

### **IISEE Newsletter**



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### Reports on Study Trip -Global Seismological Observation Course-

By Mr. Ahmed Hussein ISSE from Somalia



Our study tour started with our visit to the National Data Center at Japan Weather Association in Tokyo and had a fruitful meeting and lecture with Mr. Toyomi Sakamoto very experienced and talented seismologist he shared with us his experience and knowledge about the history of nuclear test and CTBT, functions of NDC, IMS stations in Japan and overseas. And finally we visited National Data Center daily working office and observed how they do daily activity and monitoring and how they receive data at the same time share or send

data to others.

After lunch we experienced traveling with Shinkansen (Japanese bullet train) running at speed of up to 320 km/h from Tokyo station to Hiroshima

and stayed at night in convenient hotel near to Hiroshima central station.

In the next day the first place we visited was Miyajima Island embarked on a high standard safety boat from Miyajima guchi station to Miyajima port then we had a seeing of Miyajima, I enjoyed really beautiful places like the shrines both old and new one in the island. Then at the



Peace Education: Lecture by an A-bomb survivor

### IISEE Net and Training

**IISEENET** 

IISEE-UNESCO Lecture Note

IISEE E-learning Synopsis Database Bulletin Database afternoon we comeback to Hiroshima and we had peace education lecture by an A-Bomb survivor, Ogura-san. After that we observed the documentary of Peace Memorial Museum, victims' mementos, photos and materials like melted glass, charred clothing and the Atomic Bomb Dome and many more.

I had a life time experience in there and a lot of history and could feel and conclude that we have to learn a lot from war and advocate peace memorial museums in everywhere on this planet because What happened in Hiroshima was a man-made disaster.

Next morning we headed to Nojima fault around Ezaki Toudai and we observed a real fault and surface displacement, after that we headed to



Nojima fault preservation museum

Nojima fault preservation museum and saw the great Hanshin-Awaji Earthquake memorials which was the latest highly devastating, although in Awaji Island and Kobe area are recovered from that devastation we witnessed the memory of that disaster, then in the afternoon we visited to disaster reduction and human renovation institute where I saw and observed the devastating impacts of earthquakes and Tsunamis through audio and visual, graphics and models, and physical artifacts.

Last day of this study trip was sightseeing of Kyoto city and we visited Nijo-jo Castle, Kinkakuji Temple, and Kyoto Imperial palace, those were breath taking sights and we grasped

about cultural heritages of Japanese people, the Castle and Temple's architectural design was great and how they keep their history well preserved and continue spreading it to the younger generations. This trip is very valuable to me as it would help me understand the conditions of the Japanese government and people face in responding to disaster reduction and renovate in a more proactive way which acknowledges the importance and usefulness of different techniques and scientific researches.

The experience we gained in this trip will somehow enrich our insights on global seismological observation and disaster management and policies in an international context.

Finally I would like thank everybody who contributed and assist our study trip.

#### **Earthquakes**

The 2011 off the Pacific coast of Tohoku
Earthquake

Reports of Recent Earthquakes

Utsu Catalog

Earthquake Catalog



**Enjoy Now** 

#### By Mr. Dookhee Jaikishan From Mauritius

These four days of study trip has been a very mesmerising experience for



me. I have lived a great and probably once in a lifetime learning period. It was an opportunity to understand a couple of pages from the great history book of JAPAN. After having been clearly explained on the responsibilities of the National Data Centre by Sakamoto san from JWA, the group left for Hiroshima through the Shinhansen line. I enjoyed very beautiful scenes on the way and most importantly some enchanting glimpses of the great Mount FUJI.

The next day, the visit to the Miyajima island made me gained some knowledge about the Shinto religion and at the same time discover the beauties of that place. The journey continued with a visit at the Hiroshima Peace Memorial Museum. Now, here, I won't be able to express in words the emotions that I have gone through, a mix of great sadness and anger. Great sadness at the apocalyptic scenes of destruction and suffering of the victims and anger at those people who dropped the A bomb over Hiroshima. Anyway, history cannot be re-written but all the people around the world should join our efforts so that such a thing should never occur again. The highest event during this tour has undoubtedly been the lecture by KEIKO san, the courageous A bomb survivor. I consider myself highly privileged to have this opportunity of attending such a speech. The narration of the event has been done in so detail that my emotion level was very high. I have never imagined of the such sufferings that the people of Hiroshima endured. I now consider the people of Hiroshima as HEROES. Heroes, in the sense that you have showed your courage and ability to the world by reconstructing a beautiful and lively city after such a disastrous event. I bow down and salute all the people who were involved in this reconstruction act.





On the third day we went to visit the Nojima fault preservation museum. It was with a lot of excitement that I crossed over another masterpiece of Japanese know-how, the Akashi Kaikyo bridge. At the museum, a detailed explanation was given about the event by the guide and it was impressive to see how a small part the fault of the 1995 Kobe earthquake was preserved. Now, I have a better visual understanding of a fault. Next, we went to the Disaster Reduction and Human Renovation Institution where video clips of natural disasters (mainly the 1995 Kobe earthquake and the 2011 Tohoku tsunami) were played. I got the impression of living those events through the clips. It was also very heart breaking to hear the testimonies of people who have lost close ones during those disasters. But at the end of the day, everyone showed great affection to their cities by overcoming their great desperation and restarting a new life.

On the last day, it was a brief rendez-vous with the Japanese history and culture. After witnessing snow falls for the first time in my life on the way, I visited the Golden temple in Kyoto city. The guide accompanying the group gave a very good briefing about Buddism in Japan. Then, we visited the Nijo-jo castle and the Imperial palace and again the lady guide narrated us the lives of Shoguns and Emperors and their importance in the Japanese history.

To conclude, this study tour is very important for the course. I have got a much better understanding of the disastrous impacts of nuclear bombs, earthquakes and tsunamis. It has been an emotionally strong and culturally enriching experience for me. I am indebted to JICA, IISEE and the Government of Japan for having given me the opportunity to live such an experience. My deepest thanks to JICA, IISEE, the Government of Japan and last but not least to Shibazaki sensei, Hamano san, Sakuma san and Inadome san. We have been taken very good care. Thanks a lot.



Hiroshima Peace Memorial Park

#### By Mr. Bilal Saif from Pakistan

#### **Call for Papers**

IISEE Bulletin is now accepting submissions of papers for the seismology, earthquake engineering, and tsunami. Developing countries are targeted, but are not limited.

Your original papers will be reviewed by the editorial members and some experts.

NO submission fee is needed.

Try to challenge!!



On February 6-9, 2020, the participants of the Global Seismological Observation Course went to Hiroshima, Miyajima island, Awajii Island, Kobe, and Kyoto for study and sightseeing trip.

It was a great 1<sup>st</sup>-time experience to travel through Ferry service to Miyajima island. This island is very beautiful and takes us to real environment of the Shinto religion. The shrines built in the water were so attractive and unique with beautiful landscapes. It was really impressive to visit the Atomic

Bomb Dome and the Hiroshima Peace Memorial Museum. The real stories of survivors were quite emotional and heart touching that gives us a true picture of August 6th, 1945 event. Hiroshima was almost ruined by the atomic bomb. People were hurt by the bomb very badly both physically and mentally. People were disappointed, and the economy was depressed.

Human beings should learn from the history of Hiroshima and to do something for the world without nuclear weapons, because it is the demand of times. In the museum, Sadako Sasaki's history, a girl affected by Hiroshima Bomb was very emotional for me. Nobody should experience the effects of an atomic bomb again after knowing the story of Sadako and visiting the children's peace memorial.

It was a dream come true for me to pass through Akashi-Kaikyo Bridge (world's largest suspension bridge) for Awaji Island. It was amazing to see a real Nojima fault and experience a simulated earthquake in the Nojima Fault Preservation Museum and also got more knowledge about the "The



Disaster Reduction and Human Renovation Institution

Great Hanshin-Awaji
Earthquake," in which
about 6,500 people lost
their lives.
It was really impressive
to see how Japan
preserved the Nojima
fault and damages of the
earthquake to teach
everybody how
destructive an
earthquake can be.

The Disaster Reduction and Human Renovation Institution (DRI) in Kobe showed us all the damage caused by the

devastating Great Hanshin-Awaji Earthquake (Kobe earthquake) on January 17th, 1995. The Tohoku earthquake that struck Japan on March 11th, 2011, one of the biggest earthquakes recorded in the last 100 years, which generates the great tsunami waves that ruin the coastal areas very badly.

The 3-D movies were very impressive, emotional and heart touching. I am really impressed by the preparation of Japanese people that how they prepare themselves to face future disasters and challenges caused by earthquakes.

I enjoyed really beautiful places like Kinkakuji Temple, Nijo – jo Castle, and Kyoto Imperial Palace in Kyoto City the snowfall in Kyoto makes our trip more memorable.

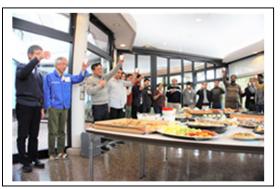
The trip gave us a lot of fun, excursion, sightseeing, knowledge, and information about the damages caused by earthquakes and nuclear explosions. Lastly, I would like to thanks JICA, IISEE, and Government of Japan for arranging this valuable trip for us. Here I also mention the commitment of Mr. Hiko Inadome and Ms. Sakuma. They gave us more care and guided the trip very smoothly and efficiently.



#### International Friendship Party

By Mr. Takahiro Yamada, Head of Administration Division, IISEE

IISEE hold a Friendship party in this period during the regular course,



and global seismological observation course are in operation. (on Feb 17<sup>th</sup>)
Lecturers of Global Seismological Observation course, Seismology and Tsunami Disaster Mitigation course joined us and we spent a great time together.

#### **Contact Us**

The IISEE Newsletter is intended to act as a gobetween for IISEE and ex-participants.

We encourage you to contribute a report and an article to this newsletter. Please let us know your current activities in your countries.

We also welcome your co-workers and friends to register our mailing list.

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# Attendance at the BRI-GRIPS symposium on "Future of post-disaster assessment for buildings"

By Dr. Tatsuya Azuhata, Chief Research Engineer, IISEE

The BRI and the GRIPS held their joint symposium titled "Future of post-disaster assessment for buildings" at the hall of the GRIPS on February 5. Prof. Nakano of the University of Tokyo chaired it, and seven speakers talked about the related topic. Three of them were abroad speakers from Chile, Taiwan, and New Zealand. From the IISEE, Dr. Azuhata introduced the IISEE training program and the lecture contents on the post-seismic disaster assessment briefly as a part of his presentation. After all presentations, they conducted the



Dr. Tatsuya Azuhata, Chief Research Engineer, IISEE

panel discussion about efficient methods for data collection and analysis on damages in case of a wide-area earthquake. All participants of the earthquake engineering course attended this symposium. It was significant for them to grasp the current situation and to acquire advanced knowledge about post-disaster assessment technologies.

## IISEE Seminar for earthquake engineering held on February 19

By Dr. Tatsuya Azuhata, Chief Research Engineer, IISEE

We held the IISEE seminar entitled "Failure Mechanism and Non-linear Seismic Performance Evaluation of Buildings." on February 19, 2020. The program was as follows.

1. Matsutaro SEKI, "Effects of Soft First Story on Seismic Performance of RC Buildings and Sustainable Approach to Retrofit," BRI, Japan

2. Tatsuya AZUHATA, "Seismic Design for Ensuring Bending Failure Mechanism and Effects of it," BRI,

Japan

3. Prakirna Tuladhar, "Lessons after April 25, 2015 Gorkha Earthquake, Nepal & Revision of Building Code NBC105:1994", Dept. Urban Development and Building Construction, Nepal Dr. Seki and Dr. Azuhata presented recent research results relating to the seminar title based on the master's thesis by exparticipants. Also, we invited Mr. Tuladhar, who is an ex-participant of the 2007-2008E course, from Nepal and asked him to introduce recent topics of seismic performance of buildings in his country.

The failure mode or the collapse mode can significantly affect nonlinear earthquake responses of building structures. Dr. Seki presented that infill masonry walls, which designers are likely to neglect in the structural design, may cause a collapse in the first story. And he introduced retrofit methods to avoid such a storycollapse. Dr. Azuhata talked about the importance of ensuring design to avoid shear failures of structural members. According to his presentation, we can reduce the collapse probability of buildings drastically by avowing shear failures. Mr. Tuladhar introduced some examples of



Dr. Matsutaro Seki



Dr. Tatsuya Azuhata



Mr. Prakirna Tuladhar

building seismic damages in the Gorkha Earthquake and presented lessons obtained from analysis results on those damages.

I think that this IISEE seminar was helpful and significant for all trainees to understand and enhance their knowledge on earthquake engineering.

#### **Back Numbers**

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