Geo Solar Engineering Studies Of Global Warming

Some technical subjects of this work are: (1) reservoir test analyses (including interwell transient pressure testing and tracer testing), (2) exploratory reservoir engineering and petrophysics, and (3) research and development of oil recovery processes (including caustic flooding, miscible/CO2 flooding, surfactant flooding, hot water flooding, steam drive, and thermal conduction by electric heating).

About the Speaker: George Stegemeier is a petroleum reservoir engineer with over 50 years of experience in thermal engineering. He holds degrees in petroleum engineering from the University of Missouri-Rolla (B.S., 1952) and from the University of Texas (M.S., 1953), and (Ph.D., 1959). At the Shell Bellaire Research Center, he worked as a research engineer on a variety of improved oil recovery processes, and later became a manager and consultant for fundamental research. Dr. Stegemeier participated in, or directed, over thirty field projects and pilots. The most successful of these were the thermal processes. He is the author of over 25 professional society publications, 50+ unpublished Shell reports, and 90 patents and 88 patents pending. Dr. Stegemeier is co-inventor of the TerraTherm Process, an in-situ thermal method for environmental remediation of soils and subsurface formations. In 1993, he formed GLS Engineering, Inc. and thereafter has provided consultation and invention for the TerraTherm technology. The process is currently being used at toxic waste sites in the US and abroad. GLS has also been engaged in the development of thermal conduction heating processes for in-situ recovery of hydrocarbons from oil shale and tar sands. In recent years GLS has applied thermal engineering practice to the subject of global warming. Dr. Stegemeier’s current book, “Principles of Geo Solar Engineering”, is a study of the energy balance of the earth’s atmosphere with the intent of quantifying the role of carbon dioxide in the Earth’s global temperature. For his contributions to the oil and gas industry and to the environmental industry, Dr. Stegemeier was elected to the National Academy of Engineering in 2001, and to the Texas Academy of Medicine, Engineering, and Science in 2004.