

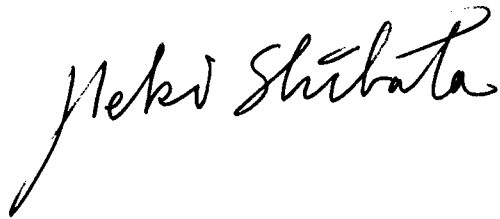
Foreword

We have some records on the damages of industrial facilities since Kwanto earthquake-1923. The systematic survey was made at Niigata earthquake-1964 by the mission of our Institute under the advice from Professor Emeritus-Dr. Okamoto, who was the director of our Institute and also one of the founders of this ERS group. At that time, the industries, who had troubles in their plants, were willing to open their plant positively for our survey, and we could obtained very fruitful results. After Niigata earthquake, several destructive earthquakes gave some damages to such plants in Japan. Based on these results, the guidelines or the regulatory codes were established in order for petro-chemical industries and nuclear power plants, for example, the order of Ministry of International Trade and Industry #515 in 1981, Safety Guide, Site-1 and 2 in IAEA and so on.

On the other hand, the Government and local governments tried to evaluate total losses by a future destructive earthquake. Through such surveys, the concept of "critical facility" was brought to this field. The industries were gradually considering that the consequences brought from seismically induced damages of their plant are their responsibility to the public. Although this is a nice tendency, it brings the other new problem to us. The industries don't want for their damages to open to the public because of their responsibility. Some typical problems were observed in the occasions of Off-Boso-peninsula (Chiba-ken Toho-oki) earthquake-1988 and Loma Prieta earthquake-1989.

They asked to the surveyors to help them, but didn't want them to make a simple survey for their research. It is true that such surveyors disturbed the activity of the engineers in their plants. But, at least, the details of their damages must be open to the researchers as soon as possible. " Гласность " (Glasnos'che) was performed in Armenian earthquake-1989 in U.S.S.R.. It is very significant to know what happened, how

happened and what was cause to reduce the future damage. We are hoping better co-operation in this field. The SMiRT, Conference on Structural Mechanics in Reactor Technology will be held in Tokyo in the summer of 1991. Through such chances, we would like to talk how we will cooperate to save the records on seismic damages of industrial facilities through the world.

A handwritten signature in black ink, reading "Heki Shibata". The signature is written in a cursive, flowing style with a long, sweeping underline that extends to the left.

SHIBATA, Heki
Professor
Institute of Industrial Science,
University of Tokyo