

ABBREVIATED CURRICULUM VITAE, Van der Voo, Rob

Education: B. Sc. (1961, Geology), M.Sc. (1965, Geology), M.Sc. (1969, Geophysics), Ph.D. (1969, Geology and Geophysics), all at the University of Utrecht, the Netherlands.
PhD Dissertation title: "Paleomagnetic evidence for the rotation of the Iberian Peninsula"

Professional positions and affiliations:

Norwegian Academy Sci.	2010-2011	Visiting Scientist
University of Michigan:	1998-2003	Director Honors Program
	1991-1995	Chairman of Geological Sciences
	1981-1988	Chairman of Geological Sciences
	1979-present	Professor
	1975-1979	Associate Professor
	1972-1975	Assistant Professor
	1970-1972	Visiting Assistant Professor
Universities of Utrecht & Delft, the Netherlands	1997-1998	Visiting Professor
Instituto Jaume Almera Barcelona, Spain	1990-1991	Visiting Research Scientist
Greenland Geological Survey, Copenhagen	Summer 1985	Research Scientist
U-Texas at Arlington	Oct. 1984	Guest Professor
University of Kuwait	Dec. 1979	Guest Professor
University of Rennes	1977	Fellow of the C.N.R.S.
Lamont-Doherty Geol. Obs. of Columbia Univ.	1976	Senior Research Fellow
University of Utrecht	1965-1970	Research Associate
	1964-1965	Research Assistant

Honors and Awards: Utrecht University, 1969, Ph.D. degree awarded Cum Laude
University of Michigan, 1976, Henry Russel Award
Elected to Royal Academy of Sciences, the Netherlands, as correspondent, 1979
Elected Fellow of the American Geophysical Union, 1982
University of Michigan, 1990, Distinguished Faculty Achievement Award
University of Michigan, Excellence in Education Awards 1991, 1992, 1993.
Geological Society of America, 1992, G.P. Woollard Award
Arthur F. Thurnau Professor, 1994-present, University of Michigan
Elected to Royal Norwegian Society of Sciences and Letters, 1995
A.V. Cox Lecturer, American Geophysical Union Spring Meeting, 1997
University of Michigan, LS&A Distinguished Faculty Lecturer, 1998
Benjamin Franklin Medal in Earth Science, Franklin Institute, Philadelphia, 2001
Frank H. T. Rhodes Collegiate Professorship, 2003-present, University of Michigan
M. and H. Sokol Faculty Award in the Sciences, University of Michigan, 2006

Membership in Professional Societies:

American Geophysical Union	Fellow
Geological Society of America	Senior Fellow
Geologische Vereinigung	Member
Phi Kappa Phi	Member

Professional Service (incl. Scientific Societies):

Geological Society of America: Past-president (2005-2006), President (2004), Vice President (2003) and Councillor (1999-2001, 2003-06), Budget and Finance Committees, Executive Committee Member (2000, 2003-06), Assoc. Editor *Geol. Soc. America Bulletin* (1981-83; 1989-93), *Geology* (1975-81; 1990-92), member Arthur Day Medal Committee (1984-86), G.P. Woollard Medal Committee (1994-96), Annual Program Committee Member (1999) and Chair (2000-02), Nominating Committee Chair (2001), Congressional Fellow Selection Committee (2003), Geology and Public Policy Committee (2003); Public Service Award Committee (2005).

American Geophysical Union: President and President Elect Geomagnetism and Paleomagnetism Section and AGU Council Member (1988-92), Editor *Geophys. Res. Lett.* (1983-87), Assoc. Editor *Reviews of Geophysics* (1988-91) and *Tectonics* (1985-96), past member of Committee on Education and Human Resources, Macelwane Award Committee, Fellowship Committee, Bucher Medal Committee, Fleming Medal Committee, Books Board, Geophys. Monograph Board, Program Chairman GP section (1981), Publications Committee, Various Editor Search Committees, Geomagnetism and Paleomagnetism ad-hoc committee on the future (1985), Convenor of special symposia (1978-93, 2005) at Annual meetings

Other (present): Assoc. Editor *Tectonophysics*, Advisory Board member of the Canadian Institute for Advanced Research (CIFAR) – Earth System Evolution Program (ESEP).

Other (past): Editor *Earth and Planetary Science Letters* (1992-2003); Editorial Board of Reidel Book Series; Editorial Board *Terra Nova*, Editorial Board *Journal of Geodynamics*. Editor *Earth Science Reviews* (2006 - 2010), Board member Ann Arbor Hands-on Museum, Convenor IAGA and IUGG meeting symposia (1977, 1979, 1981, 1989, 1999, 2001); Convenor of symposia in 1989 International Geological Congress and the European Geophysical Society/European Union of Geosciences meetings (1990, 1996, 2000, 2003, 2011). Convenor symposium GDP-04 *Palaeozoic-Mesozoic earth geography: Palaeomagnetic, faunal and facies constraints*, at International Geological Congress, Oslo, 2008. Co-convenor AGU Fall 2008 session on Asian tectonics, paleogeography & climate. Member Council of Scientific Society Presidents (2003-2004), member advisory committee of the Institute for Rock Magnetism, University of Minnesota; Panel member of National Research Council Associateship program; National Science Foundation Earth Science Division panel (1982-85); NSF panel to evaluate Distinguished Teaching Scholar nominations, December 2004; Member U. S. Geodynamics Committee of the National Research Council; International Lithosphere Commission member, and Chairman of Working Group 2 on "Phanerozoic Plate Motions and Orogenesis" (1981-1985); National Academy of Sciences Subcommittee on IAGA (1984). Past chair of visitation committee of the Vening Meinesz Research School of Geodynamics, Delft and Utrecht, the Netherlands. Past member of evaluation/visitation committees for departments of geology at University of Pittsburgh; University of Minnesota; Bowling Green State University; Ohio State University; Indiana University; Harvard University; Science Foundation of Sweden; (combined) VSNU teaching visitation of Dutch/Belgian (Flemish) University Departments of Earth Science.

Principal Research Interests:

Pre-Mesozoic paleomagnetism and plate tectonics; tectonics of the Caribbean and Mediterranean areas, Hercynian Europe and central Asia; rock magnetism and electron microscopy of sediments and ocean-floor basalts; Neogene magnetostratigraphy and environmental conditions of northeast Tibet; Structure and tectonics of orogenic belts; Oroclinal bending; General geodynamics as related to mantle tomography and paleogeography.

Invited lectures (last eight years only)

- 2010 – Fall AGU Meeting, San Francisco, invited talk “Supercontinent dispersal”, December
2010 – GSA International “Tectonic crossroads” Eurasia-Africa-Arabia meeting, Ankara, Turkey, “Permo-Triassic Pangea fits”, October 2010
2010 – Norwegian Academy Sciences & Letters, “Ediacaran paleomagnetism”, August 2010.
2010 – University of Kentucky, W. Thomas Retirement Symposium, “Oroclines”, April
2009– Spring AGU Meeting, Toronto, “Large-scale Oroclines in Eurasia” invited talk, May
2009– Spring AGU Meeting, Toronto, “Ediacaran paleomagnetism” invited talk, May
2008– University of Utrecht, Umbgrove Lecture, “Oroclines”, November
2008– Ann Arbor Rotary, “India’s northward drift”, November
2008– Michigan Basin Society, “Snowball Earth”, December
2008– International Geol. Congress, Oslo, “The Kazakhstan Orocline”, August
2008– University of Nebraska, “What’s the matter with Pangea”, April
2008– Cumhuriyet University, Sivas, Turkey, “Paleomagnetism in Turkey”, May
2007– University of Buenos Aires, Argentina, “Pangea”, November
2007– Yale University, “Pangea”, October
2007– Learning in Retirement, Osher Lifelong Learning Institute, “India’s drift”, October
2007– Statoil Research Center, Trondheim, Norway, “Oroclines” September
2007– Hands-on-Museum and AA District Library, “Snowball Earth”, July
2007– University of Michigan, Public lecture on “Snowball Earth”, organized by undergraduate student clubs of astronomy and biology, April
2006– Western Michigan Univ., “Oroclines: secondary curvature in mountain belts”, March
2006– University of Michigan, Sokol Award Public lecture “Paleomagnetism, Pangea, and Partnership”, October
2005– Geological Society of Australia and Tectonics Special Research Centre, Perth, Australia “Paleomagnetism and supercontinents”, September
2004– University of Helsinki, “Determination of remanence carriers in remagnetized and unremagnetized rocks using electron microscopy” October
2004– Norwegian Geol. Survey (NGU), Goldschmidt Lecture, “Oroclines”, September
2004– ETH-Zürich, Switzerland “Oroclines and crustal growth”, July
2004– Intern. Basement Tectonics Association Conference, Oak Ridge, Tennessee, “Paleomagnetism and crustal growth”, invited talk, June
2004– Spring AGU Meeting, Montreal, Canada, “Reliability of paleomagnetic data”, May
2004– Spring AGU Meeting, Montreal, Canada, “Determination of Titanium content and degree of oxidation of magnetite in MORB by electron microscopy” invited talk, May
2004– University of Munich, Germany “Oroclines and crustal growth”, February
2003– Learning in Retirement, The Geriatrics Center, Ann Arbor, “Pangea” May
2003– EGS/EUG/AGU meeting, “Kazakhstan orocline”, invited talk, April
2003– EGS/EUG/AGU meeting, “Non-dipole fields”, invited talk, April
2003– EGS/EUG/AGU meeting, “True Polar Wander”, invited talk, April
2003– University of Wyoming, “True Polar Wander”, April
2003– Chapman Conference, Gainesville FL. “Non-dipole fields”, March

PUBLICATIONS

Books

- Paleozoic reconstructions on the basis of paleomagnetic data, R. Van der Voo, C.R.Scotese and N.Bonhommet, Editors, Geodynamics Series, vol. 12, American Geophysical Union, 1984.
- Paleomagnetism of the Atlantic, Tethys and Iapetus Oceans, Cambridge University Press, 411 pp., 1993.
- Essentials of Paleomagnetism (electronic text, 16 chapters), Tauxe, L., with contributions by Butler, R., Banerjee, S.K., and Van der Voo, R., University of California Press, 2009.

In press:

Yuan, K. R. Van der Voo, M. L. Bazhenov, V. Bakhmutov, V. Alekhin, and B. W. H. Hendriks, Permian and Triassic Paleolatitudes of the Ukrainian Shield with Implications for Pangea Reconstructions”, *Geophys. Jour. International*.

30 Selected Articles from the last 10 years:

- Abrajevitch, A., and Van der Voo, R., Incompatible Ediacaran paleomagnetic directions suggest an equatorial geomagnetic dipole hypothesis. *Earth Planet Science Letters*, v. 293, 164-170, 2010.
- Abrajevitch, A., R. Van der Voo and D. K. Rea, Variations in relative abundances of goethite and hematite in the Bengal Fan sediments: climatic vs. diagenetic signal, *Marine Geology*, v. 267, 191-206, 2009.
- Torsvik, T. H., Müller, R. D., Van der Voo, R., Steinberger, B., and Gaina, C., Global plate motion frames: Toward a unified model, *Reviews of Geophysics*, v. 46, RG3004, doi: 10.1029/2007RG000227, 2008.
- Abrajevitch, A., R. Van der Voo, M. L. Bazhenov, N. M. Levashova and P. J. A. McCausland, The role of the Kazakhstan orocline in the late Paleozoic amalgamation of Eurasia, *Tectonophysics*, v. 455, 61-76, 2008.
- Hnat, J. S., van der Pluijm, B. A., Van der Voo, R., and Thomas, W. A., Differential shortening or rotation in curved thrust fronts: A magnetic, calcite twinning and palinspastic study of the Jones Valley thrust, Alabama, US Appalachians, *Jour Struct. Geol.*, v. 30, 725-738, 2008.
- Bazhenov, M. L., Grishanov, A. N., Van der Voo, R., and Levashova, N. M., Late Permian paleomagnetic data east and west of the Urals: Geophysical and geological implications, *Geophys. Jour. Intern.*, v. 173, 395-408, 2008.
- Rowe, C., Loope, D., Oglesby, R., Van der Voo, R., and Broadwater, C. E., Inconsistencies between Pangean reconstructions and basic climate controls, *Science*, 318, 1284-1286, 2007.
- McCausland, P. J. A., Van der Voo, R., and Hall, C. M., Circum-Iapetus paleogeography of the Precambrian-Cambrian transition with a new paleomagnetic constraint from Laurentia, *Precambrian Research*, 156, 125-152, 2007.
- Lotfy, H., and Van der Voo, R., Northeast Africa in the middle-late Eocene: Paleomagnetism of the marine-mammals sites and basalts in the Fayum Province, *Journal of African Earth Sciences*, 47, 135-152, 2007.
- Van der Voo, R., Levashova, N. M., Skrinnik, L. I., Kara, T. V., and Bazhenov, M. L., Late orogenic, large-scale rotations in the Tien Shan and adjacent mobile belts in Kyrgyzstan and Kazakhstan, *Tectonophysics*, 426, 335-360, 2006.

- Wang, D.M., R. Van der Voo and D. R. Peacor, Why is the remanent magnetic intensity of Cretaceous MORB so much higher than that of mid- to late Tertiary MORB? *Geosphere*, v. 1 (3), 138-146, 2005.
- Fang, X. M., Yan, M., Van der Voo, R., Rea, D. K., Song, C. H., Parés, J. M., Gao, J. P., Nie, J. S., and Dai, S., Late Cenozoic deformation and uplift of the NE Tibetan Plateau: Evidence from high-resolution magnetostratigraphy of the Guide Basin, Qinghai Province, China, *Geol. Soc. America Bull.*, 117, 1208-1225, 2005.
- Van der Voo, R., Paleomagnetism, oroclines and the growth of the continental crust, *GSA Today*, v 14, no. 12, pp. 4-9, 2004.
- Van der Voo, R., and Torsvik, T.H., The quality of the European Permo-Triassic paleopoles and its impact on Pangea reconstructions, *American Geophysical Union Monograph on Timescales of the paleomagnetic field*, J. E. T. Channell, D. V. Kent, W. Lowrie and J. G. Meert (Eds.), pp. 29-42, 2004.
- Bayona, G., Thomas, W.A., and Van der Voo, R., Kinematics of thrust sheets within transverse zones: A structural and paleomagnetic investigation in the Appalachian thrust belt of Georgia and Alabama, *Journal of Structural Geology*, 25, 1193-1212, 2003.
- Fang, X.M., Garzzone, C., Van der Voo, R., Li, J.J. and Fan, M., Initial Flexural Subsidence by 29 Ma on the NE Edge of Tibet from the Magnetostratigraphy of Linxia Basin, China, *Earth Planet. Sci. Lett.*, 210, 545-560, 2003.
- Kent, D.V., Cramer, B.S., Lanci, L., Wang, D.M., Wright, J.D., and Van der Voo, R., A case for a comet impact trigger for the Paleocene-Eocene thermal maximum and carbon-isotope excursion, *Earth Planet. Sci. Lett.*, 211, 13-26, 2003.
- Levashova, N.M., Degtyarev, K.E., Bazhenov, M.L., Collins, A. Q., and Van der Voo, R., Middle Paleozoic paleomagnetism of East Kazakhstan: Post-Middle Devonian rotations in a large-scale orocline in the Ural-Mongol Belt, *Tectonophysics*, 377, 249-268, 2003.
- Parés, J. M., Van der Voo, R., Downs, W. R., Yan, M., and Fang, X.-M., Northeastward growth and uplift of the Tibetan Plateau: Magnetostratigraphic insights from the Guide Basin, *J. Geophys. Res.* 108(B1), 2017, doi:10.1029/2001JB001349, 2003
- Torsvik, T. H., and Van der Voo, R., Refining the paleogeography of Gondwana and Pangea: Estimates of Phanerozoic non-dipole (octupole) fields. *Geophys. J. Intern.*, 151, 771-794, 2002.
- Torsvik, T. H., Van der Voo, R., and Redfield, T. F., Relative hotspot motion versus True Polar Wander, *Earth Planet. Sci. Letters*, 202, 185-200., 2002.
- Tohver, E., van der Pluijm, B. A., Van der Voo, R., Rizzotto, G., and Scandolara, J. E., Paleogeography of the Amazon craton at 1.2 Ma: Early Grenvillian collision with the Llano segment of Laurentia, *Earth Planet. Sci. Letters*, 199, 185-200, 2002.
- Si, J., and Van der Voo, R., Too-low magnetic inclinations in Central Asia: An indication of a long-term Tertiary non-dipole field? *Terra Nova*, 13, 471-478, 2001.
- Weil, A. B., Van der Voo, R., and van der Pluijm, B. A., Oroclinal bending and evidence against the Pangea megashear: The Cantabria-Asturias Arc (northern Spain), *Geology*, 29, 991-994, 2001.
- Zhou, W., Van der Voo, R., Peacor, D. R., Wang, D., and Zhang, Y., Low-temperature oxidation of titanomagnetite to titanomaghemite in MORB: A gradual process with implications for marine magnetic anomaly amplitudes, *J. Geophys. Res.*, 106, 6409-6421, 2001.
- McNamara, A. K., Mac Niocaill, C., van der Pluijm, B. A., and Van der Voo, R., West African proximity of Avalon in the latest Precambrian, *Geol. Soc. Am. Bull.*, 113, 1161-1170, 2001.
- Van der Voo, R., and Torsvik, T. H., Evidence for late Paleozoic and Mesozoic non-dipole fields provides an explanation for the Pangea reconstruction problems, *Earth Planet. Sci. Lett.*, 187, 71-81, 2001.
- Torsvik, T. H., Van der Voo, R., Meert, J. G., Mosar, J., and Walderhaug, H. J., Reconstructions of the continents around the North Atlantic at about the 60th parallel, *Earth Planet. Sci. Lett.*, 187, 55-69, 2001.

- Zhou, W., Van der Voo, R., Peacor, D. R., and Zhang, Y., Variable Ti-content and grain size of titanomagnetite as a function of cooling in very young MORB, *Earth Planet. Sci. Lett.*, 179, 9-20, 2000.
- Weil, A.B., Van der Voo, R., van der Pluijm, B.A., and Parés, J.M., The formation of an orocline by multiphase deformation: a paleomagnetic investigation of the Cantabria-Asturias Arc (northern Spain), *Journal of Structural Geology*, 22, 735-756, 2000