

STATE UNIVERSITY OF NEW YORK AT ALBANY
Department of Geological Sciences

CURRICULUM VITAE

WILLIAM S.F. KIDD

Personal:

Born: February 23, 1947, Shawford, Winchester, England; single

Education:

B.A. in Natural Sciences (Geology), Cambridge University, England,
June 1969

Ph.D., Cambridge University, England, November 1974

Professional Experience

Visiting Lecturer in Geology, Erindale College, University of Toronto,
1972-1973

Lecturer in Geology, Department of Geological Sciences, State University
of New York at Albany, 1974

Assistant Professor, Department of Geological Sciences, State University
of New York at Albany, 1975-1981

Associate Professor, Department of Geological Sciences, State University
of New York at Albany, 1981-

Professional Societies:

American Geophysical Union
Geological Society of America

Publications:

- 1971 (with J. M. Bird and J. F. Dewey) Appalachian-Caledonian ophiolites/Proto-Atlantic oceanic crust and mantle: Nature Phys. Sci., v. 231, p. 28-31
- 1973 (with K. C. Burke and J. T. Wilson) Plumes and concentric plume traces of the Eurasian plate: Nature Phys. Sci., v. 241, p. 128-129
- (with K. C. Burke and J. T. Wilson) Relative and latitudinal motion of Atlantic hot spots: Nature, v. 245, p. 133-137
- 1974 (with J. F. Dewey) Continental collisions in the Appalachian/Caledonian orogenic belt: style variations related to complete and incomplete suturing: Geology, v. 2, p. 543-546
- 1975 (with K. C. Burke) Earth - heat flow in; hot spots: article in McGraw-Hill Encyclopedia Yearbook for 1975, p. 165-168
- 1976 (with J. F. Dewey and K. Burke) Dominance of horizontal movements, arcs and microcontinental collisions during the later Permian regime, in The Early History of the Earth (B. F. Windley, ed.), John Wiley & Sons, p. 113-130
- (with K. C. Burke and J. F. Dewey) PreCambrian palaeomagnetic results compatible with contemporary operation of the Wilson Cycle: Tectonophysics, v. 33, p. 287-299
- 1977 (with K. C. Burke and J. F. Dewey) World distribution of sutures - the sites of former oceans, in The Past Distribution of Continents (M. W. McElhinny, ed.), Tectonophysics, v. 40, p. 69-99
- (with J. F. Dewey) Geometry of plate accretion: Geol. Soc. America Bull., v. 88, p. 960-968
- The Baie Verte Lineament, Newfoundland: ophiolite complex floor and mafic volcanic fill of a small Ordovician marginal basin, p. 407-418, in Island Arcs, Deep-Sea Trenches, and Back Arc Basins (M. Talwani and W. C. Pitman, eds.), Maurice Ewing Series, v. 1, Amer. Geophys. Union, Washington
- 1978 (with J. F. Dewey and J. M. Bird) The Mings Bight Ophiolite Complex, Newfoundland: Appalachian Oceanic Crust and Mantle: Canadian Journal of Earth Sciences v. 15, p. 781-804
- (with K. C. Burke) Were Archean continental geothermal gradients much steeper than now?: Nature 272, p. 24-241.
- 1979 (with K.C. Burke, L. Delano, J.F. Dewey, A. Edelstein, K.D. Nelson, A.M.C. Sengor and J. Stroup) Rifts and Sutures of the World. Contract Report NAS 5-24094. Geophysics Branch, ESA Division, Goddard Space Flight Center, Greenbelt, Maryland. 238 pp..

Publications (cont'd):

- 1979 (with R. Thiessen and K.C. Burke) African hotspots and their relation to the underlying mantle. Geology, 7, 263-266.
- (with A.M.C. Şengor) Post-collisional tectonics of the Turkish-Iranian plateau and a comparison with Tibet. Tectonophysics, 55, 361-376.
- (with K.D. Nelson) A lower Paleozoic trench-fill sequence, New World Island, Newfoundland: Discussion and reply. Geol. Soc. Amer. Bull., 90, 985-986.
- (with D.B. Rowley and L.L. Delano) Detailed stratigraphic and structural features of the Giddings Brook slice of the Taconic Allochthon in the Granville area. pp. 186-242, in Friedman, G.M. (ed.) Guidebook, 51st N.Y. State Geol. Assoc. Ann. Mtg. and N.E.I.G.S., 71st Mtg., ; Rensselaer Poly. Inst., Troy, NY.
- (with K.D. Nelson) The age of the Roberts Arm Group, north-central Newfoundland: Discussion. Can. J. Earth Sci., 16, 2068-2070.
- 1980 (with K.C. Burke) Volcanism on Earth through time. In D. Strangway (ed.) The continental crust of the Earth and its mineral deposits, Geol. Assoc. Canada. Spec. Publ. 20. pp. 503-522.
- 1981 (with K.C. Burke and D.L. Turcotte) Chapter 6 - Tectonics of Basaltic Volcanism, in W.M. Kaula (ed.) Basaltic Volcanism on the Terrestrial Planets, Pergamon, New York, pp. 801-898.
- (with D.B. Rowley) Stratigraphic relationships and detrital composition of the medial Ordovician flysch of western New England: implications for the tectonic evolution of the Taconic Orogeny. Jour. Geol., 89, 199-218.
- (with J.F. Casey) A parallochthonous group of sedimentary rocks unconformably overlying the Bay of Islands Ophiolite Complex, North Arm Mountain, Newfoundland. Canadian Jour. Earth Sci., 18, 1035-1050.
- 1982 (with D.B. Rowley) Stratigraphic relationships and detrital composition of the medial Ordovician flysch of western New England: Implications for the tectonic evolution of the Taconic Orogeny: A reply to discussion by Rodgers. Jour. Geol., 90, 223-226.
- : A reply to discussion by Geiser. Jour. Geol., 90, 230-233.
- (with W. Bosworth and D.B. Rowley) A structure section in eastern New York showing variation in style of deformation across the Taconic Allochthon: Discussion. Northeastern Geol., 4, 111-116.

Papers accepted:

(with J.F. Dewey and M.J. Kennedy) A geotraverse across the Appalachians of Northern Newfoundland. Geodynamics Series, Amer. Geophys. Union, Washington, D.C.

Papers Presented at Meetings:

- 1973 (with K. C. Burke and J. T. Wilson) The present plume population: EOS, Transactions, American Geophysical Union, v. 54, p. 238
- 1973 (with K. C. Burke and J. T. Wilson) Stationary Africa, moving Eurasia: EOS, Transactions, American Geophysical Union, v. 54, p. 470
- 1973 (with J. F. Dewey and P. J. Fox) Structure and generation of oceanic crust and mantle: Geological Society of America, Abstracts with Programs, v. 5, p. 597
- 1974 (with K. C. Burke and J. T. Wilson) Hot spots and the driving mechanism: EOS, Transactions, American Geophysical Union, v. 55, p. 439
- 1974 (with K. C. Burke and J. F. Dewey) The Tibetan Plateau: Its significance for tectonics and petrology: Geological Society of America, Abstracts with Programs, v. 6, p. 1027-1028
- 1975 Tectonic environment of Torridonian-Moine-Dalradian deposition: Geological Society of America, Abstracts with Programs, v. 7, p. 84-85
- 1975 (with K. C. Burke) Palaeoenvironmental studies of the Georgian Bay Formation at Erindale, Ontario: Equatorial shallow marine sedimentation on the cratonic margin of the Taconian exogeosyncline: Geological Society of America, Abstracts with Programs, v. 7, p. 35
- 1975 Widespread late Neogene and Quaternary calc-alkaline vulcanism on the Tibetan Plateau: EOS, Transactions, American Geophysical Union, v. 56, p. 453
- 1975 (with S. E. DeLong, K. C. Burke, and Y. Isachsen) Categories of anomalous topographic relief within plates: EOS, Transactions, American Geophysical Union, v. 56, p. 457
- 1976 (with J. F. Dewey and P. J. Fox) Geometry of plate accretion. EOS - Trans. Amer. Geophys. Union, v. 57, p. 331-332
- 1976 (with J. F. Dewey and P. J. Fox) Constitution of oceanic crust and upper mantle and some constraints on its generation. EOS - Trans. Amer. Geophys. Union, v. 57, p. 403
- 1976 (with J. F. Dewey and K. Burke) World distribution of sutures. 25th International Geol. Congress, Sydney, Australia
- 1977 (with J. F. Dewey and K. D. Nelson) Medial Ordovician Ridge Subduction in Central Newfoundland: Geol. Soc. America, Abstracts with Programs, v. 9, p. 283-284

Papers Presented at Meetings (cont'd):

- 1977 (with R. Thiessen and K. Burke) Are African-Plate topography and vulcanism simply related to underlying mantle structure?: EOS, Trans. Amer. Geophys. Union 58, p. 503
- 1978 (with J. F. Casey) Sediments overlying the Bay of Islands Ophiolite Complex, Newfoundland: Geol. Soc. America, Abstracts with Programs, v. 10, p. 50
- (with A.M.C. Sengor) Post-collisional tectonics of the Turkish-Iranian Plateau and a comparison with Tibet. EOS, Trans. Amer. Geophys. Union, 59, p. 323.
- 1979 (with J.F. Casey and S. Pulaski) Erosional unconformity above the Bay of Islands Ophiolite Complex and the para-allochthonous nature of overlying sedimentary rocks. Geol. Soc. America, Abstracts with Programs, v. 11, p. 6.
- (with L.L. Delano) Two "black-green" boundaries in the northern Taconic Allochthon. Geol. Soc. America, Abstracts with Programs, v.11, p. 19.
- Diversity of source and present structural setting of ophiolite rocks in the Baie Verte Lineament, Newfoundland. International Ophiolite Symposium, Cyprus; Abstracts, p. 94.
- (with K.C. Burke) Plate Tectonics on the early earth. Workshop on the Ancient Crusts of the Terrestrial Planets. Lunar and Planetary Institute, Houston.
- (with K.C. Burke) Volcanism on Earth through time. Symposium on the Crust of the Earth and its mineral deposits (Wilson Symposium) Univ. of Toronto. Abstracts.
- (with K.C. Burke and S.E. DeLong) Hot Spots, High Spots and other types of non-plate margin (anomalous) topography. Hawaii symposium on Intraplate Volcanism and submarine volcanism., Abstracts, p. 7.
- (with K.C. Burke) The distribution of hot spots and hypotheses for their origin. Hawaii symposium on Intraplate Volcanism and submarine volcanism, Abstracts, p. 36.
- (with K.C. Burke) Thermal history of the earth: one geologists' view. EOS, Trans. Amer. Geophys. Union, 60, p. 934.
- 1980 (with K.C. Burke) Record of plate boundary and non-plate boundary tectonics in the past. Invited paper, NASA Geodynamics Program review conference: Goddard Space Flight Center, Greenbelt, MD.
- (with K.C. Burke) Structural mapping in Tibet using LANDSAT imagery Lunar and Planetary Science Conference, 11th, Houston

1980

Geology of the Turkish-Iranian and Tibetan plateaux: the effects of young continental collision and the implications for older orogenic belts. Invited lecture, Logan Club, Geological Survey of Canada, Ottawa.

(with members of the Tamayo Scientific Team) Submarine landsliding at the eastern end of the Tamayo Transform Fault, Gulf of California. EOS, Trans. Amer. Geophys. Union 61, 359 (presented by W.S.F. Kidd).

(with F. Saroglu, Y. Güner and A.M.C. Şengör) Neotectonics of eastern Turkey: new evidence for crustal shortening and thickening in a collision zone (presented by W.S.F. Kidd) EOS, Trans. Amer. Geophys. Union 61, 360.

Terrestrial tectonics through time. EOS, Trans. Amer. Geophys. Union 61, 572. Invited paper.

(with members of the Tamayo Scientific Team) Tectonics of a ridge-transform intersection zone: Tamayo-East Pacific Rise, Gulf of California EOS, Trans. Amer. Geophys. Union 61, 574 (presented by W.S.F. Kidd)

(with K.C. Burke, J.F. Dewey and A.M.C. Şengör) The Alpine-Himalayan zone of continental collision and collision as a stage in continental evolution. Abstracts of proceedings of Symposium on Qinghai-Xizang (Tibet) Plateau, Peking 1980 p. 72-73.

(with R.H. Moody and B.D. Idleman) Trondhjemite formation along oceanic transforms. Geol. Soc. Amer. Abstracts with Programs, v. 12, p. 486.

(with members of the Tamayo Scientific Team) East Pacific Rise-Tamayo Transform Fault intersection. Geol. Soc. Amer. Abstracts with Programs, v. 12, p. 461-462 (presentation by W.S.F. Kidd and D.G. Gallo).

Large angular rotations of blocks along strike-slip zones as shallow decollement features, EOS Trans. Amer. Geophys. Union, 61, p. 1120 (with D.G. Gallo, H.S. Sloan and A.M.C. Sengor).

Neotectonics of eastern Anatolia, EOS, Trans. Amer. Geophys. Union 61, 1107-1108 (with J.F. Dewey, A.M.C. Sengor and F. Saroglu).

The Oceanographer Transform: morphotectonic character of a ridge-transform intersection, EOS, Trans. Amer. Geophys. Union, 61, 1105 (with P.J. Fox, K. Crane, D. Gallo, R.H. Moody, J.A. Karson).

The geology of the Oceanographer Transform: submersible and deep-towed camera investigations. EOS. Trans. Amer. Geophys. Union 61, 1105 (with P. J. Fox and others).

Papers Presented at Meetings (cont'd):

- 1981 Depositional history of the Taconic continental rise compared with equivalent sequences along the northern Appalachians. Geol. Soc. Amer. Abstracts with Programs, 13, 141. (with L.L. Delano and D.B. Rowley).
- Relationship between shelf and rise sedimentation of the early Palaeozoic continental margin of western New England. Geol. Soc. Amer. Abstracts with Programs 13, 173 (with D.B. Rowley).
- 1982 (with M. Aparisi) Poultney Formation - Early Ordovician contourite deposit on the Taconic continental rise. Geol. Soc. Amer. Abstracts with Programs 14, 2.
- (with B.D. Idleman) Field relations and regional significance of the volcanics of Woods Island, Bay of Islands, Newfoundland. Geol. Soc. Amer. Abstracts with Programs, 14, 30.
- (with J.B. Thompson, Jr., and others) Continent-Ocean Transition: Adirondacks to Georges Bank, Geodynamics Transect E-1. Geol. Soc. Amer. Abstracts with Programs 14, 631.

Field Work

1 month each year 1974-1982 teaching Field Mapping course - near Granville, NY (1974-1979); near Fairhaven, VT 1980-82 (Last week of May through third week of June).

1974: 7 weeks field work in Newfoundland - July 1-August 20; Mings Bight Ophiolite Complex, Triton Island, New World Island

1975: 1 week (Aug. 1-7) visiting student (J. Karson) Field season terminated by involvement in plane crash.

1976: 9 weeks (June 26-Aug. 25) in Newfoundland. Mapping in Baie Verte Lineament, Eastern Burlington Peninsula, Halls Bay area. Field trips provided for H. Williams. Field supervision of J. Karson, J. Casey, E. Rosencrantz, D. Nelson.

1977: 9 weeks (July 1-August 29) in Newfoundland. Mapping and sampling in Baie Verte Lineament, western Notre Dame Bay, North Arm Mountain. Field supervision of J. Karson, J. Casey, D. Nelson, A. Edelstein.

1978: 9 weeks (June 27-Aug. 26) in Newfoundland. Mapping and sampling of North Arm Mountain, eastern Notre Dame Bay. Field trip organized for SUNYA people in North Arm Mountain. Field supervision of Casey, Rosencrantz, Nelson, Idleman, Livaccari.

1979: 8 weeks (July 6-August 31) in Newfoundland. Mapping and sampling in eastern Notre Dame Bay. Field trip provided for Drs. S. McKerrow and A. Cox. Field supervision of B. Idleman and R. Livaccari.

1980: 3 weeks (Aug. 18-Sept. 4) in sampling traverse of East Anatolian high plateau (Turkey) in cooperation with the Turkish Geological Survey (M.T.A.) (with S.E. DeLong)

1981: 2 weeks (June 14-28) field work in Bay of Islands region, Newfoundland.

Grants Awarded:

- 1974 Council on Research, State University of New York at Albany
Title: Processes forming oceanic crust and upper mantle:
Geological field mapping of the Mings Bight Ophiolite
Complex, Newfoundland
Duration: May 1, 1974 - December 31, 1974
Amount: \$700
- 1975 State University of New York Research Foundation JAC/UAC
Title: Tectonic sequence in Palaeozoic island arc, Newfoundland
Duration: January 1, 1975 - December 31, 1976
Amount: \$1,585
- 1976 National Science Foundation (with J. F. Dewey)
Title: Structure and Petrofabrics of the Bay of Islands
Ophiolite Complex, Newfoundland
Duration: June 1, 1976 - October 31, 1978
Amount: \$60,500
- 1977 NASA Goddard Space Flight Center (with J. F. Dewey, K. Burke, and
S. E. DeLong)
Title: Global Tectonic Boundary Mapping
Duration: March 18, 1977 - March 17, 1978
Amount: \$23,140
- 1977 National Science Foundation
Title: Geological Development of an Arc-Trench Gap - Investiga-
tion of Ordovician Rocks of the Western Notre Dame Bay
Area, Newfoundland
Duration: December 1, 1977 - May 31, 1980
Amount: \$55,000
- 1978 NASA Goddard Space Flight Center (with K. Burke, J. F. Dewey and
S. E. DeLong)
Title: Global Tectonic Studies, Earth Research Program
Duration: May 15, 1978 - May 14, 1979
Amount: \$34,964
- 1979 National Science Foundation (with S.E. DeLong)
Title: Volcanic geochemistry in a collisional zone: Western
Anatolia to the Bitlis Suture, Turkey
Duration: May 15, 1979 to October 31, 1981
Amount: \$47,300
- 1979 National Science Foundation (with P.J. Fox and S.E. DeLong)
Title: A Submersible Investigation of Structure and Petrology
of the Fast-Slipping Tamayo Transform
Duration: August 1, 1979 to July 31, 1981
Amount: \$134,750

Grants Awarded (cont'd):

- 1980 Office of Naval Research (with P.J. Fox, S.E. DeLong and
 D.J. Fornari)
 Title: The Oceanographer Transform Fault (35°N, 35°W)
 The structure and dynamics of a transform and ridge
 crest.
 Duration: January 1, 1980 - December 31, 1983
 Amount: \$146,202
- 1982 National Science Foundation (with K. Davis)
 Title: Sedimentary Petrology and Mineral Chemistry of the
 Medial Ordovician flysch of Western New England:
 Implications for Arc/Continental margin collision
 during the Taconic Orogeny.
 Duration: 15th January 1982 - 30th June 1983