The disastrous consequences of destructive earthquakes place a heavy burden on many societies and their economies, particularly in developing countries. In order to avoid or at least mitigate the negative effects of such events, a thorough scientific knowledge of their geological and geophysical causes, their structural, kinematic and dynamic characteristics and destructive effects, as well as a developed capability to monitor and to analyze them is indispensable. The vulnerability of human societies and related human and economic losses due to earthquakes are steadily growing as a consequence of rapid population growth and urbanization. Accordingly, improved risk assessment and effective disaster mitigation measures are prerequisites to ensure sustainable development in earthquake-prone countries.

The GFZ German Research Centre for Geosciences is running an annual four weeks International Training Course in the field of Seismology and Seismic Hazard Assessment. This training course is part of related programs of the United Nations aimed at promoting training and know-how transfer, especially to nationals from developing countries. This year’s training course is mainly sponsored by the German Federal Foreign Office (GFFO).

Training Course 2015
From the 10th August to the 4th September 2015, this year’s international training course on "Seismology, Data Analysis, and Seismic Hazard Assessment" is taking place at the "Telegrafenberg" campus of the GFZ in Potsdam. This four-week course provides the theoretical fundamentals and practical training in applied seismology, especially for geoscientists and engineers from developing countries under high seismic risk. In his opening speech, Dr. Ludwig Stroink from GFZ’s International Office highlighted the importance of international scientific networks and cooperation that are supported by these workshops.

Participants are sent by universities or government institutions that are responsible for earthquake safety and monitoring in their countries. This year, 27 participants come from 21 countries: Afghanistan, Algeria, Azerbaijan, Bangladesh, Bulgaria, Cameroon, China, Egypt, Ghana, Haiti, India(2), Iran(2), Jordan, Mongolia, Myanmar, Pakistan(2), Palestine, South Africa (2), Sudan, Turkey (2), Vietnam, and Zimbabwe.

The 27 participants of the International Training Course on "Seismology and Seismic Hazard Assessment" come from 21 countries (photo: E. Gantz, GFZ).

The lecturers of the course are experts from the GFZ from various fields of geoscience and colleagues from the International Seismological Centre Thatcham (UK), ETH Zurich (Switzerland), and the University of Bergen (Norway). The location of this annual course alternates annually.

Lectures and computer exercises during the training course 2015 are being realised in the GeoLab of the GFZ Potsdam.

http://www.gfz-potsdam.de/en/events/international-training-courses
International Training Course
„Seismology and Seismic Hazard Assessment“

between Potsdam and a regional course held abroad, most recently in 2014 in Colombia. The courses are financially mainly supported by the Federal Foreign Office, with further support from GFZ.

International Networking for Disaster Reduction

Until 2015, more than 1000 participants from 118 countries, amongst them graduate students, university lecturers as well as senior staff and directors of research institutes, have attended the seismology training courses. Since the foundation of the GFZ in 1992, these courses are held alternately every second year in Potsdam and as regional courses in a hosting country of Africa, Asia or Latin America. In the latter case, the course topics are specifically tailored to the needs and potential of the respective region and integrate many local lecturers into the international team of instructors.

Generally, the course programme aims at developing interdisciplinary problem understanding, acquaintance with the theoretical fundamentals and basic features of modern instrumentation, commonly used models and algorithms, as well as developing practical skills in data evaluation and analysis.

Lessons and exercises concentrate on Seismology, Microzonation, Strong Ground Motion, and Seismic Hazard Assessment.

In Memoriam

On 11 February 2015, the former course coordinator and lecturer Prof. Dr. Peter Bormann passed away at the age of 75. We have lost not only a precious colleague and friend but also an outstanding geoscientist. With all his strength and personality, he had dedicated his professional life to seismology, has made significant research contributions in this field, rendered excellent services to the international bodies and the scientific community and has trained young seismologists from all over the world.

Since 1992 – four years after the German reunification – Peter Bormann worked at GFZ German Research Centre for Geosciences where he received worldwide recognition, in particular through the organization and execution of the GFZ International Training Courses on Seismology and Seismic Hazard Assessment. Under his leadership the „New Manual of Observatory Practice (NMSOP, http://nmsop.gfz-potsdam.de)“ came into being. The Manual holds internationally as one of the most important books for the education of seismologists. Detailed information can be found in the IASPEI newsletter March 2015 (http://www.iaspei.org/newsletters/2015/2015-March.pdf)

Training Course 2016 and Application

The next training course will be organized as a regional course in South-East Asia. This region has a high seismicity rate and a high seismic hazard. The seismic risk is especially high as many vulnerable cities are near seismic zones, while populations are also endangered by tsunamis generated by strong earthquakes.

The course is arranged for the benefit of participants from earthquake-prone countries. To make the training effective, the number of participants is limited. Preference is given to young candidates engaged in seismology, seismic monitoring and zonation, earthquake data analysis, hazard assessment and/or risk estimation. They should have an active interest and obligations in these fields. Applicants have to apply personally and must have a scientific degree in geosciences, physics or engineering. Preferably, they should have several years of professional experience in the subjects covered by the course.

Details about the application procedure will be available soon on the course website www.gfz-potsdam.de/en/events/international-training-courses

Forum

This newsletter is intended to keep former course participants, scientists, engineers, and institutions interested in the International Training Courses informed about the activities and planned training courses. Past issues are posted on the training course website of the GFZ. Please forward this message to those who will benefit from this information. Your comments and contributions are welcome. The newsletter also intends to inform about ongoing projects, scientific activities or summaries of recent publications from former participants.

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