

## CURRICULUM VITAE

### KELIN WANG

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Citations: <https://scholar.google.ca/citations?user=SUP0E9YAAAAJ&hl=en&oi=ao>

### Work Experience

- 1992 - Research Scientist, Pacific Geoscience Centre (PGC), Geol. Survey of Canada
- 1999 - Adjunct Professor, School of Earth and Ocean Sciences, University of Victoria
- 1990 - 1992 Canadian Government Laboratory Visiting Fellow, PGC
- 1989 - 1990 Lecturer of Geophysics, University of Western Ontario (Now Western University)
- 2003 Visiting Professor, Earthquake Research Institute, University of Tokyo
- 2010 Weiss Visiting Professor, Department of Earth Sciences, Rice University
- 2006 - 2011 Guest Professor, Graduate School of China University of Science and Technology

### Education

- Ph.D. 1989 University of Western Ontario (now Western University) (Geophysics)
- B.Sc. 1982 Peking University (Geology)

### Current Research

Kelin Wang uses quantitative modeling of deformation and stresses, thermal structure, and hydrological processes to understand lithospheric behaviour, earthquake mechanics, and the geodynamics of subduction zones. Kelin Wang's fundamental research has been applied globally to understand and mitigate the risk from subduction zone earthquakes and tsunamis.

### Honour and Recognition

- 2018 Outstanding Reviewer, American Geophysical Union
- 2017 Honorary Research Professor, University of Victoria, Canada
- 2016 Fellow of the American Geophysical Union
- 2015 Birch Lecturer, 2015 Fall Meeting of the American Geophysical Union
- 2015 Awarded J. Tuzo Wilson Medal by the Canadian Geophysical Union
- 2012 Honorary Professor, Inst. Crustal Dynamics, China Earthquake Administration
- 2008 Special Recognition by Natural Resources Canada for contribution to IPCC which was awarded the 2007 Nobel Peace Prize
- 2008 Exceptional Reviewer, Geological Society of America

### Service to Scientific Community

Co-Editor-in-Chief: Tectonophysics (September 2014 – 2020)

Associate Editor: Journal of Geophysical Research – Solid Earth (2003 – 2011)

Editorial boards: Geology (2002–2007); Journal of Geodynamics (2002–); Science in China Series D: Earth Sciences (2008 – 2012); Earthquake Science (2009 – 2012); Chinese Journal of Geophysics (2021 – )

Co-Editor: EPS 2001 special issue Great Subduction Zone Earthquakes; Elsevier 2002 book

Land and Marine Hydrogeology; USGS 2002 volume on Cascadia intraslab earthquakes  
Convener of International Sessions: Numerous international meetings and conference sessions  
Chair: International Professionals for the Advancement of Chinese Earth Science (2005 – 2006)  
Secretary: Canadian Geophysical Union (1999 – 2003)  
Review Panels and Steering Committees:

AGU Tectonophysics section Fellow Selection Committee (2020– )  
AGU Tectonics Editor-in-Chief Search Committee (2019)  
Natural Science and Engineering Research Council of Canada EWR Steacie Fellowship  
Selection Committee (2018–2019)  
International Scientific Advisory Board, Inst Oceanology, Chinese Academy of Sci. (2016– )  
Academic Committee, South China Sea Inst Oceanology, Chinese Academy of Sci. (2016– )  
Board of Overseas Expert, Chinese Academy of Sciences (2015–2018)  
AGU Tectonophysics Section Jason Morgan Award Selection Committee (2014–2017)  
U.S. EarthScope Program Steering Committee (2014–2016)  
International Site-visit Review Panel for Inst Oceanology, Chinese Academy Sci. (2014)  
Chair of USGS Site-visit Review Panel for Southern California Earthquake Center IV (2010)  
Academic Committee of National Laboratory of Comput. Geodynamics, China (2005–2010)  
Scientific Advisor for Earthquake and Tsunami Research Project, JAMSTEC (2007–2008)  
International Site-visit Review Panel for IFREE/JAMSTEC (2006)  
Proposal Review Panel, USGS National Earthquake Hazard Reduction Program (1996–97)

### **Ten Relevant Publications**

- Dragert, H., K. Wang, and T. S. James (2001), A silent slip event on the deeper Cascadia subduction interface, *Science*, 292, 1525-1528.
- Gao, X., and K. Wang (2014). Strength of stick-slip and creeping subduction megathrusts from heat flow observations, *Science*, 345, 1038-1041.
- Gao, X., and K. Wang (2017). Rheological separation of the megathrust seismogenic zone and Episodic Tremor and Slip, *Nature*, 543, 416–419.
- Luo, H., and K. Wang (2021). Postseismic geodetic signature of cold forearc mantle in subduction zones, *Nature Geosci.*, 14, 104–109.
- Sun, T., K. Wang, T. Iinuma, R. Hino, J. He, H. Fujimoto, M. Kido, Y. Osada, S. Miura, Y. Ohta, and Y. Hu (2014). Prevalence of viscoelastic relaxation after the 2011 Tohoku-oki earthquake, *Nature*, 513, 84-87.
- Wang, K., and S. L. Bilek (2014). Fault creep caused by subduction of rough seafloor relief, *Tectonophys.*, 610, 1-24.
- Wang, K., and Y. Hu (2006), Accretionary prisms in subduction earthquake cycles: The theory of dynamic Coulomb wedge, *J. Geophys. Res.*, 111, B06410.
- Wang, K., L. Brown, Y. Hu, K. Yoshida, J. He, and T. Sun (2019). Stable forearc stressed by a weak megathrust: Mechanical and geodynamic implications of stress changes caused by the M=9 Tohoku-oki earthquake, *J. Geophys. Res.*, 124, 6179 – 6194.
- Wang, K., Y. Hu, and J. He (2012). Deformation cycles of subduction earthquakes in a viscoelastic Earth, *Nature*, 484, 327-332.
- Wang, K., Y. Zhu, E. Nissen, and Z.-K. Shen (2021). On the relevance of geodetic deformation rates to earthquake potential, *Geophys. Res. Lett.*, 48, e2021GL093231.