

## BIOGRAPHICAL INFORMATION

### Winthrop D. Means

Born February 7, 1933

Married; three children

### Education:

Harvard University, Cambridge, MA, A.B. in 1955, Magna cum laude,  
Phi Beta Kappa.

Cambridge University, Cambridge, England, Fulbright Fellow in the  
Department of Mineralogy and Petrology, 1955-1956.

University of California, Berkeley, California, Graduate Student 1956-  
1960; N.S.F. Predoctoral Fellow 1958-1959, 1959-1960, Ph.D. 1960.

### Professional Experience:

Undergraduate summer field work, United State Geological Survey, two  
seasons, gravity surveying.

Teaching Assistant, Berkeley, 1956-1957, 1957-1958, mineralogy.

Lecturer, Geology Department, University of Otago, Dunedin, New Zealand,  
1960-1964. Promoted to Senior Lecturer, February 1964.

N.A.T.O. Research Fellow, Department of Geophysics, Australian National  
University, Canberra, Australia, May 1964 - February 1965.

Visiting Research Fellow, Department of Geophysics, Australian National  
University, March - May 1965.

Associate Professor of Geology, State University of New York at Albany,  
New York, September 1965 - September 1977.

Acting Chairman, Department of Geological Sciences, State University of  
New York at Albany, June 1968 - September 1969.

Professor of Geology, State University of New York at Albany, September  
1977 - present.

Chairman, Department of Geological Sciences, State University of New  
York at Albany, January 1982-present.

Publications:

- 1962 - Structure and stratigraphy in the central Toiyabe Range, Nevada: University of California Pubs. Geol. Sci., v. 42 (2), p. 71-110.
- 1963 - Mesoscopic structures and multiple deformation in the Otago schist: N. Z. Jour., Geol. and Geophys., v. 6 (5), p. 801-816.
- 1964 - Comments on dynamic interpretation of faulting: N. Z. Jour. Geol. and Geophys., v. 6 (5), p. 757-768.
- (with J. Rogers) Orientation of pyrophyllite synthesized in slowly strained materials: Nature, v. 204 (4955), p. 244-246.
- 1966 - A macroscopic recumbent fold in schist near Alexandra, Central Otago: N. Z. Jour. Geol. and Geophys., v. 9 (3), p. 173-194.
- (with M. S. Paterson) Experiments on preferred orientation of platy minerals: Contr. Mineral. and Petrol., v. 13, p. 108-133.
- 1967 - Review of E.H.T. Whitten's Structural Geology of Folded Rocks: Geo-times, v. 12 (9), p. 36-38.
- 1968 - Incipient strain-slip cleavage in experimentally-deformed Martinsburg slate: Trans. Am. Geophys. Union, v. 49 (4), p. 655 (abstract only).
- Experimental folding of a synthetic schistose material: Trans. Am. Geophys. Union, v. 49 (4), p. 756 (abstract only).
- 1971 - (with P. F. Williams) Folding experiments on an artificial schist: Nature, v. 234 (48), p. 90-92.
- 1972 - (with P. F. Williams) Crenulation cleavage and faulting in an artificial salt-mica schist: Jour. Geol., v. 80, p. 569-591.
- 1973 - (with B. E. Hobbs and P. F. Williams) Folding and microfabric development in experimentally-deformed salt-mica specimens: Trans. Am. Geophys. Union, v. 54 (4), p. 457 (abstract only).
- Folding of wet salt-mica specimens at low strain rate: Trans. Am. Geophys. Union, v. 54 (4), p. 457 (abstract only).
- 1974 - (with P. F. Williams) Compositional differentiation in an experimentally-deformed salt-mica specimen: Geology, v. 2 (4), p. 15-16.
- Review of A.G.U. Geophysical Monograph 16 (The Griggs Volume): Economic Geology, 68 (8), p. 1349.
- 1975 - Natural and experimental microstructures in deformed micaceous sandstone. Bull. Geol. Soc. Amer., v. 86 (9), p. 1221-1229.
- 1976 - (with B. E. Hobbs and P. F. Williams) An Outline of Structural Geology. John Wiley, New York, 572 pp.
- Stress and Strain, Basic Concepts of Continuum Mechanics for Geologists. Springer-Verlag, New York, 339 pp.

- 1977 - Experimental contributions to the study of foliations in rocks: a review of research since 1960. Tectonophysics, 39 (1-3), 329-354.
- A deformation experiment in transmitted light. Earth and Plan. Sci. Letters, 35, 169-179.
- Contributor of plates AM 23-25 and EX 5, 6 in Atlas of Rock Cleavage, M.B. Bayly, et al. (eds.), University of Tasmania.
- 1978 - (with P.F. Williams and B.E. Hobbs) Development of axial plane slaty cleavage and schistosity in experimental and natural materials. Tectonophysics, 42, 139-159.
- 1980 - High temperature simple-shearing fabrics: a new experimental approach. Jour. Struct. Geol., 2 (1/2), 197-202.
- (with R.L. Thiessen) Classification of fold interference patterns: a re-examination. Jour. Struct. Geol., 2 (3), 311-316.
- (with B.E. Hobbs, G.S. Lister, and P.F. Williams) Vorticity and non-coaxiality in progressive deformations. Jour. Struct. Geol., 2 (3), 371-378.
- 1981 - Review of the Origin of the Southern Alps (R.I. Walcott and M.M. Creswell (eds.)). Bull. 18, Roy. Soc. New Zealand. EOS.
- The concept of steady-state foliation, Tectonophysics, 78, 179-199.
- (with Z.G. Xia) Deformation of crystalline materials in thin section. Geology, 9, 538-543.
- 1982 - (with H.G. Dong) Some unexpected effects of recrystallization on the microstructure of materials deformed at high temperature. Mitt. Geol. Inst. der E.T.H., Neue Folge 239a, 205-207.
- Several Plates in Atlas of Deformational and Metamorphic Rock Fabrics, Borradaile, Bayly and Powell (eds.), Springer-Verlag.
- An unfamiliar Mohr circle construction for finite strain. Tectonophysics, 89, T1-T6.
- in press - Application of the Mohr circle construction to problems of inhomogeneous deformation. Jour. Struct. Geol.
- in press - Microstructure and micromotion in recrystallization flow of octachloropropane: a first look. Geol. Rund. (B. Sander Volume).
- in press - Lineation. (a short review article) in Encyclopedia of Structural Geology and Tectonics, K. Seyfert (ed.).
- in press - Incremental deformation and fabric development in a KCl/mica mixture. Jour. Struct. Geol.
- 1952 - The relationship between foliations and strain. An experimental investigation. Jour. Struct. Geol. 4, 411-428.

submitted - (with H.G. Dong) Plates with text for Atlas of Fault Rocks,  
Tullis, Snoke and Todd (eds.).

submitted - (with B.E. Hobbs and P.F. Williams) Incremental deformation  
and fabric development in a KCl/mica mixture. Jour. Struct.  
Geol.

Editorial Boards:

Tectonophysics, Jour. Struct. Geology