

*The following letter was sent by department alumnus **Kô Higashitani** (MS, 1970, PhD, 1973) to Emeritus Professor Bob Bird on March 19, 2011. Bob translated the letter from the Japanese. Kô is Distinguished Professor of Engineering at Kyôto University.*

I had been invited to give a lecture at a half-day seminar in the afternoon of the 11th of March at the Institute of Multidisciplinary Research for Advanced Materials on the Katahira Campus of Tôhoku University. Immediately after my and the subsequent speaker's lectures, there was a horrible shaking and swaying. Since the building was new, I thought it unlikely that the building would collapse. The motion was unusually strong and lengthy, and the electricity went out, so without thinking I crawled under the desk, thinking that that was the customary thing to do.

The aftershocks continued, but when the worst of the strong vibrations had stopped, we went outside. Tôhoku University is perhaps accustomed to such events, as they quickly distributed helmets. This amazed me. We were told we should not leave without permission. I had the impression that the system for handling emergencies was well constructed. When I looked around, I could see that there were some cracks in the buildings, but that they were virtually all right. Tôhoku University's buildings seemed to have the proper earthquake countermeasures. On an assembly ground, I met some professors from the chemical engineering department, who said that their research space inside was a shambles.

Fortunately Sendai R.R. station is near the Katahira Campus, and before it was dark, I set off for the hotel by the station where I had reserved a room. I strolled peacefully and approached the hotel. Because it was cold outside, people with or without reservations had gone inside, and people had overflowed into the lobby and onto the staircase like refugees. It was getting dark, and the hotel manager said that their electrical generating system could last for 20 hours. That day, the displaced persons' conditions were such that they had resigned themselves to sleeping while sitting upright in the chairs in the lobby. Meanwhile the staff of the hotel were distributing rice-balls, one per person. We were able to taste the flavor of compassion, which left us with a warm feeling inside.

Meanwhile, after the safety check of the hotel rooms was completed, only those who had reservations could spend the night in the hotel rooms. Around midnight I was able to get into my room. We were asked not to shut the door

completely so as to avoid troubles with the electronic key, but I appreciated the fact that I could happily sleep lying down on the bed. I really want to thank the hotel employees for their kindness and efforts.

The next day, I got up early and went out, taking a glance at many people who slept all night in the lobby. To all outward appearances, the neighborhood of the shopping district of Sendai seemed to be normal, but the life-line and transit system, including taxis, were not functioning at all. When I went to a convenience store, there was a long line of people. After waiting for about an hour, I finally got in, but there was practically nothing there. I was however able to buy one box of souvenir buns, filled with bean-paste. This was surprisingly enough to tide me over until the very end.

The telephone was not working at all, but there was no problem with the Internet. I did a thorough collection of news from my family in Kyôto and Tôkyô and the net. I realized then that all the victims of the disaster were saying on the television "we want to have information." My family said that the Shinkansen (bullet train) service would perhaps be restored soon and that I should wait. But since I had seen photographs of the collapsed Shinkansen electric transmission poles, I thought that was not the best idea, and that I should try to look for an escape via any of the airports in the Tôhoku area. Fukushima airport was booked up 6 days in advance, Yamagata airport 4 days in advance. At Niigata airport, much farther away, a reservation was possible for the last flight on the 14th.

So the problem was how to get to Niigata. I found out by the net that a special bus service Sendai-Yamagata would start on the 13th. When I left the hotel to get on the bus, there was an unbelievably long waiting line. Hence I was thinking that I may not be able to ride on the bus on that day. Nearby there was a middle-aged woman from Yamagata who called for a taxi using the sheer force of her personality. She bundled two young people and myself into the taxi, and together we were off. Since she called me "company president", I had resolved to pay the full cost of the taxi ride, but they were good enough to pay most of their share. During the taxi ride, the driver said that, because it was cold and pitch dark, the first day he slept inside the car, and the second day he curled up with his wife to keep warm. Since the road was an alternate route, it was slow going, and that evening, I stayed overnight in Yamagata, where it is less damaged by the earthquake. The next day, fortunately they added extra buses to Niigata, so that in four hours I reached that city. There life was going on as usual. Since there were some

cancellations, I was able to arrive at Osaka and then Kyoto at an earlier time than I expected. On this occasion, I had so much good luck for some reason, so that I was able to return home as quickly as I did. The professor who had organized the symposium sent me a message saying that, because they were staying at the laboratory, I should come and join them, but by that time I had already returned home.

These were my experiences. I learned how important it is to make use of the net and to get a global picture of what's going on.

Nevertheless, the state of the nuclear reactors is worrisome. On the TV, they are saying that if they can recover the electricity and the cooling system, then perhaps the situation can be resolved. But I wonder if the government has made simulations of what might happen in the worst case. TEPCO is, after all, a user, and there is a question as to whether or not they sufficiently understand it. In the Japanese universities, nuclear power engineering, being unpopular, is disappearing; it is being replaced by something called quantum engineering. Hence the specialists and technicians of nuclear power plants are disappearing.

We only hope that the government is studying all possible simulations and countermeasures. Tears are being shed for the courage and sense of mission of the people who are currently persevering at the affected areas at the risk of their lives. As for the company president and those officials under him, their necks are in the noose.