SEISMOLOGICAL SOCIETY OF AMERICA
400 EVELYN AVENUE, SUITE 201
ALBANY, CALIFORNIA 94706
(510) 525-5474 • FAX (510) 525-7204

News Release News Release News Release News Release News Release

For Immediate Release

Media contact: Nan Broadbent
Seismological Society of America
Phone: 408-431-9885
E-mail: press@seismosoc.org

Pioneering geologist Kerry Sieh awarded top honor in seismology

SAN FRANCISCO, Jan. 6, 2014 – Throughout his career, geologist Kerry Sieh has developed new ideas and techniques that place him at the forefront of understanding the recurrence of earthquakes and fault behavior. Transforming the field of paleoseismology through his early work on the San Andreas fault to his current work in Asia, he changed how scientists study earthquakes. For his pioneering work and leadership, the Seismological Society of America (SSA) will honor Sieh with its highest honor, the Harry Fielding Reid Medal, at its 2014 annual meeting.

"Kerry Sieh has literally changed the way we think about earthquakes and seismic hazards," said Clarence R. Allen, professor-emeritus of geology and geophysics at Caltech, who was among many who nominated Sieh for the honor.

Sieh revolutionized the study of earthquakes by spearheading the development of the field of paleoseismology, which is at the forefront of both seismological research and geotechnical practice in seismic hazard assessment.

It was while an undergraduate student at the University of California, Riverside, that Sieh excavated his first trenches across the San Jacinto fault. As a doctoral student at Stanford University, he produced his seminal field work on the San Andreas fault at Pallett Creek in southern California, dating a long sequence of past surface ruptures and introducing methods and types of observations that are still in use today in the analysis of paleo-events along strike-slip faults. Sieh's study at Pallett Creek revealed earthquakes were more frequent than most expected and did not recur as regularly as hoped. This study represented the first time paleo-earthquake geology was used to infer detailed long-term fault behavior.

During the 1970s and 80s, Sieh conducted numerous fault-specific studies in California and became active in applying his research to hazard mitigation, becoming an early participant in several key initiatives like the Working Group on California Earth Probabilities and later organizations like the Southern California Earthquake Center. Sieh also began studying active faults around the world during this time, particularly in Asia.

In the late 1990s, Sieh turned his attention to the Sumatran subduction zone, focusing on the ups and downs of coral heads, or "microatolls," which are sensitive to vertical motions or relative changes in sea levels. By using the pattern of interrupted uplift, he

demonstrated and dated pre-instrumental earthquake events. This research led to installation of the Sumatran GPS Array, a network of continuously recording GPS stations, to record deformations during and in between large earthquakes that has become invaluable to the study of recent earthquakes in this extremely active seismic region.

In 2009 Sieh left Caltech, where he was a tenured professor, to establish the Earth Observatory of Singapore (EOS), which is housed at Nanyang Technological University and conducts basic and applied research on natural hazards and climate change in Southeast Asia. EOS focuses on key threats to the region's stability – earthquakes, tsunamis, volcanic eruptions and climate change – and influences education and public safety by devoting nearly one-fifth of the institute's budget to education and outreach.

In addition to his more than 100 scientific papers, Sieh is the co-author of a widely used textbook, The Geology of Earthquakes. In addition to SSA, he is member of the National Academy of Sciences, American Association for the Advancement of Science, American Geophysical Union, and the Geological Society of America.

The Harry Fielding Reid Medal for outstanding contributions in seismology and earthquake engineering and will be presented at the 2014 SSA annual meeting on April 30, 2014 in Anchorage, Alaska

###

SSA is an international scientific society devoted to the advancement of seismology and its applications in understanding and mitigating earthquake hazards and in imaging the structure of the Earth. Founded in 1906 in San Francisco, the Society now has members throughout the world representing a variety of technical interests: seismologists and other geophysicists, geologists, engineers, insurers and policy-makers in preparedness and safety.