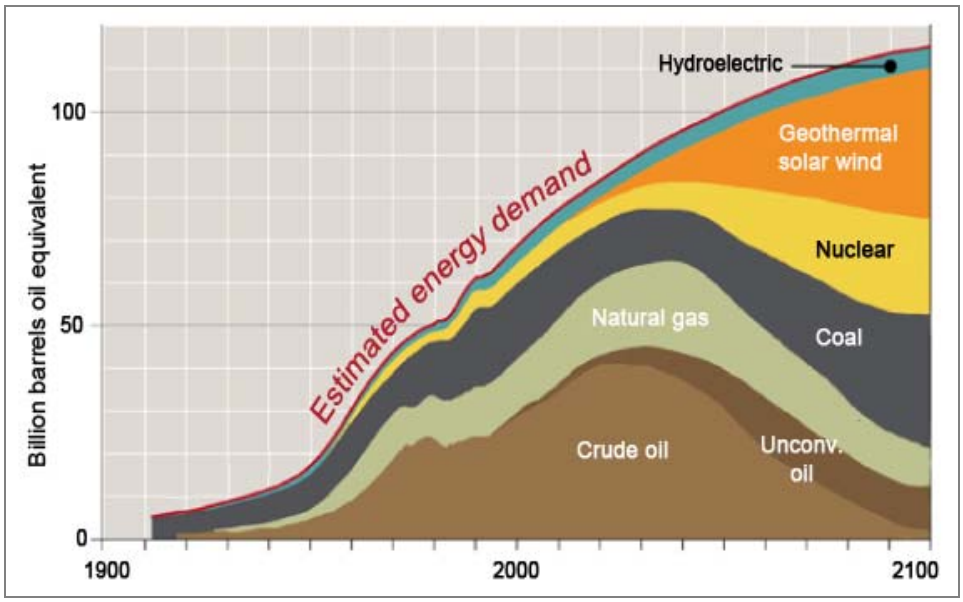
You are cordially invited to attend (non VSP/ASP guests welcome)

VSP/ASP Committee



The Reach of World Oil and Gas Resources – the impact of technology

Peter Burri



The reach of the world's fossil fuel resources has become a hotly debated topic in the media, the public and in political circles. Opinions on when the world will run out of oil and gas and what the world should do about it have become a "religious" question in which factual data are often playing a minor role. Predictions of oil prices and of the end of the oil era have one thing in common: they are nearly always wrong, irrespective of whether they come from the Oil Industry or from "Peak Oil" advocates. It is time that geologists and engineers bring some sober thinking into this emotional discussion.

The reach of fossil energy is a dynamic number. The amount of time during which we can continue to use oil and gas resources depends only partly on the geologically existing volumes. Of almost equal weight are political constraints, price, investment volumes, environmental concerns and most importantly technology. New scientific breakthroughs in geophysics (seismic), drilling technology and methods to improve recovery from existing fields have added tens of years of additional world consumption. Improved seismic imaging of tectonic and lithological/sedimentological features in the subsurface has, within a few decades, doubled the chances of drilling successful exploration wells and the average recovery rates in fields have risen in the same period from 20-30% to close to 40%. Some oil fields are now targeting a 60-70% recovery. In addition, large volumes are being added by unconventional oil and gas resources (tar sands, oil shales, shale gas etc.).

In spite of this success, the world's energy supply will get tighter: traditional oil and gas basins are providing declining rewards and new discoveries of giant fields are rare. Therefore, well before the middle of this century we will see a decline, first in oil, and some 10-20 years later in gas production. We are not running out of oil and gas but have reached the end of cheap oil and gas. Very large efforts and huge investments (100's of billions USD/year) are needed both in HC exploration and production **and** in the development of renewable energy and conservation. Oil and gas will provide the necessary bridge. Earth scientists and engineers are best placed to help the world find a smooth transition.

CV Peter Burri

- 1968: Graduated in Geology at Basel University with a thesis in carbonate sedimentology.
- 1969: Joined Shell International as international staff, working in research, technical and management functions in 10 countries, predominantly in the Far East. Last Jobs: Chief Representative Beijing and Managing Director for Shell Exploration and Production in China, Exploration Adviser in Shell Head Offices in Den Haag, responsible for the Far East, the Pacific and Latin America.
- 1998: Senior Vice President BASF-Wintershall, Germany, responsible for Oil and Gas Exploration and New Business in the energy division of BASF.
- 2005: Return to Switzerland, Basel. Consulting for European Gas companies. Work on the reach of fossil fuel resources. Advisor to Geopower AG Basel (Geothermal Projects Switzerland). President of the Swiss Association of Petroleum Geologists and Engineers (VSP/ASP). Member of the House of Delegates AAPG.
- Married, 3 adult children. Main interests (apart from geology): travel, long-distance hiking, (mini) agriculture, art and history.