

Global sharing of the findings from the past great earthquake disasters in Japan

Science Council of Japan and 30 Academic Societies' Liaison

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Acknowledgement

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Academic Society Liaison Association Corresponding to the Great East Japan Earthquake

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... Executive Committee of 30 Academic Societies

listed on the last page of the Joint Statement

Academic Society Liaison Association Corresponding to the Great East Japan Earthquake



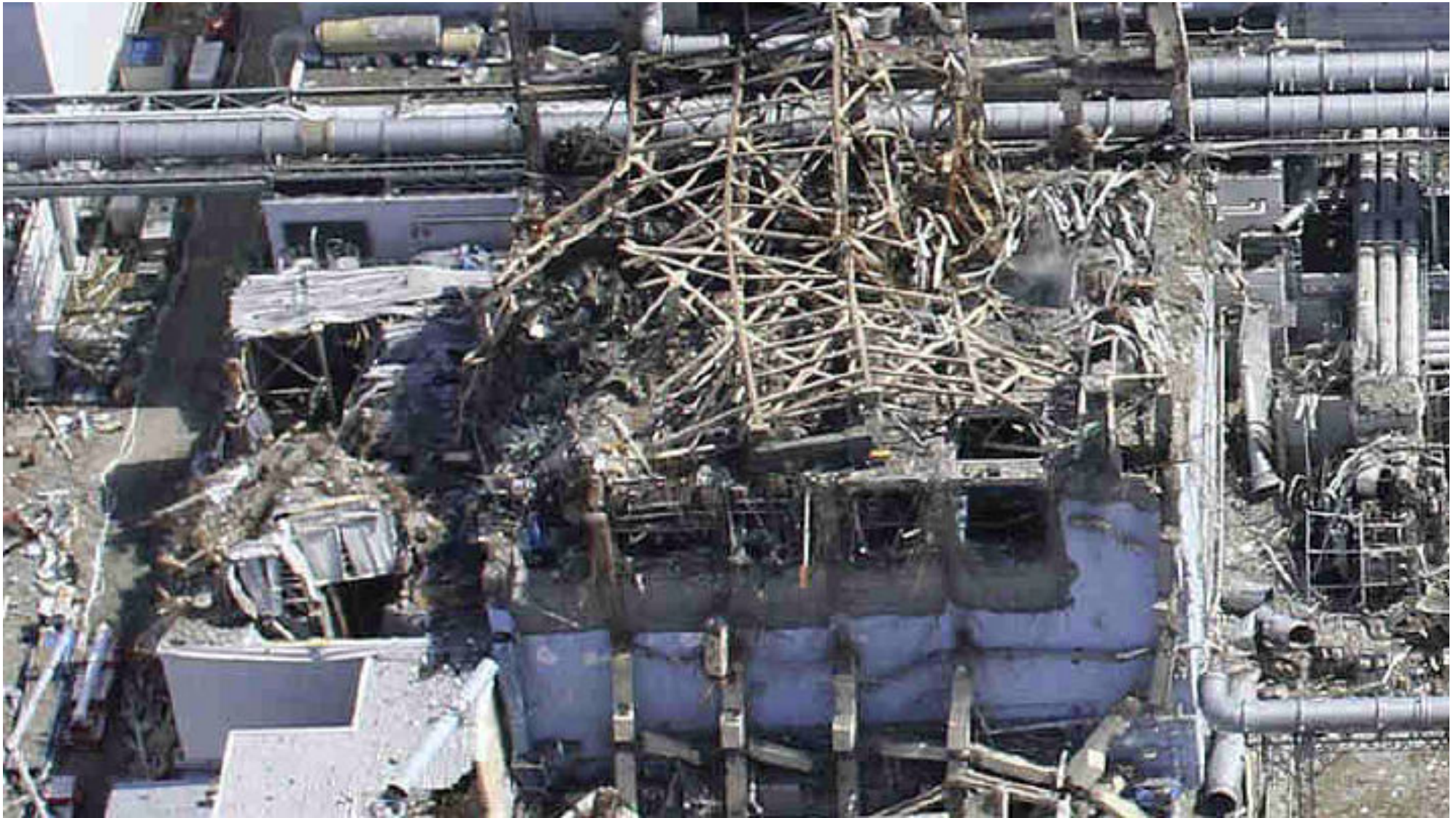
After the 2011 Great East Japan Earthquake, members of the [Science Council of Japan](#) became founders and academic societies relevant to disaster management gathered to deepen mutual understanding and make efforts to integrate different specialties.

Kamaishi deepest breakwater

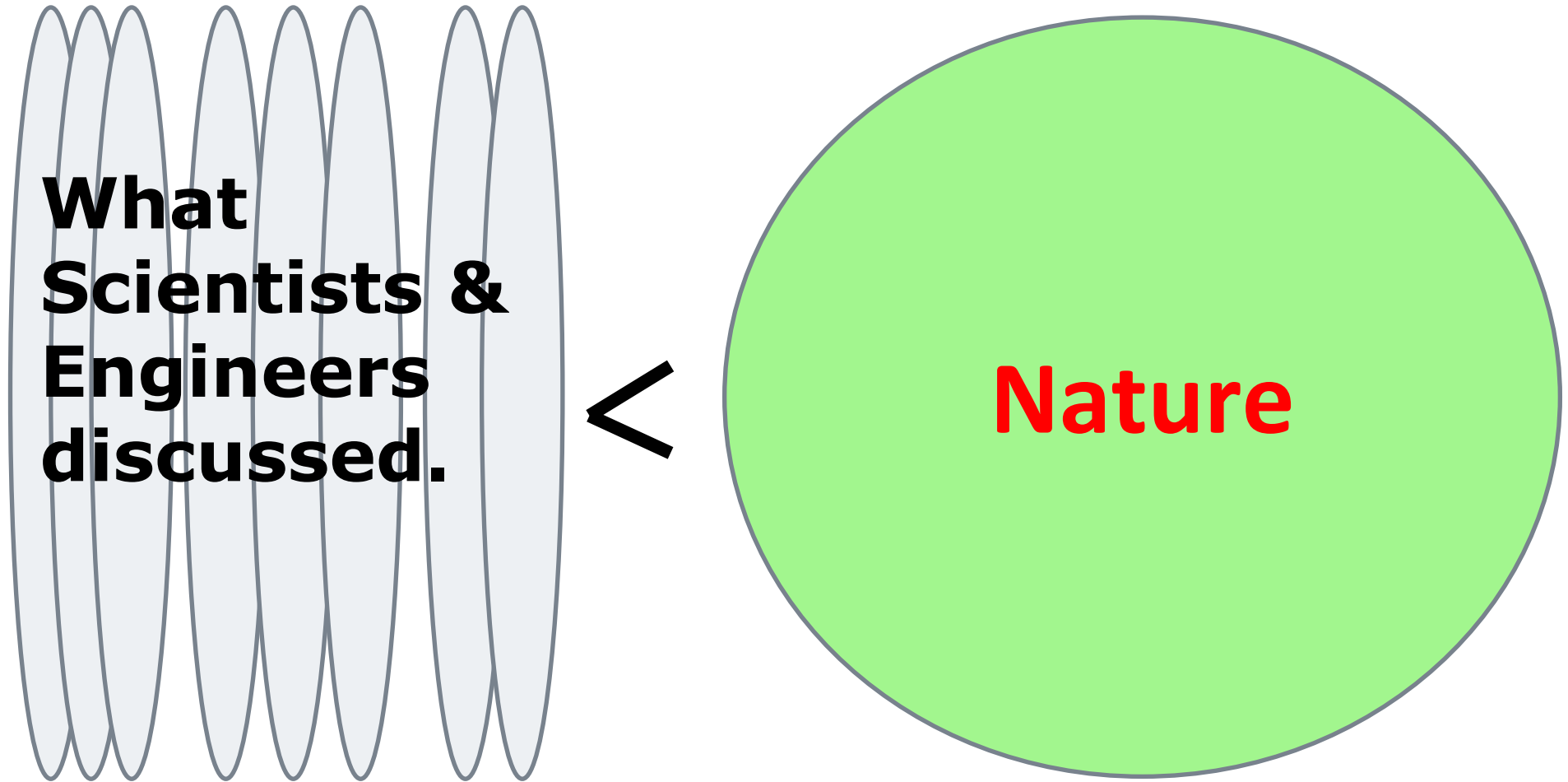
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The accident of the Fukushima Dai-ichi Nuclear Power Station



Why natural disaster can't be stopped ?



30 Japanese academic societies

Architectural Institute of Japan

Association for Children's Environment

Atomic Energy Society of Japan

Geographic Information Systems Association of Japan

Institute of Social Safety Science

Japan Association for Earthquake Engineering

Japan Association for Fire Science and Engineering

Japan Association for Planning and Public Management

Japan Concrete Institute

Japan Society for Disaster Information Studies

Japan Society for Natural Disaster Science

Japan Society of Civil Engineers

Japan Society of Engineering Geology

Japan Society of Erosion Control Engineering

Japan Society on Water Environment

30 Japanese academic societies

Japanese Association for **Disaster Medicine**
Japanese Institute of **Landscape Architecture**
The **City Planning** Institute of Japan
The Japan **Landslide** Society
The Japan Society of **Mechanical Engineers**
The Japanese **Geotechnical** Society
The Japanese Society for **Active Fault** Studies
The Japanese Society of **Irrigation, Drainage** and **Rural Engineering**
The **Seismological Society** of Japan
The Society of **Environmental Instrumentation** Control and Automation
The Society of **Heating, Air-Conditioning** and **Sanitary** Engineers of Japan
The Society of **Instrument and Control** Engineers
The Japan Association for **Regional Economic** Studies
Japan Society of **Material Cycles and Waste Management**

Joint Statement of 30 Academic Societies on May 10, 2012



Minister of Land, Infrastructure and Transport, and Representatives of the association and academic societies .

“Proposal for Revision of Japanese Disaster Prevention and Reduction Policies”

三十学会・共同声明

国土・防災・減災政策の見直しに向けて
- 巨大災害から生命と国土を守るために -

平成24年(2012年)5月10日

東日本大震災の総合対応に関する学協会連絡会

環境システム計測制御学会	空調調和・衛生工学会
こども環境学会	砂防学会
地域安全学会	地理情報システム学会
地盤工学会	土木学会
日本応用地質学会	日本火災学会
日本活断層学会	日本機械学会
日本計画行政学会	日本建築学会
日本原子力学会	日本コンクリート工学会
日本災害情報学会	日本自然災害学会
日本集団災害医学会	日本森林学会
日本地震学会	日本地震工学会
日本地すべり学会	日本造園学会
日本地域経済学会	日本都市計画学会
日本水環境学会	農業農村工学会
廃棄物資源循環学会	

The Serial Symposiums

- 1: **Prediction of earthquake and tsunami hazards** for disaster reduction
2011.11
- 2: For the **next national land policy** on the premise of great disasters
2012.1
- 3: How to realize **disaster mitigation society**
2012.2
- 4: **Preparedness for the next mega-quake**
2012.5
- 5: Direction of **regional and urban planning** after the big earthquake
2012.6

The Serial Symposiums

- 6: How to re-create the **energy policy** from the accident of the nuclear power station 2012.7
- 7: A New approach for **making resilient homeland** after the 2011 Great East Japan earthquake 2012.8
- 8: All-inclusive forum and **prospective society collaboration** 2012.11
- 9: How should academic societies face to **the Nankai Trough earthquake?** 2013.08
- 10: **Global sharing of the findings** from the past great earthquake disasters in Japan 2014.11

The Science Council of Japan Forum on November 29, 2014

As 10th of the Serial Symposiums, in advance of the United Nations World Conference on Disaster Risk Reduction (March, 2015 Sendai), Tokyo Conference before the United Nations World Conference (January, 2015 Tokyo), Science Council of Japan and Academic Society Liaison Association had this forum.



Joint Statement of 30 Disaster-Related Academic Societies of Japan

Global sharing of the findings from the Past Great Earthquake Disasters in Japan

- Toward the 2015 United Nations World Conference on Disaster Risk Reduction -
- Toward the World Engineering Conference and Convention 2015 -

November 29, 2014

**Academic Society Liaison Association
Corresponding to the Great East Japan Earthquake**

Preface

The 2011 Great East Japan Earthquake was huge and exceeded our expectations. Its induced damage was so serious that we are still recovering from it and still face many issues. Response activities undertaken against the accident of the Fukushima Dai-ichi Nuclear Power Station are very difficult and insufficient to alleviate its impact to both inland and marine environments.

For many years, Japanese scientists and engineers have been trying to establish scientific knowledge and to develop technologies for disaster reduction, but they were divided into each specialty. Specialization has caused significant knowledge gaps and communication difficulties among specialties. Issues between specialties have not been tackled. There is a serious reflection that we blindly believed our scientific knowledge and technologies and we didn't have enough sense of the awe and humble feeling to nature.

Preface

After the 2011 Great East Japan Earthquake, we, 30 Japanese academic societies related to disaster management, started to deepen mutual understanding and made efforts to integrate different specialties. We also studied lessons for better recovery and preparedness from the 1995 Kobe Earthquake disaster and others.

Experience and knowledge learnt from natural disasters should be widely applied to reduce all disasters worldwide. Prior to the United Nations World Conference on Disaster Risk Reduction (March, 2015 Sendai, Japan) and the World Engineering Conference and Convention 2015 (November, 2015 Kyoto, Japan), representatives from these 30 academic societies relevant to disaster management, have started to discuss ways of exchanging very rare and important experience and knowledge on such disasters.

For global sharing, the representatives of 30 societies declare to promote the following actions:

1. Serious soul-searching on blind belief in our science and technologies

We, Japanese scientists and engineers, have been trying to establish scientific knowledge and to develop technologies for disaster reduction and we could reduce damage by natural hazards to lower levels than before.

But based on the experiences after the 2011 Great East Japan Earthquake, we seriously recognized that there was blind belief in our scientific knowledge and technologies and that they were not enough.

We should always question our knowledge and never forget the sense of awe and humble feeling to nature for implementation of a disaster safe society.

2. Sharing of our experiences with international community

We will contribute to disaster reduction around the world by sharing the lessons learnt from the past earthquake disasters, such as the 2011 Great East Japan Earthquake and the 1995 Kobe Earthquake disasters.

We will emphasize the importance of pre-event countermeasures including damage mitigation, preparedness, disaster prediction and early warning, and warning for the possibility of unexpected huge hazards with extremely low probability.

3. Collaboration of academic societies

We will collaborate across academies to promote multidisciplinary research for disaster reduction and sustainable development.

The researchers in both natural and social science fields, such as physical science, engineering, medicine, sociology, and economics etc. will work together to create practical measures that have been examined from various perspectives.

4. Application to local communities

We will integrate different specialties and establish comprehensive and effective risk reduction countermeasures for local communities around the world as well as in Japan, considering each local environment and condition.

5. Enhancing earth observation and strengthening international human network

We will enhance the global earth observation and monitoring system, and carry out broad and integrated studies across the earth sciences, focusing on evolution and dynamics of the earth.

We will pursue the cause of natural disasters and strengthen the international network of researchers and practitioners for disaster reduction.

6. Resiliency for huge hazards that exceed conventional expectations

We will consider the preparedness against huge hazards, which lie beyond conventional expectations.

Even if it seems to be technically impossible, we will do our best to find a way to reduce the impact due to the hazard considering environmental issues and needs for uninterrupted business and social activities during and after severe disasters.

7. Human resource development

We will promote the capacity building of scientists and engineers worldwide by sharing knowledge and experiences learnt from the past earthquake disasters around the world.

We will develop Japanese experts in comprehensive disaster management who can work nationally and internationally.

We will also train local experts who can contribute to local disaster risk control and management.

8. Public awareness

We will improve public awareness, which is one of the most important measures for disaster reduction.

Pre-disaster countermeasures are effective in both human security and economic growth.

We will present the knowledge based on the experiences from the past earthquake disasters in an easy-to-understand format to the public.

We will promote understanding of the self-help effort, mutual assistance and public support, and will appeal their importance for disaster reduction to the public.

We will collaborate across academies to promote multidisciplinary research for disaster reduction in the world.



Science Council of Japan and Representatives of 30 Academic Societies

November 29, 2014