IN MEMORIAM CINNA LOMNITZ (1925-2016)

Peter Malischewsky Member of the Editorial Board of *Geofísica Internacional* Institut für Geowissenschaften Friedrich-Schiller-Universität Jena, Germany

Cinna Lomnitz was born in Cologne, Germany on May 4, 1925, and died on July 7, 2016, in Mexico City. The very eventful and interesting life of this great German-Chilean-Mexican seismologist and expert on soil dynamics has been commemorated at several places and different languages. It was important for me to write an obituary in his native language, where the most important stations of his long life are mentioned and recognized. It appears in November in "Mitteilungen der Deutschen Geophysikalischen Gesellschaft".

Here, however, as his close friend and member of the Editorial Board of *Geofísica Internacional*, it is a matter close to my heart to write about my experiences with him concerning science and private life during around 17 years.

It was in 1999 when Dr. Ismael Herrera invited me to work as a visiting professor in his institute, IIMAS, UNAM, for one year. This stay in Mexico was crucial for my further life and laid the cornerstone for the fact that I consider Mexico now as my second homeland. One day, Ismael Herrera gave me the important advice to meet Cinna Lomnitz, whose name was not unknown for me, because my esteemed colleague Dr. Ullmann had met him long time before during a conference. I will never forget this first encounter with Cinna Lomnitz at Instituto de Geofísica in his nice office with a view on coniferous trees, which he kindly allowed me to use during my following stays at UNAM. From the very beginning we had sympathy for each other. I admired his consolidated knowledge in seismology and all neighbouring areas. On his part he felt that my decades of experience in the theory of seismic wave propagation could be interesting for his efforts in understanding the effects of earthquakes under the very special conditions within the valley of Mexico City. In this way, a long-lasting fruitful cooperation was started which found its end only with Cinna Lomnitz' death. This collaboration concerned, among other things. prograde Rayleigh-wave motion in the valley of Mexico City and coupling of body and surface waves. These topics are important to understand wave motion in Mexico City. Two joint articles about the prograde Rayleigh-wave motion were published with the participation of Rudolfo Saragoni from the Universidad de Chile, contacted by Cinna Lomnitz. I myself established the contact of Lomnitz with the well-known American wave theoretician John Harris, who gave lectures at IIMAS in 2004. A project concerning mode transformation in the margin zone of Mexico City's basin started, but was not finished because of the premature death of Harris. Cinna Lomnitz also organized an international Humboldt-Workshop in Juriquilla in 2004 with the aim of installing a network of temporary German seismographs. Unfortunately, this project could not be realized due to organizational difficulties.

I am very thankful to Cinna, that invited me to become a member of the Editorial Board of *Geofisica Internacional*, a journal which I estimate and feel connected with. I always admired the care and competence with which he edited the articles up to his end. Only recently we wrote a joint article about a strange behaviour of Rayleigh-wave dispersion curves in the valley of Mexico City, which will appear soon.

Through the years a close friendship developed not only between us but also between our families. A typical characteristic was the fact that sometimes e-mails between Mexico and Jena went back and forth several times daily. Cinna Lomnitz was a man of great culture and exceptionally broad general education. When I am thinking on Cinna, I remember the enormous spectrum of our correspondence: from seismology to modern aspects of New Physics, from critical point phenomena to theory of probability, from Mexican domestic and University policy and Mexican literature, up to the special German author Ernst Jünger, for whom he worshiped and wakened my interest, or to special aspects of Bach's music in the Christmas oratorio. Even the remarkable history of the lonesome island Clipperton was not omitted and we dreamed to install there a seismic station...

I am glad that I could inspire him for fractal mathematics and physics, so that my unconventional article about the Gingko leaf could appear in *Geofísica Internacional*.

I deeply regret I could not pursue my original plan of encouraging UNAM's Rector to award Cinna Lomnitz and Ismael Herrera an Honorary Doctorates.

Cinna Lomnitz was almost exactly 20 years elder than I and he stand always by me in difficult personal situations with advice and parental support. Those who were lucky enough to know him will never forget his essentially warm character which will be surely missed in the future. I remember him with gratitude and respect. Rest in peace.

Jena, Germany