Bob Maurer, who is a member of our Society and a chartered Engineer, has consistently maintained that from a Mechanical Engineer's point of view the unrelenting tectonic movements and orogenic activities of the earth cannot be adequately and solely explained by subduction via the omni-directional heated currents within the Earth's mantle. More and more complicated ideas have been proposed to try to explain what is happening. In his talk Bob will describe an alternative system that will provide the aeons long constant force necessary to sustain Tectonic activities.