

Curriculum Vitae

J. Bruce H. Shyu (officially known as **Hao-Te Hsu**) (徐濤德)

Associate Professor

Department of Geosciences, National Taiwan University

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Ph.D., Geology, California Institute of Technology, December 2005

Date of birth: 15 August 1972; Sex: Male; Citizenship: Taiwan

Primary Research Interest:

Earthquake geology, Tectonic geomorphology, Paleoseismology, Surface processes

Secondary Research Interest:

Sedimentology, Quaternary stratigraphy and environmental change, Geomicrobiology, Environmental geochemistry

Educational Background:

2005 Ph.D., Geology, California Institute of Technology, Pasadena, CA, USA

Thesis title: A Neotectonic Model of Taiwan, with a Focus on the Longitudinal Valley Suture

Thesis advisor: Kerry Sieh

1998 M.S., Geology, National Taiwan University, Taipei, Taiwan

Thesis title: The sedimentary environments since the Last Glacial in the southern part of Pingdong Plain, southern Taiwan

Thesis advisor: Ping-Mei Liew

1994 B.S., Geology, National Taiwan University, Taipei, Taiwan

Professional Appointments:

08/12-present Associate professor

Department of Geosciences, National Taiwan University

08/09-07/12 Assistant professor

Department of Geosciences, National Taiwan University

08/08-07/09 Adjunct assistant professor

Department of Geosciences, National Taiwan University

01/08-07/09 Distinguished post-doctoral research fellow

Department of Geosciences, National Taiwan University

10/07-02/08 Hochschulassistent (Lecturer)

Department of Earth and Environmental Sciences, Ludwig-Maximilians-University
Munich, Germany

- 04/07-03/08 Post-doctoral research scholar
Department of Earth and Environmental Sciences, Ludwig-Maximilians-University
Munich, Germany
- 01/07-04/07 Visiting post-doctoral scholar
Department of Geosciences, National Taiwan University
- 01/06-12/06 Post-doctoral research scholar
Tectonics Observatory, Division of Geological and Planetary Sciences, California Institute
of Technology
- 07/99-12/05 Graduate student research and teaching assistant
Division of Geological and Planetary Sciences, California Institute of Technology
- 12/98-06/99 Full-time research assistant
Department of Geology, Chinese Culture University, Taiwan
- 09/96-11/98 Graduate student research and teaching assistant
Department of Geology, National Taiwan University
- 09/92-06/94 Undergraduate student research assistant
Department of Geology, National Taiwan University

Administrative Experiences:

- 05/14-present Board member
Chinese Taipei Geophysical Society
- 10/13-07/14 Deputy Vice President for International Affairs
National Taiwan University

Research Experiences:

- 08/15-present Active tectonic characteristics and earthquake and tsunami hazards along major plate
boundary belts in eastern and southeastern Asia
Research project funded by the Ministry of Science and Technology, Taiwan. Project
number: MOST 104-2116-M-002-027-MY4
- 08/10-present Active tectonics and seismic hazards along major convergent plate boundaries: neotectonic
characteristics of western Myanmar and the Taiwan orogen
Research project funded by the National Science Council, Taiwan. Project number: NSC
99-2116-M-002-009; NSC 100-2116-M-002-005; NSC 101-2116-M-002-013; NSC
102-2628-M-002-007-MY3
- 12/09-11/10 Investigation of the landslide and debris flow caused by Typhoon Morakot: Geomorphic
analysis of landslides, debris flow deposits, and river evolution
Research project funded by the National Science Council, Taiwan. Project number: NSC
98-2745-M-002-010
- 01/08-03/11 Neotectonic architecture and distribution of convergence across plate boundaries: western
central Andes and Taiwan
Research project funded by the National Science Council, Taiwan. Project number: NSC
97-2116-M-002-001; NSC 98-2116-M-002-001; NSC 99-2116-M-002-001
- 04/07-03/08 Neotectonic characteristics of the Preandean Depression and the central Western Cordillera
between 22°S and 25°S, northern Chile

- Independent post-doctoral research project supervised by Anke Friedrich at Ludwig-Maximilians-University Munich, Germany
- 01/06-12/06 Preliminary neotectonic analysis of western central Andes
Post-doctoral research project supervised by Mark Simons and Jean-Philippe Avouac at California Institute of Technology
- 01/01-11/05 Neotectonic architecture, model, and the active Longitudinal Valley suture of Taiwan
Ph.D. research project advised by Kerry Sieh at California Institute of Technology
- 04/00-06/01 Genetic basis of humic acid reduction by the bacteria *Shewanella oneidensis* strain MR-1
First year graduate student research project #2 advised by Dianne Newman at California Institute of Technology
- 10/99-10/00 Stable isotope geochemistry of Sumatran corals
First year graduate student research project #1 advised by John Eiler and Kerry Sieh at California Institute of Technology
- 07/99-10/99 Laboratory synthesis and carbon isotopic characteristics of methane clathrate
Graduate student summer research project advised by John Eiler at California Institute of Technology
- 12/98-06/99 Quaternary sediment sampling, core description and paleo-environmental analysis in western Taiwan
Field and laboratory work supervised by Leh-Chyun Wu at Chinese Culture University, Taiwan
- 09/96-11/98 Quaternary sediment sampling, core description and paleo-environmental analysis in southwestern Taiwan
Master thesis research project advised by Ping-Mei Liew at National Taiwan University
- 09/93-06/94 Geomorphic and neotectonic analysis of river terraces in central Taiwan
Bachelor thesis research project advised by Ping-Mei Liew at National Taiwan University

Teaching Experiences:

- 08/09-present Associate professor and assistant professor, Department of Geosciences, National Taiwan University
Courses: Geological Surveying
Earthquake Geology
Tectonic Geomorphology
Surface Processes and Landforms
Geologic Hazard Assessment
Geologic Maps and Profiles
Introduction to Geosciences
Introduction to Field Geology
Taiwan Seismotectonics
Seminars on Seismotectonics and Neotectonics
- 08/08-07/09 Adjunct assistant professor, Department of Geosciences, National Taiwan University
Courses: Geological Surveying
Tectonic Geomorphology
- 10/07-02/08 Hochschulassistent (Lecturer), Department of Earth and Environmental Sciences,

- Ludwig-Maximilians-University Munich, Germany
 Courses: Geologic Maps and Profiles, Winter 2007-08
- 10/00-12/05 Graduate teaching assistant, Division of Geological and Planetary Sciences, California Institute of Technology
 Courses: Ge112, Geomorphology and Stratigraphy, Fall 2000-2003
 Ge122, Geologic Hazard Assessment, Summer 2001, 2002, 2005
 Ge177a, Geology of Earthquakes, Spring 2004
- 09/97-06/98 Graduate teaching assistant, Department of Geology, National Taiwan University
 Courses: Historical Geology, Fall 1997 and Spring 1998

Honors and Awards:

- 09/2014 Ta-You Wu Memorial Award, Ministry of Science and Technology, Taiwan, ROC
- 09/2013 Distinguished Teaching Award, 2013-2017, National Taiwan University
- 08/2013 Distinguished Junior Scientist Research Grant, 2013-2015, National Science Council, Taiwan, ROC
- 09/2012 Outstanding Teaching Award, National Taiwan University
- 01/2008 Distinguished Post-doctoral Research Fellowship, 2008-2010, National Science Council, Taiwan, ROC
- 12/2004 Outstanding Student Paper Award, 2004 Fall Meeting, San Francisco, USA, American Geophysical Union
- 06/2004 Richard H. Jahns Teaching Award, California Institute of Technology
- 06/2003 Richard H. Jahns Teaching Award, California Institute of Technology
- 11/2001 F. Beach Leighton Fellowship, California Institute of Technology
- 07/2000 Li Ming Scholarship, California Institute of Technology
- 07/1999 Continental Oil Company (CONOCO) Fellowship, California Institute of Technology
- 06/1998 Mr. C.H. Chu Memorial Scholarship, National Taiwan University
- 12/1997 Mr. K.Y. Liu Memorial Scholarship, National Taiwan University
- 03/1994 Presidential Award, National Taiwan University
- 12/1993 Geological Scholarship, Ministry of Economic Affairs, Taiwan, ROC

Professional Memberships:

- Since 1996 Geological Society of Taiwan
- Since 1999 American Geophysical Union (AGU)
- Since 2009 Asia Oceania Geosciences Society (AOGS)
- Since 2010 Chinese Taipei Geophysical Society
- Since 2010 European Geosciences Union (EGU)
- Since 2011 Geological Society of America (GSA)