International Workshop on Educational Seismology, 16-17 April 2019
Pokhara, Nepal

Organized as part of 'Seismology-at-School in Nepal' program for earthquake education- first time in Nepal.

Format of the conference:
Presentation style, question and answers and workshops.

Goal:
The two-day workshop on educational seismology for teachers in Pokhara (16-17 April 2019) is the main connecting event between earthquake and education specialists, and teachers of schools across the region of western Nepal. The goal of the workshop is to explain our educational aims, to show and practice the learning material, to demonstrate the use of a low-cost seismometer, and to answer any question that may arise from the teachers. In particular, we aim to describe the causes and effects of Himalayan earthquakes, plate tectonics and geological history, discuss about the ways for better preparedness for earthquakes, to provide hands-on training on inexpensive seismometers, to teach tasks to follow before, during, and after an earthquake, and to perform evacuation drill exercises. These activities are crucial to make Nepali communities earthquake-safer, as the students in the region will transfer the knowledge to their environment as well. Through the teachers alone, more than 16'000 students between the age of 5 and 18 in the 20 schools involved in the project will get education within a few months. Furthermore, representative from the local authorities, who are first responsible for rescue in case of an earthquake and the local government, who is responsible for adapting school curriculum can take benefit from the workshop.

Participants: 81 participants - STEM teachers from public and boarding schools located on western Nepal and neighbouring regions, interested students of physics, geology and related subjects, representatives of various education organizations, representatives from institutes interested in earthquake and science communication activities and decision-makers in the field of educational policies.

Dates: 16-17 April 2019
Event format: One full day and one-half day.
Venue: Lakeside, Pokhara

KEYNOTE SPEAKERS

Prof. Dr. György Hetényi

Geophysicist

Institute of Earth Sciences,

Faculty of Geosciences and Environment

University of Lausanne, Switzerland

György is a geophysicist and holds a Swiss National Science Foundation professorship at the Institute of Earth Sciences, University of Lausanne, Switzerland. After a geophysics and geology M.Sc. education starting at Eötvös University, Budapest, Hungary and finishing at the Ecole Normale Supérieure, Paris, France, he continued at ENS Paris with a Ph.D. which he completed in 2007, with the title "Evolution of deformation of the Himalayan prism: from imaging to modelling." After a post-doctoral stay at the University of Leeds, United Kingdom, he has worked at ETH Zurich, at the Department of Earth Sciences and at the Swiss Seismological Service for 7 years. György started in Lausanne in 2015, where the "Seismology at school in Nepal" project was initiated in 2017, related to the Ph.D. thesis of Shiba Subedi. György is actively involved in Himalayan research since 2004, including several field campaigns in seismology and gravimetry, and numerous publications on Himalayan geodynamics and seismotectonics.

Mr. Paul Denton

Seismologist, Leader of British school seismology program

British Geological Survey

United Kingdom

Paul is a seismologist who has been leading the UK school seismology education project at the British Geological Survey since 2006. As the UK is not a seismically active country the main purpose of this project has been to inspire and educate UK students to study geosciences by providing them with the hands-on resources and instruments to allow them to detect and analyse seismic signals from all over the world using simple and inexpensive instruments in their own schools. The resources and tools developed by this project have helped to set up similar programs in countries across the world including projects in Trinidad, Romania and now Nepal. He has also helped co-ordinate European educational seismology projects under EU funded projects linking projects from across Europe. Paul originally studied Physics at Bath University before working as an observational seismologist in industry and at the University of Leicester.

Dr. Anne Sauron

Geophysicist

ETH Zurich and HES-SO Valais-Wallis in Sion,

Switzerland

Anne studied physics at the University of Paris XI (France) where she received his geophysics degree in 1986 and his doctorate in 1990. From 1991 to 1995, associate professor of geophysics at the University of Nice-Sophia–Antipolis (France) and founder of the CNRS team “RUADE: from Rupture to Deformation. She has developed the laboratory of analogue modelling of tectonic deformation, faulting and earthquake rupture, and supervised numerous students and training courses, in Physics department at the University of Nice-Sophia–Antipolis. From 1995 until 2005 she shaves time between Nice and the University of California, Los Angeles, Depart. of Earth and Space Sciences. She concentrated on the study on phenomena of Rupture and scaling laws in the Earth crust, looking for model of percolation of rupture, of fault growth process and of self-organized criticality. Since 2006 until 2013, associate professor of geophysics at ETH Zürich she is developing seismic network for school and she is developing some pedagogical approaches for teachers at school through the program “Seismo@School” in Switzerland. Since 2013 until 2017, she shares 50 % of time at EHT Zürich and 50% Prof., at the Institute of Industrial System, HES-SO Valais-Wallis in Sion. She is Project manager of the CPPS (http://www.cppsvs.ch) Centre for Earthquakes Education and Preparedness.

Peter Loader

Geoscience Educator

Principal Examiner GCSE/A-level Geology (WJEC-Eduqas)

Chair – Geological Society of London Education Committee

United Kingdom

Pete was Geology Master at St Bede's College, Manchester for 38 years and then as a part time geology tutor at Aquinas College, Stockport, prior to his retirement' in 2017. During 43 years of teaching geology, he has been an active member of the UK Earth Science Teachers' Association, including Chair, whilst working for the past 25 years as the Chief Examiner for WJEC-Eduqas, where he is involved in GCSE and A level examination assessment and specification development. He currently acts as Chair of the Geological Society of London Education Committee where his responsibilities include promoting geology in schools and running geology CPD. In addition, he is a STEM ambassador and tutor on the Keele University Geoscience Summer School which trains geology teachers to teach the UK specifications.

Shiba Subedi
M.Sc. in Physics and Geophysics
Ph.D. student at the *Institute of Earth Science*
University of Lausanne
Switzerland

Shiba is a doctoral Student, a Swiss Government Excellence Scholarship holder at the Institute of Earth Sciences of the University of Lausanne, completed Master's degree in Exploration Geophysics at IPGP, followed by a Research Assistant internship at Ecole Normale Supérieure, Paris, France. After the completion of Master's degree in Physics from Tribhuvan University he motivated towards seismology, it was the time of 2015 Gorkha earthquake. Currently, he is working for 'Seismology-at-School in Nepal' program under the supervision of György Hetényi. The purpose of the program is to evaluate the feasibility by locally testing a bottom-up approach of seismology in schools. With special lectures to students, and by installing low-cost seismometers in schools, he is working to enhance awareness and preparedness of the people, and at the same time collect useful local shaking data.