

CURRICULUM VITAE

Name: Ponomarev Vladimir I.

Birth date: December 24, 1947

Birth place: Vologodskaya Region, Russia

Education: Leningrad (Sankt-Petersburg) Hydrometeorological State University, 1962 (oceanology)

Area of scientific interest: physical oceanography and meteorology, climate change, data analyses and numerical simulation of sea water structure and circulation

Degrees: PhD Physics and Mathematics (Specialty: Oceanography), Vladivostok, Pacific Oceanological Institute, Far-Eastern Branch of Russian Academy of Science, 1989.

Title: Associate Professor

Professional experience:

Apr. 2001-present - Leading Scientist of the Pacific Oceanological Institute (POI), Far-Eastern Branch, Russian Academy of Science, Lab. for Modeling of physical processes in the ocean Vladivostok, Russia

Apr.2000 – Apr. 2001 - Associate Professor of Engineering Faculty Kanazawa University, Kanazawa, Japan

Jan. 1989 – Apr.2000 - Senior Research Scientist of Pacific Oceanological Institute, Vladivostok, Russia

Feb. 1988 - Jan.1989 - Research Scientist of Arctic and Antarctic Research Institute, Department of Ocean Atmosphere Interaction, Lab. of Southern Ocean, Leningrad (St.-Petersburg), Russia

Jan. 1974 - Feb.1988 - Research Scientist of Main Geophysical Observatory, Dynamic Meteorology Dep., Lab. for Atmosphere-Ocean Circulation Modeling, Leningrad (St.-Petersburg), Russia

Dec.1971- Dec.1974 - Research Scientist of Central Research Institute of Oceanography and Fishery, Lab. of Physical oceanography, Moscow, Russia

Present Position: Leading Scientist of the Pacific Oceanological Institute FEBRAS, Vladivostok, Russia

Teaching experience:

1997-1998 - Lecturer, Lectures “Introduction to Physical Oceanography and Meteorology, School of Far-Eastern Branch Russian Academy of Sciences, undergraduate course.

2000-2001 - Lecturer, Facultative lectures on: “Ocean-Atmosphere Dynamics”, “Climate Change and Oscillations”, Department of Civil Engineering, Faculty of Engineering, Kanazawa University, Japan

Expedition experience:

1969 – Barents, Norwegian and Greenland Seas

1980-1981, 198-1986 - Antarctic area of the World Ocean (Soviet Antarctic Expeditions)

1987 – Arctic Ocean, (Air Arctic Expedition POLEX-North)

1989 – Bering Sea,

1991-1995 – East-China, Japan, Okhotsk Seas, Subarctic Pacific Gyre (INPOC, KEEP-MASS, WOCE and other projects)
1998 - Tumen River basin, Peter the Great Bay (TUMANGAN project)
1999-2002 - Japan Sea (CREAMS2 project).

Publications: 60

Awards: Primorye Governor's Award for the scientific research, 1999.

Selected publications:

Ponomarev V.I., and Felzenbaum A.I. (1975) Two-dimensional non-stationary circulation model for the Arctic Ocean. *Okeanologia* (in Russian), *Oceanology*, XV, 6, p.17-23 (Rus., Engl.)

Ponomarev V.I. (1979) On the influence of beta-effect on vertical velocity in cyclones considering friction in the boundary layer. *Meteorologiya i Gidrologiya* (in Russian), *Journal of Meteorology and Hydrology*, 5, p.93-96 (Rus., Engl.)

Ponomarev V.I. (1981) On the non-linear theory of the steady sea-ice drift. *Collection of papers of Main Geophysical Observatory (Trudi GGO)*, 446, p.109-115 (Rus.)

Gazova L.A., and Ponomarev V.I. (1981) Simulation of the Atlantic Water Propagation in the Arctic Basin. *Meteorologiya i Gidrologiya* (in Russian), 1, p. 17-25 (Rus., Engl.)

Ponomarev V.I. (1983) A non-linear diagnostic model of the mesoscale circulation in the zone of water confluence of Scotia and Weddell Seas. *Journal of Meteorology and Hydrology* (*Meteorologiya i Gidrologiya*), 11, p.68-75 (Rus.,Engl.)

Belyakov L.N., Volkov V.A., Ponomarev V.I., Chernyshov A.F., Gazova L.A. (1984) Interannual variations of water circulation in the Arctic Ocean. *Doklady Akademii Nauk SSSR* (in Russian), *Journal of Russian Academy of Sciences*, 276, 4, p.946-949 (Rus., Engl.)

Goncharenko I.A., Federyakov V.G., Lazaryuk A.Yu. Ponomarev V.I. (1993) Thematic processing of the AVHRR data illustrated by the example of coastal upwelling study. *Issledovaniya Zemli iz kosmosa* (in Russian), *Journal of Earth Study From Space*, 2, p.97-108 (Rus., Engl.)

Ponomarev V.I. Yurasov G.I. The Tartar (Mamiya) Strait Currents (1994) // *J. Korean Society Coastal and Ocean Eng.* V.6. No. 4. P. 335-339.

Ponomarev V.I., Salyuk A.N. (1997) Climate regime shifts and heat accumulation in the Sea of Japan // *Proc. CREAMS'97 International Symposium*, 26-31 January, 1997, Fukuoka, Japan, p.157-161.

Ponomarev, V.I., E.I. Ustinova, A.N. Salyuk, and D. D. Kaplunenko 2000. Climate variation in the Japan Sea and adjacent area in 20th century. (in Russian). *Izvestiya TINRO* (Collection of papers *Trans. Pacific Res. Fish. Center*). 127 (2):20-36.

Ponomarev V.I., Trusenkova O.O., Trousenkov S.T., Kaplunenko D.D., Ustinova E.I., Polyakova A.M. (1999) The ENSO signal in the Northwest Pacific. *Proc. Science Board*

Symposium On the 1997/98 El Nino event 14-25 Oct. 1998, Fairbanks, USA. PICES Scientific Report 1999, No.10, p.39-57.

Ponomarev V.I. Trusenкова O.O., Kaplunenko D.D., Ustinova E.I. (1999) Interannual Variations of Oceanographic and Meteorological Characteristics in the Sea of Okhotsk. In: Proceedings of The Second PICES Workshop on the Okhotsk Sea and Adjacent Areas, 9-12 Nov., 1998, Nemuro, Japan, p. 31-40.

Ponomarev V., Trusenкова O., Trousenkov S., Ishida H. (2001) Complex Principal Component Analysis of sea surface temperature in respect of climate oscillation in the Northwest Pacific // Bulletin of the Japan Sea Research Institution. Kanazawa University. No.32, p.91-116.

Ponomarev V. I., Kaplunenko D. D., Ishida H. (2001) The 20th century climate change in the Asian-Pacific region // Oceanography of the Japan Sea. Proc. CREAMS'2000 Int. Symp. / Ed. M.A. Danchenkov. Vladivostok: Dalnauka, 2001. P. 129-136.

Ponomarev V.I., Trusenкова O.O., Trousenkov S.T., and D.D. Kaplunenko (2002) Relationship between surface temperature anomalies in the mid-latitude North Pacific and ENSO // Reports of the Int. Workshop on Global Change Studies in the Far East. (Sept. 7-9, 1999, Vladivostok, Russia) 7th TEACOM Publication, 2002. Vol.2, p. 34-65.

Ponomarev V.I., Ustinova E.I., Kaplunenko D. D. (2002) Climate change in the Northwest Pacific Margin and mid-latitude Asia // Reports of the International Workshop on Global Change Studies in the Far East. (7-9 Sept., 1999, Vladivostok, Russia), 7th TEACOM Publication, Vladivostok: Dalnauka, 2002. Vol.2, p.6-33.

Ponomarev V., Sagalaev S., Talley L., Tishchenko P., and Lobanov V. (2001) Near-bottom oxygen depletion in the subarctic zone of Japan Sea // Proc. The 16-th Int. Symp. On the Okhotsk Sea and sea ice. Mombetsu, Hokkaido, Japan, 2001. p. 433-442.

Ponomarev V., Sagalaev S., Talley L., Tischenko P., Lobanov V. (2001) Oxygen depletion along deep slope of the Japan (East) Sea // Proc. 11th PAMS/JECSS Symp., Cheju, Korea, April 11-13, 2001, P. 155-158.

Ponomarev, V.I., D.D. Kaplunenko, V. Krokhin, and H. Ishida. (2002) Climate change in the Northeast Asia and Northwest Pacific during 20th century. J. Recent Advances in Marine Science and Technology (in print).

Kim K.-R., Kim G., Kim K., Lobanov V., Ponomarev V., and A. Salyuk. A sudden bottom-water formation during the severe winter 2000 – 2001: The case of the East/Japan Sea. // Geophys. Res. Lett. 2002. V.29. N 8. 14498.

Lobanov V.B., Ponomarev V.I., Tishchenko P.Y., Talley L.D., Mosyagina S.Y., Sagalaev S.G., Salyuk A.N., Sosnin V.A. Evolution of anticyclonic eddies in the northwestern Japan/East Sea / Proc. 11th PAMS/JECSS Symp., Cheju, Korea, Apr. 11-13, 2001. P.37-40.

Lobanov V., A.Salyuk, V.Ponomarev, L.Talley, K.Kim, K.-R.Kim, P.Tishchenko, A.Nedashkovskiy, G.-B.Kim and S.Sagalaev, Renewal of bottom water in the Japan Sea / Proc. The 17th Int. Symp. Okhotsk Sea & Sea Ice, 24-28 Feb., 2002, Mombetsu, Japan. P.31-36. 18.

Talley L. D., Lobanov V. B., Tishchenko P. Ya., Ponomarev V. I., Sherbinin A. F., Luchin V. A. Hydrographic observations in the Japan/East Sea in winter, 2000, with some results from

summer, 1999. / Oceanography of the Japan Sea. Proc. CREAMS'2000 Int. Symp., Vladivostok: Dalnauka, 2001. P. 25-32.

Tishchenko P. Ya., Talley L. D., Zhabin I. A., Ponomarev V. I., Nedashkovsky A. P., Sagalaev S. G., Il'ina E. M., Luchin V. A., Lobanov V. B. Hydrochemical structure of the Japan/East Sea in the summer 1999 / Oceanography of the Japan Sea. Proc. CREAMS'2000 Int. Symp., Vladivostok: Dalnauka, 2001. P.47-58.

Ponomarev V.I., and Trusenkova O.O. (1999). Simulation of the Japan/East Sea general circulation using the MHI quasi-isopycnal model. In: Proc. of the CREAMS'99 Int. Symp., Fukuoka, Japan, 26-28 Jan. 1999, p. 132-135.

Ponomarev V.I., Trusenkova O.O. (1999) The dynamic response to the wind and buoyancy forcing in the Sea of Japan. 1999. // Proc. Int. Conf. on coastal ocean and semi-enclosed seas: circulation and ecology modeling and monitoring, 8-12 September 1998, Moscow, Russia.

Ponomarev V.I., Trusenkova O.O. (1999) Regular dynamic structures in the Sea of Japan. // IOC Workshop Rep. No159, IOC, UNESCO, Paris, 1999, p. 433-438.

Ponomarev V.I., Trusenkova O.O. (2000) Circulation patterns of the Japan Sea. *La Mer (De la Societe Franco-Japonaise d'oceanographie)*, 38, No 4, p. 189-198.

Ponomarev V.I., Trusenkova O.O., Talley L. (2001) Simulation of the Japan Sea circulation in summer 1999 using the MHI layered model. // Oceanography of the Japan Sea. Proc. CREAMS'2000 Int. Symp. / Ed. M.A. Danchenkov. Vladivostok: Dalnauka, 2001. P. 104-111.