W.R. Peltier **Curriculum Vitae** **September 2016**

1. Personal

Name: Wm. Richard Peltier

Citizenship: Canadian

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2. Degrees

B.Sc., Physics, 1967, University of British Columbia.
M.Sc., Physics, 1969, University of Toronto.
Ph.D., Physics, 1971, University of Toronto.
Thesis: "Thermal Stability of non-Boussinesq Configurations"
Supervisor: Professor C.O. Hines
D.Sc., honoris causa, 2007, University of Waterloo

3. Employment

present appointment - University Professor, 1993-present
date of appointment to the graduate school - 1973
date of tenure award - 1977

Lecturer, 1971-72, Department of Physics, University of Toronto

Visiting Fellow, 1972-73, CIRES, University of Colorado

Visiting Assistant Professor, 1973-74, Department of Physics, University of Toronto

Consultant, Summer 1974, CIRES-INSTAAR, University of Colorado

Assistant Professor, 1974-77, Department of Physics, University of Toronto

Consultant, Summer 1975, CIRES-INSTAAR, University of Colorado

Visiting Associate Professor, Spring 1976, Geophysics and Space Physics, U.C.L.A.

Associate Professor, 1977-79, Department of Physics, University of Toronto

Visiting Professor, Spring 1978, Geophysics and Space Physics, U.C.L.A.

Steacie Fellowship Leave, 1978-79, NCAR, Boulder, Colorado

Guggenheim Fellowship Leave, 1987-1988, DAMTP and Bullard Lab., Cambridge Univ, UK

Full Professor, 1979-1993, Department of Physics, University of Toronto

Sabbatical Leave, 2002-2003, Professeur Invité, Institute de Physique du Globe de Paris, Université Paris VII

Professor Invité, Institute de Physique du Globe de Paris, Université Paris VII, Summer 2004

Principal Investigator, the Polar Climate Stability Network, 2005-2010

Adjunct Professor, Department of Earth Sciences, University of Waterloo, 2005-continuing.

Director, Centre for Global Change Science, University of Toronto, 2005-

Visiting Professor, Dept. of Earth Sciences and Bjerknes Center for Marine Research, University of Bergen, Bergen, Norway, Summer 2006.

Scientific Director, SciNet facility for High Performance Computation, 2007-

Professeur Invite, Ecole Normale Superieure, Paris, summer, 2009

4. Honours – including named lectures in bold

Alfred P. Sloan Foundation Fellowship, 1977-1979

E.W.R. Steacie Memorial Fellowship of NSERC, 1978-1980

Kirk Bryan Award of the Geological Society of America, 1980

Killam Senior Research Fellowship of the Canada Council, 1980-82

L.G. Weeks Distinguished Lecturer, Department of Geology and Geophysics, University of Wisconsin, Madison, 1985

Fellow of the American Geophysical Union, 1986-

Fellow of the Royal Society of Canada, 1986-

John Simon Guggenheim Memorial Foundation Fellowship, 1986-1988

Fellow of Clare Hall, Cambridge University, U.K., 1988-

Cecil and Ida Green Fellow, UC San Diego, 1988 (declined in favour of Cambridge sabbatical)

Lady Margaret Lecturer, and Norman Sosnow Distinguished Visiting Scholar, Christs College, Cambridge, Fall Term 1988

Senior Fellow of Massey College, U. Toronto, 1989-

Fellow of the American Meteorological Society, 1991-

Patterson Medal of the Atmospheric Environment Service of Canada (DOE), 1992

University Professor (highest rank held by ~25 faculty), University of Toronto, 1993-

IUGG Union Lecturer - Boulder, Colorado General Assembly, 1995

Distinguished Visiting Lecturer, Global Change Institute, Pennsylvania State Univ., 1995

Walter H. Elsasser Memorial Lecturer, John's Hopkins University, Baltimore, 1996

Benjamin Meeker Visiting Professor, Department of Mathematics, University of Bristol, UK, 1996

Presidents Lecture, IAMAS/IAPSO General Assembly, Melbourne, Australia, 1997

H. Burr Steinback Visiting Scholar, Woods Hole Oceanographic Institution, Summer 1997

Climate Center Visiting Scholar, LDEO, Columbia University, 1998

Sloan Foundation Lecturer, Woods Hole Oceanographic Institution, Woods Hole, MA, 1998

Distinguished Lecturer of the Canadian Geophysical Union, 1999-2000. (Gave a total of 20 lectures at Canadian Universities in the period October 1999 through March 2000**)**

R.F. Flint Lecturer, Yale University, New Haven, Connecticut, 2001

Science Watch listing as the fifth most highly cited Earth Scientist internationally in the decade 1991-2001 (based upon analysis of the Highly Cited project (Science Watch magazine, volume 12, no. 6, Nov.-Dec. 2001); this included analysis of all Earth science disciplines; geology, geophysics, atmospheric science, oceanography, etc.). This Article is included in this short cv.

IAMAS "Sushi Lecturer", IUGG General Assembly, Sapporo, Japan, 2003

Elected as Foreign Member to Fellowship in the Norwegian Academy of Science and Letters, 2004

Bancroft Award of the Royal Society of Canada, 2004

J. Tuzo Wilson Medal of the Canadian Geophysical Union, 2004

The Vetlesen Prize of the G. Unger Vetlesen Foundation, 2004

Leiv Eriksson Fellowship of the National Research Council of Norway, 2006

Miroslaw Romanowski Medal of the Royal Society of Canada, 2006

DSc, honoris causa, The University of Waterloo, 2007

Milutin Milankovic Medal of the European Geosciences Union, 2008

Milutin Milankovic Medal Lecture, EGU, Vienna, 2008

Proudman Lecture, Proudman Oceanographic Laboratory, Liverpool, September 2008

CAP Gold Medal for Achievements in Physics, 2009

Bower Award and Prize for Achievement in Science of the Franklin Institute of Philadelphia, 2010

Bower Prize Lecture, University of Pennsylvania, Philadelphia, May 2010

Charles A. Whitten Medal of the American Geophysical Union, 2010

CAP Global Medal Lecture, Memorial University, St. John's, Newfoundland, June 2011

Gerhard Herzberg Canada Gold Medal in Science and Engineering of NSERC, 2011

Killam Prize in Natural Science of the Canada Council, 2012

Killam Prize Lecture, University of Alberta, November 14, 2013

Guptill Lectures, Department of Physics and Atmospheric Science, Dalhousie University, 1 departmental and 1 public, November 18, 2014

5. Professional Affiliations

Canadian Association of Physicists

Canadian Geophysical Union - Past President

Canadian Meteorological and Oceanographic Society

Royal Astronomical Society - Fellow

Royal Meteorological Society - Fellow

European Geosciences Union

American Geophysical Union - Elected Fellow

American Meteorological Society - Elected Fellow

Geological Society of America

List of Publications

Citation data – Web of Science
Total Citations 19, 723
Average citations per publication ~54 (citations not stripped to exclude numerous nulls)
Number of publications with more than 100 citations 42,
H factor 68

Citation data – Google Scholar
Total Citations 29962
Number of publications with more than 100 citations 65
H factor 82

a. Refereed Articles

1. J.F. Hermance and W.R. Peltier, "The magnetotelluric fields of a line source", J. Geophys. Res., 75, 3351-3359, 1970.

2. G. Chimonas and W.R. Peltier, "The bow wave generated by an auroral arc in supersonic motion", Planet. Space Sci., 18, 599-612, 1970.

3. W.R. Peltier and J.F. Hermance, "The magnetotelluric fields of a gaussian electrojet", Can. J. Earth Sci., 8, 338-346, 1971.

4. W.R. Peltier, "Penetrative convection in the planetary mantle", Geophys. Astrophys. Fluid Dyn., 5, 47-88, 1972.

5. G. Chimonas and W.R. Peltier, "On severe storm acoustic signals observed at ionospheric height", J. Atmos. Terr. Phys., 36, 821-828, 1974.

6. W.R. Peltier, "The impulse response of a Maxwell earth", Rev. Geophys. Space Phys., 12, 649-669, 1974.

7. W.R. Peltier and J.T. Andrews, "Glacial isostatic adjustment I: the forward problem", Geophys. J. Roy astr. Soc., 46, 605-646, 1976.

8. W.R. Peltier, "Glacial isostatic adjustment II: the inverse problem", Geophys. J. Roy. astr., Soc., 46,

669-706, 1976.

9. P.A. Davis and W.R. Peltier, "Resonant parallel shear instability in the stably stratified p.b. □., J. Atmos. Sci., 33, 1287-1300, 1976.

10. W.R. Peltier and C.O. Hines, "On a possible ionospheric technique for tsunami detection", J. Geophys. Res., 81, 1995-2000, 1976.

11. J.T. Andrews and W.R. Peltier, "Collapse of the Hudson Bay ice center and glacio-isostatic rebound", Geology, 2, 73-75, 1976.

12. T.L. Clark and W.R. Peltier, "On the evolution and stability of finite amplitude mountain waves", J. Atmos. Sci., 34, 1715-1730, 1977.

13. P.A. Davis and W.R. Peltier, "Effects of dissipation on parallel shear instability near the ground", J. Atmos. Sci., 34, 1868-1884, 1977.

14. B.E. Ley and W.R. Peltier, "Wave generation and frontal collapse", J. Atmos. Sci., 35, 3-17,1978.

15. W.R. Peltier, J. Hallé and T.L. Clark, "The evolution of finite amplitude Kelvin-Helmholtz billows", Geophys. Astrophys. Fluid Dyn., 10, 53-87, 1978.

16. J.A. Clark, W.E. Farrell and W.R. Peltier, "Global changes in postglacial sea level: a numerical calculation", Quaternary Research, 9, 265-287, 1978.

17. H.N. Sharpe and W.R. Peltier, "Parameterized mantle convection and the Earth's thermal history", Geophys. Res. Lett., 5, 737-740, 1978.

18. W.R. Peltier, W.E. Farrell and J.A. Clark, "Glacial isostasy and relative sea level: a global finite element model", Tectonophysics, 50, 81-110, 1978.

19. P.W. Cary, G.K.C. Clarke and W.R. Peltier, "A creep instability analysis of the Antarctic and Greenland Ice Sheets", Can. J. Earth Sci., 16, 182-188, 1979.

20. W.R. Peltier and T.L. Clark, "The evolution and stability of finite amplitude mountain waves. Part II: Surface wave drag and severe downslope windstorms", J. Atmos. Sci., 36, 1498-1529, 1979.

21. H.N. Sharpe and W.R. Peltier, "A thermal history model for the Earth with parameterized convection", Geophys. J. Roy. astr. Soc., 59, 171-203, 1979.

22. P.A. Davis and W.R. Peltier, "Some characteristics of the Kelvin-Helmholtz and resonant over-reflection modes of shear flow instability and of their interaction through vortex pairing", J. Atmos. Sci., 36, 2394-2412, 1979.

23. W.R. Peltier, D.A. Yuen and P. Wu, "Postglacial rebound and transient rheology", Geophys. Res. Lett., vol. 7, no. 10, 733-736, 1980.

24. D.A. Yuen and W.R. Peltier, "Mantle plumes and the thermal stability of the D" layer", Geophys. Res. Lett., vol. 7, no. 9, 625-28, 1980.

25. W.R. Peltier and T.L. Clark, Reply to comments by D. Lilly and J. Klemp on "The evolution and stability of finite amplitude mountain waves II", J. Atmos. Sci., vol. 37, no. 9, 2122-25, 1980.

26. G. Jarvis and W.R. Peltier, "Oceanic bathymetry profiles flattened by radiogenic heating in a convecting mantle", Nature vol. 285, no. 5767, 649-651, 1980.

27. D.A. Yuen, W.R. Peltier and G. Schubert, "On the existence of a second scale of convection in the upper mantle", Geophys. J.R. astr. Soc., 65, 171-190, 1981.

28. R. Sabadini and W.R. Peltier, "Pleistocene deglaciation and the Earth's rotation: implications for mantle viscosity", Geophys. J.R. astr. Soc., 66, 553-578, 1981.

29. B.E. Ley and W.R. Peltier, "Propagating mesoscale cloud bands", J. Atmos. Sci., 38, 1206-1219, 1981.

30. W.R. Peltier, "Ice age geodynamics", invited paper, Ann. Rev. Earth Planetary Sciences, 9, 199-225, 1981.

31. G. Jarvis and W.R. Peltier, "Effects of lithospheric rigidity on ocean floor bathymetry and heat flow", Geophys. Res. Lett., 8, 857-860, 1981.

32. G. Jarvis and W.R. Peltier, "Mantle convection as a boundary layer phenomenon", Geophys. J.R. astr. Soc., 68, 389-427, 1982.

33. D.A. Yuen and W.R. Peltier, "Normal modes of the viscoelastic earth", Geophys. J.R. astr. Soc., 69, 495-526, 1982.

34. A. Simard and W.R. Peltier, "Ship waves in the lee of isolated topography", J. Atmos. Sci, 39, 587-609, 1982.

35. P. Wu and W.R. Peltier, "Viscous gravitational relaxation," Geophys. J.R. astr. Soc., 70, 435-485, 1982.

36. W.R. Peltier, "Dynamics of the ice age earth", Advances in Geophysics, vol. 24, 1-146, 1982.

37. W.R. Peltier and Patrick Wu, "Mantle phase transitions and the free air gravity anomalies over Fennoscandia and Laurentia", Geophys. Res. Lett., 9 (7), 731-734, 1982.

38. W.R. Peltier and G.T. Jarvis, "Whole mantle convection and the thermal evolution of the earth", Phys. Earth Planet Int., 29, 281-304, 1982.

39. W.R. Peltier and T.L. Clark, "Nonlinear mountain waves in two and three spatial dimensions", Quart. J.R. Meteorol. Soc., 109, 527-548, 1983.

40. W.R. Peltier and P. Wu, "Continental lithospheric thickness and deglaciation induced true polar wander", Geophys. Res. Lett., 10, 181-184, 1983.

41. P. Wu and W.R. Peltier, "Glacial isostatic adjustment and the free air gravity anomaly as a constraint on deep mantle viscosity", Geophys. J.R. Astron. Soc., 74, 377-449, 1983.

42. W.R. Peltier, "Constraint on deep mantle viscosity from LAGEOS acceleration data", Nature, 304, 434-436, 1983.

43. P. Wu and W.R. Peltier, "Pleistocene deglaciation and the earth's rotation: A new analysis, Geophys. J.R. astr. Soc., 76, 753-792, 1984.

44. W.R. Peltier, "The thickness of the continental lithosphere", J. Geophys. Res., 89, B13, 303-316, 1984.

45. T.L. Clark and W.R. Peltier, "Critical level reflection and the resonant growth of nonlinear mountain waves", J. Atmos. Sci., 41, 3122-3134, 1984.

46. W.R. Peltier, "The rheology of the planetary interior", J. Rheol., 28, 665-697, 1984.

47. W.R. Peltier, "Mantle convection and viscoelasticity", invited paper, Ann. Rev. Fluid Mech., 17, 561-608, 1985.

48. W.R. Peltier, "The LAGEOS constraint on deep mantle viscosity: results from a new normal mode method for the inversion of viscoelastic relaxation spectra", J. Geophys. Res., 90, 9411-9421, 1985.

49. G.P. Klaassen and W.R. Peltier, "Prandtl number effects on the evolution and stability of finite amplitude Kelvin-Helmholtz billows", Geophys. Astrophys. Fluid Dyn., 32, 23-60, 1985.

50. G.P. Klaassen and W.R. Peltier, "The high Reynolds number evolution of finite amplitude Kelvin-Helmholtz waves", J. Atmos. Sci., 42, 1321-1339, 1985.

51. G.P. Klaassen and W.R. Peltier, "The onset of turbulence in finite amplitude Kelvin-Helmholtz billows", J. Fluid Mech., 155, 1-35, 1985.

52. W.R. Peltier and R. Chagnon, "Sensitivity experiments with a model of stratospheric sudden warming", PAGEOPH, 123, 99-140, 1985.

53. I. Halevy and W.R. Peltier, "Barotropic instability and Rossby wave radiation, J. Atmos. Sci., 42, 1825-1837, 1985.

54. W.T. Hyde and W.R. Peltier, "Sensitivity experiments with a model of the ice age cycle: the response to harmonic forcing", J. Atmos. Sci., 42, 2170-2188, 1985.

55. D.E. Cartwright, T.P. Barnett, C.J.R. Garrett, W.E. Carter, W.R. Peltier, T. Pyle, and K.R. Thompson, "Changes in relative mean sea level", EOS, 66, 754-756, 1985.

56. W.R. Peltier, "New constraints on transient lower mantle rheology and internal mantle buoyancy from glacial rebound data", Nature, 318, (6047), 614-617, 1985.

57. G.T. Jarvis and W.R. Peltier, "Lateral heterogeneity in the convecting mantle", J. Geophys. Res., 91, 435-451, 1986.

58. W.R. Peltier, "Deglaciation induced vertical motion of the North American continent and transient lower mantle rheology", J. Geophys. Res., 91, 9099-9123, 1986.

59. W.R. Peltier, R.A. Drummond and A.M. Tushingham, "Postglacial rebound and transient lower mantle rheology", Geophys. J.R. astr. Soc., 87, 79-116, 1986.

60. W.R. Peltier, K. Higuchi and R. Bloxam, "Quasi_geostrophic simulations of the 1979 stratospheric major warming: the importance of middle atmospheric drag", PAGEOPH, 124, 1051-1085, 1986.

61. G.W. Kent Moore and W.R. Peltier, "Cyclogenesis in frontal zones", J. Atmos. Sci., 44, 384-409, 1987.

62. W.T. Hyde and W.R. Peltier, "Sensitivity experiments with a model of the ice age cycle: the response to

Milankovitch forcing", J. Atmos. Sci., 44, 1351-1374, 1987.

63. A.M. Forte and W.R. Peltier, "Plate tectonics and a-spherical earth structure: the importance of poloidal-toroidal coupling", J. Geophys. Res., 92, 3645-3679, 1987.

64. W.R. Peltier, "Lithospheric thickness, Antarctic deglaciation history, and ocean basin discretization effects in a global model of postglacial sea level change", Quat. Res., 29, 93-112, 1988.

65. W.R. Peltier, "Global sea level and earth rotation", Science, 240, 895-901, 1988.

66. W.D. Smyth, G.P. Klaassen, and W.R. Peltier, "Finite amplitude Holmboe waves", Geophys. Astrophys. Fluid Dyn., 43, 181-222, 1988.

67. J.P. Rene Laprise and W.R. Peltier, "On the structural characteristics of steady finite amplitude mountain waves over bell-shaped topography", J. Atmos. Sci., 46, 586-595, 1989.

68. J.P. Rene Laprise and W.R. Peltier, "The linear stability of nonlinear mountain waves: implications for the understanding of severe downslope windstorms", J. Atmos. Sci., 46, 545-564, 1989.

69. J.P. Rene Laprise and W.R. Peltier, "On the structure and energetics of transient eddies in a numerical simulation of breaking mountain waves", J. Atmos. Sci., 46, 565-585, 1989.

70. G.P. Klaassen and W.R. Peltier, "The role of transverse secondary instabilities in the evolution of free shear layers" J. Fluid Mech., 202, 367-402, 1989.

71. G.W. Kent Moore and W.R. Peltier, "Nonseparable baroclinic instability and frontal cyclogenesis: Part 1. Quasi-geostrophic dynamics", J. Atmos. Sci., 46, 57-78, 1989.

72. G.W. Kent Moore and W.R. Peltier, "Frontal cyclogenesis and the geostrophic momentum approximation", Geophys. Astrophys. Fluid Dyn., 45, 183-197, 1989.

73. W.R. Peltier and A.M. Tushingham, "Global Sea Level Rise and the Greenhouse Effect: Might they be Connected?", Science, 244, 806-810, 1989.

74. J.X. Mitrovica and W.R. Peltier, "Pleistocene deglaciation and the global gravity field", J. Geophys. Res., 94, 13651-13671, 1989.

75. J.F. Scinocca and W.R. Peltier, "Pulsating downslope windstorms", J. Atmos. Sci., 46, 2885-2914, 1989.

76. W.D. Smyth and W.R. Peltier, "The transition between Kelvin-Helmholtz and Holmboe instability: An Application of the Over-reflection Hypothesis", J. Atmos. Sci., 46, 3698-3720, 1989.

77. A.M. Forte and W.R. Peltier, "Core Mantle Boundary Topography and Whole Mantle Convection", Geophys. Res. Lett., 16, 621-624, 1989.

78. W.R. Peltier, G.W.K. Moore and S. Polavarapu, "Cyclogenesis and Frontogenesis", Tellus, 42A, 3-13, 1990.

79. W.D. Smyth and W.R. Peltier, Three-Dimensional Primary Instabilities of a Stratified, Dissipative, Parallel Flow, Geophys. Astrophys. Fluid Dyn., 52, 249-261, 1990.

80. G.T. Jarvis and W.R. Peltier, "Low wavenumber signatures of time dependent mantle convection", Physics of the Earth and Planetary Interiors, 59, 182-194, 1990.

81. L.P. Solheim and W.R. Peltier, "Heat Transfer and the Onset of Chaos in an Axisymmetric Anelastic Model of Whole Mantle Convection", Geophys. Astrophys. Fluid Dynamics, 53, 205-255, 1990.

82. G. Deblonde and W.R. Peltier, "Models of the mid-Pleistocene Climate transition", Annals of Glaciology, 14, 47-50, 1990.

83. G.W. Kent Moore and W.R. Peltier, "Nonseparable Baroclinic Instability. Part II. Primitive Equations Dynamics", J. Atmos. Sciences, 47, 1223-1242, 1990.

84. W.R. Peltier, "Paleoenvironmental Modelling and Global Change", Paleogeo. Paleoclim. and Paleoec., 82, 79-85, 1990.

85. G. Deblonde and W.R. Peltier, "A model of late Pleistocene ice sheet growth with realistic geography and simplified cryodynamics and geodynamics, Climate Dynamics, 24, 23-31, 1990.

86. G.W.K. Moore and W.R. Peltier, "On the accuracy of the WKBJ Approximation to the nonseparable quasi-geostrophic baroclinic instability problem", J. Atmos. Sci., 47, 2829-2831, 1990.

87. S.M. Polavarapu and W.R. Peltier, "The structure and nonlinear evolution of synoptic scale cyclones: Life cycle simulations with a cloud scale model", J. Atmos. Sci., 47, 2645-2672, 1990.

88. W.R. Peltier and J.F. Scinocca, "The origin of Severe Downslope Windstorm Pulsations", J. Atmos. Sci., 47, 2853-2870, 1990.

89. N.J. Shackleton, A. Berger, and W.R. Peltier, "An alternative astronomical calibration of the lower Pleistocene timescale based on ODP site 677", Transactions of the Royal Society of Edinburgh: Earth Sciences, 81, 251-261, 1990.

90. G. Deblonde and W.R. Peltier, "A one dimensional model of Continental ice volume fluctuations through the Pleistocene: Implications for the origin of the mid-Pleistocene climate transition", J. Climate, 4, 18-34, 1991.

91. S.R. Karpik and W.R. Peltier, "Multigrid Methods for the Solution of Poisson's Equation in a thick Spherical Shell", SIAM J. Sci. Stat. Comp., 12, 681-694, 1991.

92. W.R. Peltier and A.M. Tushingham, "Influence of glacial isostatic adjustment on tide gauge measurements of secular sea level change", J. Geophys. Res., 96, 6779-6796, 1991.

93. G.P. Klaassen and W.R. Peltier, "The influence of stratification on secondary instability in free shear layers", J. Fluid Mech., 227, 71-106, 1991.

94. J.X. Mitrovica and W.R. Peltier, "A complete formalism for the inversion of post_glacial rebound data: resolving power analysis", Geophys. Journal International, 104, 267-288, 1991.

95. G. Deblonde and W.R. Peltier, "Simulations of continental ice sheet growth over the last glacial_interglacial cycle: Experiments with a one level seasonal energy balance model including realistic geography", J. Geophys. Res., 96, 9189-9215, 1991.

96. A.M. Forte and W.R. Peltier, "Viscous flow models of global geophysical observables: forward

problems", J. Geophys. Res., 96, 20131-20159, 1991.

97. A.M. Tushingham and W.R. Peltier, "ICE_3G: A new global model of late Pleistocene deglaciation based upon geophysical predictions of post-glacial relative sea level change", J. Geophys. Res., 96, 4497-4523, 1991.

98. J.X. Mitrovica and W.R. Peltier, "On postglacial geoid subsidence over the equatorial oceans", J. Geophys. Res., 96, 20053-20071, 1991.

99. J.X. Mitrovica and W.R. Peltier, "Free air gravity anomalies associated with glacial isostatic disequilibrium: Load history effects on the inference of deep mantle viscosity", Geophys. Res. Lett., 18, 235-238, 1991.

100. A.M. Tushingham, A. Lambert, J.O. Liard and W.R. Peltier, "Secular gravity changes: measure-ments and predictions for selected Canadian sites," Can. J. Earth Sci., 28, 557-560, 1991.

101. J.F. Scinocca and W.R. Peltier, "On the Richardson number dependence of nonlinear critical layer flow over localized topography", J. Atmos. Sci., 48, 1560-1572, 1991.

102. W.D. Smyth and W.R. Peltier, "Instability and Transition in Finite Amplitude Kelvin-Helmholtz and Holmboe Waves", J. Fluid Mech., 228, 387-415, 1991.

103. A.M. Forte and W.R. Peltier, "Mantle convection and core-mantle boundary topography: explanations and implications", Tectonophysics, 187, 91-116, 1991.

104. A.M. Forte, W.R. Peltier and A.M. Dziewonski, "Inferences of mantle viscosity from tectonic plate velocities", Geophys. Res. Lett., 18, 1747-1750, 1991.

105. A.M. Tushingham and W.R. Peltier, "Validation of the ICE_3G model of Warm-Wisconsin deglaciation using a global data base of relative sea level histories", J. Geophys. Res., 97, 3285-3304, 1992.

106. J.X. Mitrovica and W.R. Peltier, "A comparison of methods for the inversion of viscoelastic relaxation spectra", Geophys. J. Int., 108, 410-414, 1992.

107. W.R. Peltier and L.P. Solheim, "Mantle phase transitions and layered chaotic convection", Geophys. Res. Lett., 19, 321-324, 1992.

108. J.X. Mitrovica and W.R. Peltier, "Constraints on mantle viscosity from relative sea level variations in Hudson Bay", Geophys. Res. Lett., 19, 1185-1188, 1992.

109. W.R. Peltier, A.M. Forte, J.X. Mitrovica and A.M. Dziewonski, "Earth's gravitational field: Seismic tomography resolves the enigma of the Laurentian anomaly", Geophys. Res. Lett., 19, 1555-1558, 1992.

110. G. Deblonde, W.R. Peltier and W.T. Hyde, "Simulations of continental ice sheet growth over the last glacial - interglacial cycle: experiments with a one level seasonal energy balance model including seasonal ice-albedo feedback", Global and Planetary Change, 98, 37-55, 1992.

111. B.R. Sutherland and W.R. Peltier, "The linear stability of stratified jets", Geophys. Astrophys. Fluid Dyn., 66, 101-131, 1992.

112. A.M. Tushingham and W.R. Peltier, "Implications of the radiocarbon timescale for ice-sheet chronology and sea level", Quaternary Research, 39, 125-129, 1993.

113. G. Deblonde and W.R. Peltier, "Late Pleistocene Ice Age Scenarios based upon observational evidence", J. Climate, 6, 709-727, 1993.

114. S.M. Polavarapu and W.R. Peltier, "On the formation of small scale cyclones in numerical simulations of synoptic scale baroclinic wave life cycles: secondary instability at the cusp", J. Atmos. Sci., 50, 1047-1057, 1993.

115. L.P. Solheim and W.R. Peltier, "Mantle phase transitions and layered convection", C.J. Earth Science, 30(5), 881-892, 1993.

116. W.D. Smyth and W.R. Peltier, “Two Dimensional turbulence in homogeneous and stratified shear layers”, Geophys. Astrophys. Fluid Dyn., 69, 1-32, 1993.

117. J.X. Mitrovica and W.R. Peltier, "The inference of mantle viscosity from an inversion of the Fennoscandian relaxation spectrum", Geophys. J. Int., 114, 45-62, 1993.

118. William T. Hyde and W.R. Peltier, Effect of altered boundary conditions on GCM studies of the climate of the last glacial maximum, Geophys. Res. Lett., 20, 939-942, 1993.

119. J.F. Scinocca and W.R. Peltier, "The instability of Long's stationary solution and the evolution towards severe downslope windstorm flow. Part I: Nested-grid numerical simulations", J. Atmos. Sci., 50(14), 2245-2263, 1993.

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b <u>Book reviews, Encyclopedia articles, Papers in Conference Proceedings, Non-Technical Articles, Technical Reports</u>

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2. W.R.Peltier, "Energy and momentum flux in mountain waves".Report for the World Meteorological Organization (Boundary layer Commission). Also published in the *Proceedings of the First Canadian Symposium on Climate*, Atmospheric Environment Service, 27, pp., 1977.

3. W.R. Peltier (with three others), "Gravity wave interactions with severe storms", *Workshop recommendations for Project Sesame*, Planning Documentation Volume, U.S. Department of Commerce, NOAA, ERL, 61-84, 1977.

4. W.R. Peltier, "Slow changes in the Earth's shape and gravitational field: signatures of glacial isostasy", *Proceedings of the Second International Symposium on Problems Related to the Redefinition of North American Vertical Geodetic Networks (1980)*, 133-150, 1980.

5. W.R. Peltier, Review of *The Earths' Variable Rotation* by Kurt Lambeck. *J. Roy. Astron. Soc. Canada*, **75**, (5), 271-273, 1981.

6. W.R. Peltier, Review of *Mechanisms of Continental Drift and plate tectonics* by P.A. Davies and S.K. Runcorn. *Geophys. Astrophys. Fluid Dyn.*, **21**, 319-322, 1982.

7. W.R. Peltier, "Convection in the Earth", *Encyclopedia of Science and Technology*, McGraw_Hill Publ. Co. Ltd., 457-463, 1982. Reprinted, 1984.

8. W.R. Peltier, Review of *Deformations of an Elastic Earth* by Paulo Lanzano. *Icarus*, **58**, 452-453, 1984.

9. W.R. Peltier, Review of *Principles of Geodynamics* by Adrian E. Scheiddeger. *Geophys. Astrophys. Fluid Dyn.*, **28**, 309-311, 1984.

10. W.R. Peltier, "Earth Physics", The *New Canadian Encyclopedia*, 1985.

11. G.W. Kent Moore, and W.R. Peltier, “Cyclogenesis along frontal zones, Proc. Second Int. Conference on Southern Hemisphere Meteorology”, pp. 81-84, American Meteorological Soc., Wellington, New Zealand, Dec. 1986.

12. G.W. Kent Moore, and W.R. Peltier, “Cyclogenesis along frontal zones”, Proc. of the WMO/AMS/UCS Int. Workshop on Rain Producing Systems in the Tropics and the Extra-Tropics, pp. 89-93, San Jose, Costa Rica, July 1986.

13. W.R. Peltier, and T.L. Clark, “The nonlinear amplification of breaking mountain waves: ingredients of a drag parameterization”, Proceedings of the ECMWF Symposium on Topographic Effects, pp. 223-250, Reading, England, Oct. 1986.

14. T.L. Clark, and W.R. Peltier, “Mountain waves: modelling aspects”, Op. Cit., pp. 195-222, Reading, England, Oct. 1986.

15. G.W. Kent Moore, and W.R. Peltier, “Non-separable baroclinic instability and frontal cyclones, Proc. of the Third Int. Symposium on Stratified Flows”, Calif. Inst. of Tech., Pasadena, pp. 1-12 (session B1) 1987.

16. G.P. Klaassen, and W.R. Peltier, “Secondary instability and transition in finite amplitude Kelvin-Helmholtz billows”, Proc. Third Int. Symp. on Stratified Flows, Calif. Inst. of Tech., Pasadena, pp. 1-10, (session A3) 1987.

17. W.D. Smyth, G.P. Klaassen, and W.R. Peltier, “The nonlinear evolution of Holmboe waves”, Proc. Third Int. Symp. on Stratified Flows, Calif. Inst. of Tech., Pasadena, pp. 21-30 (session A3) 1987.

18. W.R. Peltier, and G.W. Kent Moore, “Cyclone scale baroclinic instability”, Proc. Sixth Extra tropical Cyclone Workshop, Pacific Grove California February 1987.

19. G. W. Kent Moore, and W.R. Peltier, “On the genesis of meteorological bombs”, Op. Cit. 1987.

20. G.W. Kent Moore, and W.R. Peltier, “On the dynamical process responsible for cyclone scale frontal waves”, Proc. Int. Conf. on Monsoon and Mesoscale Meteorology, pp. 21-26, American Meteorological Soc., Taipei, Republic of China, Nov. 1987.

21. W.R. Peltier, “Mantle Viscosity: constraints from glacial isostasy, plate tectonics, and seismic

tomography", in The Encyclopedia of Geophysics, David E. James ed., Academic Press, pp. 819-834, 1989.

22. W.R. Peltier, Our Fragile Inheritance, Chapter III in *Planet Under Stress*, Constance Mungall and Digby J. McLaren eds, pp. 80-95, Oxford University Press, Toronto, 1990. [Also published in French in *La Terre en Pril*, Les Presses de L'Universite D'Ottawa, Ottawa, 1990.

23. W.R. Peltier, "Sea Level Variations", in the Encyclopedia of Global Change, W. Nierenburg ed., pp. 53-62, Academic Press, San Diego, 1991.

24. B.R. Sutherland and W.R. Peltier, "On the linear stability of stratified symmetric jets", Proceedings of the Eighth Conference on Atmospheric Waves and Stability, pp. 39-42, A. Meteorological Soc., Boston, MA, 1991.

25. W. D. Smyth and W .R. Peltier, "Vortex dynamics in two dimensional shear layers", op. cit., pp. 84-87, 1991.

26. A.B.G. Bush and W.R. Peltier, "Vertical mixing in mid-latitude baroclinic instability: tropopause folds and troposphere-stratosphere exchange", op. cit., pp. 404-407, 1991.

27. W.R. Peltier, Review of "Topics in Geophysical Fluid Dynamics: Atmospheric Dynamics, Dynamo Theory and Climate Dynamics", by M. Ghil and S. Childress, *PAGEOPH*, **138**, 176-178, 1992.

28. W.R. Peltier and J.F. Scinocca, "Stratified turbulence in downslope flow over topography: an image", in *Cray Channels*, pg. 37, summer 1992.

29. W.R. Peltier, "Future research trends in the atmospheric sciences", invited article for *Geoscience Canada*, **20**, 129-132, 1993.

30. W.R. Peltier, "Mantle Convection", Encyclopedia of Science and Technology, McGraw-Hill Publ. Co., 8th Ed., 1995.

31. W.R. Peltier, John Tuzo Wilson 1908-1993, *EOS*, Vol. 75, No. 52, 609-612, 1994.

32. W.R. Peltier, John Tuzo Wilson, McMillan Encyclopedia of Earth Science, E. Julias Dasch, Editor, McMillan Reference USA, 1185-1186, 1996.

33. W.R. Peltier, "Earth as a dynamic system", McMillan Encyclopedia of Earth Science, pp. 575-578, 1996.

34. W.R. Peltier, "Mantle convection and plumes", McMillan Encyclopedia of Earth Science, pp. 578-582, 1996.

35. C.P. Caulfield and W.R. Peltier, "Mixing in stratified shear flows: dependence upon initial conditions", in Proceedings of the 5th International Symposium on Stratified Flows, ed. G.A. Lawrence, R. Pieters and N. Yonemitsu, pp. 483-488, U.B.C. Press, 2000.

36. W.R. Peltier, "Earth system history", in The Encyclopedia of Global Environmental Change: vol.;1, Michael C. MacCracken and John S. Perry eds., John Wiley and Sons, pp. 31-60, 2002. (Extended invited lead article to volume 1 of a 4-volume encyclopedia).

37. W.R. Peltier, Isostasy, op.cit., p. 479, 2002.

38. W.R. Peltier, “A Design Basis Glacier Scenario”, Technical Consultant’s Report No. 06819-REP-01200-10069-R00 for Ontario Power Generation, 73 pages, 2001.

39. W.R. Peltier, “Long term climate change-glaciation”, Technical Consultants Report No. 0689-REP-01220-10113-R00 for Ontario Power Generation, 64 pages, 2003.

40. W.R. Peltier, Richard W. Ojakangas, Christiane Weber and Tuomo Makela, Finnish Geoscience Evaluation Report, Publications of the Academy of Finland 14103, 88 pp., 2003.

41. Johannes Lelieveld, W. Richard Peltier, Frank Hsia-San Shu, Dorrik Stow, Ray F. Weiss, External Review of the School of Earth and Environmental Science, Seoul National University and University of Korea, for the BK21 Programme, pp. 1-5, 2004.

42. Dennis Duffy, David Humphreys, Ross Newkirk, Richard Peltier. External Review Report for a new UOIT B.Sc. programme in Energy and the Environment for the Postsecondary Education Quality Assessment Board of Ontario, 26 pages, 2004.

43. W.R. Peltier, “Permafrost influences upon the subsurface”, Technical Consultants Report No. 06819-REP-01200-10134-R00 for Ontario Power Generation, 32 pages, 2005.

44. W.R. Peltier, “Sub-glacial hydrology effects upon spent fuel repository safety”, Technical Consultants Report No. 06820-REP-01200-10135 for Ontario Power Generation, 20 pages, 2006.

45. John R. Dudeney, W. Richard Peltier and Francisco J. Navarro, “Antarctic Research in Finland 1998-2005”, International Evaluation Report for the Academy of Finland, 56 pages, 2006.

46. W.R. Peltier, “Review of The Phanerozoic Carbon Cycle by Robert A. Berner”, American Journal of Science, 306, 774-776, 2006.

47. Bill Wakeham (Chair), Martin Barstow, Donal Bradley, Sir Mike Brady, Christine Davies, Carlos Frenk, Sir Richard Friend, Jorgen Kjerns and Richard Peltier, Review of UK Physics, pp. 1-77 , Research Councils of the United Kingdom (RCUK), October 2008.

48. W.R. Peltier, “Climate models: Are they compatible with Geological constraints on Earth System processes?”, Geoscience Canada, vol. 37, Number 4, 174-179, 2010.

49. W.R. Peltier, “Mantle Viscosity, Encyclopedia of Solid Earth Geophysics, Springer, Berlin, pp. 869-876, 2011.

M.Sc. Students

1. S.Y. Fan, "Mountain lee waves and seismic sea waves", 1974-75.

2. J.E. Donnegani, "Acoustic gravity wave propagation from a severe storm", 1974-75.

3. P.S. King, "Uniqueness of temperature profiles derived from satellite radiance measurements", 1974-75.

4. D. Hudak, "Mountain waves: a nonlinear stream function vorticity model", 1974-75.

5. B.E. Ley, "Wave generation and frontal collapse", 1975-76.

6. R.J. Morris, "Lee waves: a convective trigger mechanism", 1975-76.

7. J. Hall, "Numerical simulations of finite amplitude KH waves", 1976-77.

8. K. Higuchi, "The initiation of prefrontal squall lines", 1976-77.

9. P. Chen, "Mountain waves: a linear approach", 1977-78.

10. D. Patrick, "Severe downslope windstorms", 1977-78.

11. P. Wu "Viscous gravitational relaxation and glacial isostasy", 1977-78.

12. A. Simard, "Ship waves in the lee of topography", 1979-80.

13. R. Chagnon, "Stratospheric sudden warming and tropospheric blocking", 1979-80.

14. I. Kay, "Convection in a spherical shell with solid_solid phase transitions", 1980-82.

15. S. Polavarapu, "Lagrangian models of atmospheric frontogenesis", 1982-84.

16. A. Forte, "The gravitational and thermal signatures of plate tectonics", 1983-85.

17. M. Tushingham, "Mantle viscosity from postglacial rebound data", 1983-85.

18. W. Smyth, "The non_linear Holmboe wave and the genesis of solitons in stably stratified parallel flow", 1984-1986.

19. L. Solheim, "Axi-symmetric spherical convection at high Rayleigh number: a model of Planetary thermal history", 1984-1986.

20. J. Bush, "Chaos in MHD systems and the dynamo theory of the earth's magnetic field", 1986-1988. Completed Ph.D. at Harvard University and now Associate Professor of Mathematics at the Massachusetts Institute of Technology.

21. J. Scinocca, "Nonlinear topographically forced internal waves", 1986-1988.

22. Andrew Bush, "Frontal Cyclogenesis and the Origins of Imbalance", 1989-90.

23. Lin Lin, "A spherical multigrid model of mantle convection with solid-solid phase transformations", 1992-93.

24. Gordan Stuhne, “Barotropic chaos in a new finite element model of large scale flow on the sphere”, 1993-94.

25. Guido Vettoretti, “Climate system history and dynamics: An initial simulation with the CCC

GCM of the climate at 6000 kyr BP", 1993-94.

26. Kui Xu, "Glacial isostatic adjustment effects on modern variations of relative sea level", 1993-94.

27. Pavel Potylitsine, "Vorticity dynamics with stratification and rotation", 1994-95.

28. Samuel Leonard Butler, "Avalanche effects in mantle mixing with phase transitions", 1994-95.

29. Amit Ghosh, "Stratospheric Sudden Warming in the Ice-Age", 1996-97.

30. Jana Tharmaratnam, "A numerical model of mantle convection", 1997-1998.

31. Qiong Zheng, "Global Climate Change during Deglaciation", 2000-2001.

32. Christopher Harlow, "Jelly sandwich models of the deformation of the shallow viscoelastic structure of the Earth", 2002-2003.

33. Yonggang Liu, "Mantle mixing and the endothermic phase transformation at 660 km depth", 2003-2004.

34. Mohammed Hamidian, "The Fluid mechanics of ENSO", 2004-2005.

35. Xiaolu Yu, "The influence of solar variability on climate change during the industrial era", 2005-2006.

36. Alireza Mashayekhi, "Turbulent Mixing in the Oceans", 2008-2010

37. Keven Roy, "Space Geodetic Constraints on polar land ice melting", 2009-2010

38. Jun Yang, "Snowball Earth" (Jun is on secondment for two years from the Chinese Academy of Science), 2009-2011.

39. Deepak Chandan, "An internal loading theory for the mantle convection process based upon seismic tomographic imaging", 2010-2011.

40. Cai Durbin, "Mantle convection and surface tectonics", 2011-2012

41. Hesam Salehipour, "A discontinuous Galerkin formulation of oceanic tides with paleoclimate applications", 2011-2012

42. Ryan Li, "Global warming impacts on sea level rise", 2015-2016

Ph.D. Students

1. P.A. Davis, "Wave mechanics and the stability of atmospheric shear flows", 1974-77. Now Director of Environmental Research with Atomic Energy of Canada Limited.

2. H.N. Sharpe, "A thermal history model for the Earth with parameterized convection", 1975-77. Now Research Scientist with SOHIO Ltd.

3. P. Chuk-K. Wu, "The viscosity of the deep mantle", 1978-1982. Now Full Professor of Geophysics at the University of Calgary.

4. G.P. Klaassen, "The transition to turbulence in stratified parallel flows", 1979-1982. Now Associate Professor of Earth and Atmospheric Science at York University.

5. I. Halevy, "Solar terrestrial weather relations", 1978-84. Now Private Sector Consultant in the City of Toronto.

6. B. Ley, "Internal waves in the Warm Sector", 1976-84. (part-time student from 1979). Now Research Scientist with the Ontario Ministry of the Environment.

7. D. Wolf, "Dynamics of the Continental Lithosphere", 1982-85. Now Head of the System Theory and Modelling Section in the area of geodynamics of the GeoForschungsZentrum in Potsdam, Germany.

8. W. Hyde, "An Astronomical Theory of the Pleistocene Ice Age", 1978-85. Now Research Associate Professor at Duke University in South Carolina.

9. R. Laprise, "The resonant amplification of topographically forced internal waves", 1984-1987. Now Full Professor of Earth and Atmospheric Sciences at the Universit du Quebec à Montreal, in Montreal, Quebec.

10. S. Polavarapu, "Midlatitude Cyclones and Cyclogenesis", 1984-1989. Now Research Scientist with the Meteorological Service of Canada in Downsview, Ontario and Adjunct Professor of Physics in the University of Toronto.

11. A.M. Forte, "Mantle convection and tomographically inferred a-spherical earth structure", 1985-1989. Now Full Professor and Tier 1 Canada Research Chair with the GEOTOP Laboratory, joint UQAM/McGill/Concordia U's, Montreal, Quebec.

12. M. Tushingham, "Post glacial rebound and relative sea level histories in the Canadian high Arctic", 1985-1989. Now Scientific Officer with the Department of the Environment of the Federal Government in Ottawa.

13. G. Deblonde, "Astronomically forced ice ages on a geographically realistic earth", 1986-1990. Now Research Scientist with Recherche en Prevision Numerique of the Meteorological Service of Canada in Dorval, Quebec.

14. W. Smyth, "Holmboe waves and the transition to turbulence in stratified parallel flows", 1986-1990. Now Full Professor of Oceanography at Oregon State University in Corvallis, Oregon, USA.

15. J.X. Mitrovica, "The inverse problem for mantle viscosity", 1986-1991. Now Full Professor of of Geophysics, Harvard University, Boston, USA.

16. J. Scinocca, "The nonlinear critical layer for topographically forced internal waves", 1988-1991. Now Research Scientist with the Canadian Climate Centre for Modelling and analysis (CCCMA) of the Meteorological Service of Canada at U. Victoria, B.C.

17. L. Solheim, "Mantle phase transitions and chaotic mixing", 1986-1992. Now Research Scientist with the Canadian Climate Centre for modelling and analysis (CCCma), U. Victoria, Victoria, B.C.

18. Andrew B.G. Bush, "Cyclogenesis in the atmosphere and Gulf Stream ring formation in the Oceans", 1990-1994. Now Full Professor of Earth and Atmospheric Science at U. Alberta, Edmonton, Canada.

19. Bruce Sutherland, "Mixing and internal wave generation in dynamically unstable stratified jets", 1991-1994. Now Full Professor of Mathematics at the University of Alberta in Edmonton, Alberta, Canada.

20. Dong Mei Zhang, "Nonlinear Dynamics of Chemical Waves in the Belousov-Zabotinsky Reaction", 1991-1994. Now working in the private sector on computer systems and software.

21. Kotaro Sakai, "Thermohaline ocean circulation effects in a model of the ice age cycle", 1991-1996. Former Staff Scientist at the Frontier Institute for Global Change Research in Tokyo, Japan. (Deceased)

22. Giovanni Pari, "Seismic Tomography, Mantle Mixing and Radial Heat Transfer", 1992-1997. Now employed in the private sector in Ottawa, Ontario.

23. Yasuhiro Yamazaki, "Small scale structures in large scale baroclinic instability", 1993-2000. Now Senior Lecturer at the School of Geography, Politics and Sociology, University of Newcastle Upon Tyne, England.

24. Gordan Stuhne, "Classical Hydrodynamics on the Sphere: Gas giant phenomenology and novel numerical methodology", 1994-1999. Currently Research Associate working in the area of climate model software design at the Department of Physics, University of Toronto.

25. Guido Vettoretti, "Paleoclimate Tests of a Model of the Atmospheric General Circulation", 1994-2001. Now Research Associate in Physics at the University of Toronto working in the area of paleoclimate modelling and in charge of operating the NEC SX-6 computer system.

26. Pavel Potylitsin, "Rotating-Stratified Turbulence", 1995-2000. Now working in the area of financial mathematics in New York.

27. Samuel Butler, "Pressure Induced Phase transitions and Mantle Mixing", 1995-2000. Now Full Professor of Earth Sciences in the Department of Earth Sciences of the University of Saskatchewan.

28. Jean-Michel Lemieux, “Impact of the Wisconsinian Glaciation on Canadian Continental Groundwater Flow”, 2001-2006. Joint Toronto-Waterloo thesis. Now Associate Professor in the Department of Earth Science at Laval University.

29. Yonggang Liu, “Climate Dynamics of the Neoproterozoic Eon”, 2004-2011. Currently a Professor in Peking University in Beijing, China.

30. Heather Andres, “Greenland Ice-Sheet Stability”, 2007-2015.

31. Alireza Mashayekhi, “Turbulent mixing in the oceans”, 2010-2013. Currently PDF at MIT.

32. Jun Yang, “Snowball Earth” 2010-11 (on secondment from the Chinese Academy of Science for a Period of two years while working towards his PhD degree with salary paid by the Chinese Government). Currently PDF at the University of Chicago.

33. Keven Roy, “Space geodetic constraints on polar land ice melting”, 2010-

34. Deepak Chandan, “Mantle dynamics and Climate: the case of the Pliocene warm period”, 2010-

35. Andre Erler, “Downscaling of global warming projections”, 2011-2015

36. Hesam Salehipour, “Tidally induced mixing in the abyssal ocean”, 2012-

37. Fengyi Xie, “Dynamical downscaling of climate over the Great Lakes Basin”, 2015-

38. Yiling Huo, “Warming impacts upon landscapes at high elevation: Tibet”, 2016-

Postdoctoral Fellows and Research Associates

1. D.A. Yuen, Ph.D. UCLA, 1978-1980. Funded through American N.S.F. and NATO scholarships. Models of the rheology of the mantle. (Currently Full Professor of Geophysics at the University of Minnesota).

2. H.N. Sharpe, Ph.D. Toronto, 1978-79. Galerkin models for convection with internal heat generation. (Currently research scientist with SOHIO).

3. G. Jarvis, Ph.D. Cambridge, 1979-1981. Funded through NSERC two year postdoctoral fellowship. Mantle convection and related tectonic processes. (Currently Full Professor of Geophysics and Chair of the Department of Earth and Atmospheric Sciences at York University in Toronto, Ontario).

4. R. Sabadini, (1979-1981), on leave from Instituto di Geofisica of the University of Bologna, Italy. Funded by the Italian Government. Rotational response of the earth to deglaciation. (Currently Full Professor of Geophysics at the University of Milan).

5. P. Wu, Ph.D. Toronto, 1982. Rotational response of the earth to deglaciation. (Currently Full Professor of Geophysics at the University of Calgary in Calgary, Alberta).

6. R.A. Drummond, Ph.D. Oxford, 1980-. Glacial isostatic adjustment and relative sea level change analyses. (Full time Research Associate).

7. G.W.K. Moore, Ph.D. Princeton, 1983-1985. Funded by an NSERC two-year Postdoctoral Fellowship. Hydrodynamic stability of Atmospheric Fronts. (Currently Associate Professor of Physics at the University of Toronto).

8. G.P. Klaassen, Ph.D. Toronto, 1984-85. The turbulence transition in stably stratified parallel flows. (Currently Associate Professor of Earth and Atmospheric Science at York University, in Toronto, Ontario).

9. Detlef Wolf, Ph.D. Toronto, 1985-86. Visco-elastic models of the earth. Funded by one year NSERC postdoctoral fellowship. (Currently Head of the System Theory and Modelling Section of the GeoForschungsZentrum in Potsdam, Germany).

10. X.N. Ding, 1984-85. Associate Professor of Geophysics, Beijing University. On one year sabbatical leave supported by the Chinese Government.

11. S. Karpik, Ph.D. Waterloo, 1987-1990. Design of an anelastic, nonhydrostatic, general circulation model. Funded by grants from CRAY Canada Inc. (Currently Director of Computer and Information Sciences with the Ontario Science Centre).

12. Moshe Olim, Ph.D. Victoria, 1990-1992. Design of an anelastic nonhydrostatic general circulation model. Funded by grants from Cray Canada. (Currently Senior Staff Engineer specializing in modelling with FSI International in Chaska, Minnesota).

13. W.D. Smyth, Ph.D. Toronto, 1991-1992. Two dimensional turbulence. Funded through NSERC grants. (Currently Research Associate Professor in the Department of Oceanography at the University of Oregon in Corvallis).

14. C.C. Caulfield, Ph.D. Cambridge U., 1992-1994. Three dimensionalization of turbulence in the stratified mixing layer. Funded by the Japan-Science and Technology Fund of the Department of External Affairs and International Trade. (Currently Associate Professor of Fluid Mechanics and Environmental Engineering at the University of California in San Diego, California, USA).

15. Xianhua Jiang, Ph.D. York U., 1993-1995. Development of a three dimensional model of the post glacial rebound process with laterally heterogeneous viscosity. Mantle viscosity inverse theory. (Currently employed in the private sector by Rogers Cable Systems Inc.).

16. Lev Tarasov, Ph.D., Toronto, 1995-. Introduction of a detailed theory of glacial isostatic adjustment into a model of the ice-age cycle.

17. Peter Fawcett, Ph.D., Pennsylvania State University, 1995-1997. General circulation modelling of past climate regimes. (Currently Associate Professor of Geology at the University of New Mexico in Alberquerque, New Mexico).

18. Keith Alverson, Ph.D., M.I.T., 1996-1998. Ice-Age cycle related variations in the oceanic thermohaline circulation and atmospheric pCO2. (Currently Director of the PAGES Core Project Office in Berne, Switzerland).

19. Yakov Afanasyev, Ph.D. Moscow, 1995-1999. Three dimensional turbulence in stratified flow over topography. (Currently Full Professor of Physics and Oceanography at Memorial University of Newfoundland).

20. Xiaoqing Li, Ph.D. Oxford, 1997-1998. AGCM reconstructions of past climate regimes. (Currently employed in the software development industry in Toronto, Ontario).

21. Zhengrong R. Peng, Ph.D., Memorial University, 1996-1997. Postglacial Rebound. (Currently employed in the private sector in the petroleum industry in Calgary, Alberta).

22. Dong-Mei Zhang, Ph.D., U. Toronto, 1995-1998. Development of a global data base of relative sea level histories. Now employed in the software development industry in Toronto, Ontario.

23. Jonathan Wiley, Ph.D. Cambridge University, 1999-2000. Phase transition effects on mixing in the planetary mantle. (Currently Associatet Professor of Applied Mathematics with the University of Hong Kong).

24. Larry P. Solheim, Ph.D., Toronto, 1998-2002. Environmental simulation on the NEC SX5 vector computer system. (Now with the Canadian Climate Centre for modelling and analysis of the Meteorological Service of Canada in Victoria, British Columbia).

25. Mark Stastna, Ph.D., Waterloo, 2001-2004. Mixing in stratified flows over topography: oceanographic applications. (Currently Associate Professor of Applied Mathematics with the University of Waterloo, Waterloo, Ontario).

26. Guido Vettoretti, Ph.D., Toronto, 2004-. Simulation of ancient climates using modern coupled atmosphere ocean climate models, (Research Associate).

27. Gordan Stuhne, Ph.D., Toronto, 2004-. Further development of the University of Toronto Glacial Systems model including the process of ice-earth-ocean interaction, (Research Associate)

28. Marc D'Orgeville, Ph.D., EFREMER-French Oceanographic Laboratory, Brest, France, 2005-2008. Downscaling DP global warming projections over Southern Ontario and the Great Lakes Basin and the analysis of precipitation extremes.

29. Stephen Griffiths, Ph.D., Cambridge University, 2006-2008. Global ocean tides and tidal mixing: ice-age to present. Currently Lecturer in the Department of Applied Mathematics of the University of Leeds in the UK.

30. William T. Hyde, Ph.D., Toronto, 2006-2009. Modelling ancient climates, (Research Associate).

31. Hosein Shahnas, Ph.D., Middle East Technical University, Turkey, 2009-2013. Three dimensional models of mantle convection.

32. Jonathan Gula, Ph.D., ENS-Paris, 2009-2011. Regional Climate Modeling of the Global Warming Process.

33. Marc D'Orgeville, , Ph.D., EFREMER-French Oceanographic Laboratory, Brest, France, 2012-2015. Downscaling DP global warming projections over Southern Ontario and the Great Lakes Basin and the analysis of precipitation extremes.

34. Hosein Shahnas, Ph.D., Middle East Technical University Turkey. 2013-2015. Three dimensional models of mantle convection. (Research Associate)

35. Pu Guo, Ph.D., Chinese Oceanography Laboratory. 2015-2016. Tidal dissipation and mixing in the South China Sea.

Invited Lectures 514 as of September 15, 2016 – not listed in the short cv