

Remembering Professor Roman Teisseyre

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In the late 1980-ties, while staying on a postdoc at Milan Polytechnique with Prof. Alberto Castellani and doing research on seismic rotations, I was not aware that this subject already had a long geophysical track of investigations in Poland. After a few publications that appeared during the early 1990s, I changed my subject of research but soon was informed that Prof. Teisseyre read some of my papers and subsequently invited me to participate in a monographic collection of papers prepared for Springer (Teisseyre et al. 2006). On the other hand, I knew the name of Roman Teisseyre for many years since, as a youngster, I used to buy books from the popular Polish series “Omega”. Among these books, the one titled “Interior of the Earth Shapes its Surface” (Czechowski and Teisseyre 1981) was on my shelf.

Soon after the above-mentioned Springer monograph appeared, a research seminar started in 2007, with the aim of energizing wider investigations of seismic rotations, which had not been popular among geophysicists or engineers. The Seminar was organized by Willy Lee from the US Geological Survey, who selected the participants based on their activity in rotational seismology and invited them to Menlo Park, California (Figs. 1 and 2).

This was the moment when I met Professor Roman Teisseyre personally. From the very beginning, at the SFO airport in San Francisco, he made a very nice impression on me by giving a handshake and saying: “My name is Romek”. I did not expect such a straightforward approach from such a scientific VIP to a stranger. Interestingly, the thought-provoking evening discussions with Professor presented me his outstanding personality of a world-class geophysicist and a warm, nice person in direct contact. Later, the 2007 workshop in Menlo Park appeared to be the first seminar of a newly born “rotational” working group IWGoRS (<https://www.rotational-seismology.org/>), which became very active from that moment.

Part of the reason for initiating this research area and gathering selected researchers from all over the world derived from an apparent crisis of the US gravitational wave detection program known as the LIGO project. After 10 years of unsuccessful search for the gravitational waves, it appeared that too low an accuracy of the first recordings of the large LIGO installations in Hanford and Livingston derived from the underestimation of the rotational effects. During the last day of the Seminar, we had a “brain storm” discussion with the LIGO project physicists and engineers led by Brian Lantz and Riccardo DeSalvo. Two years after the Menlo Park seminar, a special issue of *BSSA* appeared (Lee et al. 2009) with two papers devoted to the



Fig. 1. Willy Lee opens the first Seminar on rotational seismology and engineering in Menlo Park, California, in 2007.



Fig. 2. Prof. Roman Teisseyre (on the right) with Dr. Marek Górski in Menlo Park, California, in 2007.



Fig. 3. Prof. Roman Teisseyre with his wife Bogna and Prof. Avigdor Rutenberg during the 6th EWICS Conference held in Haifa, Israel, in 2011.

problems of the LIGO project and its “rotational ground motion” correction. Ten years later, the “Advanced LIGO” project led to a breakthrough in the gravitational wave detection and to a Nobel prize.

Later on, I met Prof. Roman Teisseyre again, this time in Haifa, Israel, during the 6th EWICS Conference I co-organized, devoted to the seismic engineering of irregular structures (Fig. 3). The EWICS conferences also deal, indirectly, with the rotational seismic effects, and are organized since 1996 in various countries, including Israel (Lavan and De Stefano 2013).

The Professor’s indefatigable life energy prompted him to come to Israel despite his serious health problems and to actively participate both in the conference lectures as well as in other activities that accompanied the conference. On October 17–18, 2014, the 7th EWICS Conference was held in Opole, Poland. Professor Roman Teisseyre contributed a chapter (Teisseyre 2016) to the post-conference Springer monograph, though, due to his age and health issues, he could not take part in that event.

Looking from the field of seismic engineering, one should appreciate the research incisiveness of Professor Roman Teisseyre, who, as early as in the 1970s, considered the issues worth investigation, which only 4 decades later started to be appreciated by geophysicists and seismic engineers.

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