

Tsukuba: Science City

The City of the Future?

The chances are that you have not heard of Tsukuba (Science City). We don't blame you, many Japanese haven't even heard of it! In fact, when we first moved to Tsukuba from Palo Alto, California, we were certain that the travel books we had read were written by people who had never set foot in Japan. After all, weren't the roads nice and wide? and straight? and tree lined? Where was the amazing public transport system that had been so eloquently described? The beautiful, old temples and castles? The ladies in bright kimonos? Could it be that we were back in the United States?

Well, not quite. Founded in the 1970's, Tsukuba is amongst the newest cities in Japan, a nation in which most towns and cities have histories spanning centuries. It's also Japan's Technological capital.

Until the 70's, most of the Japanese national labs (run by either the infamous Ministry for International Trade and Industry, MITI, or by the Science and Technology Agency of Japan) were located in the Tokyo metropolitan area. With the growth of the Japanese economy, and the realization that it was time to start generating the ideas in addition to the products engineered elsewhere in the world, the national government decided that it was time to expand these labs. It was also decided that the labs should be located close to each other so as to foster inter-disciplinary work. To relocate a dozen labs to a spacious campus, which are home to a few thousand researchers, was quite a challenge. As almost everyone knows, the cost of real estate in Tokyo is astronomical. So, rather than spend a fortune trying to find room in Tokyo, someone decided that it was time to build a new city. The rest is history.

Tsukuba was placed bang in the middle of a little pine forest and some paddy fields, about 60 kilometers north of Tokyo. (The pine forest was the only contiguous piece of land available within a reasonable distance of Tokyo.) While the labs started moving out from the late 70's, Tsukuba was formally inaugurated in 1985 when the World Expo was held here. In one of the inaugural shows, a wonderful anthropomorphic robot from the Waseda University grabbed the attention of the visitors. This humanoid played the piano along with an entire orchestra in a concert! Having labored to build similar machines, I was extremely impressed -- even after I visited Waseda and heard that an army (50-100) of graduate students had hand coded every motion that the poor robot made. The infrastructure that was set up for the Expo became the basis for the Science City.

Today, Tsukuba is home to about 170 000 people associated with about 50 government labs, about 50 corporate R & D labs and a couple of national universities. (Depending on who is counting, and what the criteria are, I have seen numbers of up to 190 labs!) By bringing in the multi-nationals along side the Japanese corporate and national labs, it was hoped that Tsukuba could become another Cambridge or Palo Alto. The unstated

hope was that the Nobel prizes would start flowing in once people settled into this intellectual atmosphere. Reality, sadly, is quite different from this wonderful dream. What has resulted is an interesting mix of good and bad. At the positive end is the variety of excellent labs of international stature located in town while at the negative end is the fact that folks here do not really believe in collaborations. For the Japanophiles reading this article, we suggest that you take a look at an interesting volume of the magazine, "Science" [see end of article] for details on the Tsukuba area, on the national and corporate labs in the city, and on MITI's role.

A city which was founded as far back as 20 years ago does not really provide one with much to talk about. So we shall only briefly touch upon the life here. Unlike most cities in Japan which are unplanned, Tsukuba is a planned city. A consequence of this is that there is a campus-like feeling. Architecture is fairly standard (brick and glass construction in the MITI campus). Buildings are separated by paddy fields and open spaces. The city itself is large, spanning five smaller cities that were combined to form the new city. However, the core of the city is small -- it takes less than a half hour to ride through the main part of town! As the public transport system is almost nonexistent, bikes are a common mode of transport. Of particular interest is that fact that the poor public transport system has spawned off a Silicon Valley-like atmosphere where almost everyone drives around. The wide roads have spawned off their own sub-cultures amongst the more lively kids. One bunch, called the "bozozukas," attempt to vent their feelings by removing the silencers on their Harley-Davidsons and Hondas and thereafter proceeding to blast the neighborhoods with the deep roar of their powerful engines. Another group meets every Friday and Saturday night for a most interesting "you-stay-in-your-car-while-I-stay-in-mine" dating (mating?) drama. They cruise down the road in two's, talking across open windows. Things are so different in Tsukuba that we have had Japanese friends come up from the more traditional Kyoto and Osaka areas, only to shake their heads and wonder if they were in Japan or in the US!

We find this bizarre mix of new and old to be most fascinating. So, if you are looking for a place to relax in and to mix with the people who are striving to have something to do with the future of mankind, while not having to mess around with the bustle of Tokyo...Tsukuba is for you! If you do decide to head to these parts, remember to give us a call! We might even show you around...

- Surekha and Prasad Akella, Tsukuba, Japan
prasad@mel.go.jp

Sources

"Science in Japan," Science, Volume 258, 23 October 1992.