

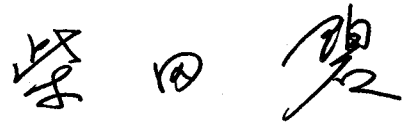
FOREWORD

The problem of aseismic design of nuclear power plants emerged one of the most important at the instant when the project of the Tokai power plant of Japan Atomic Power Company was started. Thirteen years have been passing since. Aseismic design of power plants and chemical engineering plants has been developing with the development of electronic computing devices.

The nuclear power plants in Japan are designed under the elaborate consideration of their dynamic responses, however, most of all plants except nuclear power plants are designed in the very conventional way like the way for ordinary buildings. In 1968 we saw damages of structures in chemical engineering plants to Tokachioki Earthquake, and in 1964 the big fire of oil storages caused by the resonance of their floating roofs to Niigata Earthquake. Both were caused by dynamic effect of earthquake motions, though these two earthquakes were not the first-class ones.

One of very strict problems to such plants is recording and analyzing long period waves, and also torsional motions of ground and their supporting structures.

Our ERS group is going to start a new project including such problems in next fiscal year. The project is a part of the project of the Institute of Industrial Science, "Defense System of Urban Function from Environmental Disturbances".



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