



## CURRICULUM VITAE

**Prof. Efim Pelinovsky**

17 January 2011

**Birth:** 1945, July 12, Kemerovo, Russia (USSR).

**Marital status:** Married (1966), two children:

Dr. Dmitry Pelinovsky (1969) - Associate Professor of Mathematics, McMaster University, Hamilton, Canada,

Dr. Nataly Solovitch-Vella (1977) – Researcher, SEREGE, Aix-en-Provence, France.

Five grandchildren: Marta (1990), Polina (1993), Albert (2002), Roman (2006) and Edward (2006).

### ***AFFILIATION:***

Department of Nonlinear Geophysical Processes, Institute of Applied Physics, 46 Uljanov Street, 603950, GSP-120 Nizhny Novgorod, Russia.

Applied Mathematics Department, Nizhny Novgorod State Technical University, 24 Minin Street, 603950 Nizhny Novgorod, Russia.

Department of Information Systems, Nizhny Novgorod Branch of High School of Economics, 25 B. Pechorkaya Street, 603155 Nizhny Novgorod, Russia.

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URL: <http://www.ipfran.ru/pp/Pelinovsky/>

### ***STATUS:***

- Chief Scientist, Department of Nonlinear Geophysical Processes, Institute of Applied Physics (full-time position).
- Professor, Applied Mathematics Department, Nizhny Novgorod State Technical University (part-time position).
- Professor, Department of Information Systems, Nizhny Novgorod Branch of High School of Economics (part-time position)

### ***EDUCATION:***

1972. Candidate of Science (PhD), Physics and Mathematics (Radiophysics), Gorky State University, Gorky (now Nizhny Novgorod), Russia.

Ph.D. Thesis: Non-sinusoidal Waves in Nonlinear Dispersive Media.

1969. Diploma with distinction (M.S.), Physics and Mathematics (Radiophysics), Gorky State University, Gorky, Russia.

M.S. Thesis: Generalised Variational Principle for Nonlinear Waves in Dispersive Media.

1963. Diploma with distinction (Electro-technique), Technical College, Dzerzhinsk, Russia.

**ACADEMIC QUALIFICATION:**

2007. Fellow of the Russian Academy of Natural Sciences (elected).

1996. Corresponding Member of the Russian Academy of Natural Sciences (elected).

1989. Professor in Applied Mathematics, Russian Ministry of High Education.

1981. Doctor of Science (Highest Scientific Degree in Russia), Physics and Mathematics (Physical Oceanography - Oceanology), P.P.Shirshov Institute of Oceanology, Moscow, Russia. D.Sc. Thesis: Nonlinear Dynamics of Tsunami Waves.

**ACADEMIC APPOINTMENTS:**

2005-now. Chief Scientist, Institute of Applied Physics, Nizhny Novgorod, Russia.

1998-2005. Head of Laboratory of Hydrophysics and Nonlinear Acoustics, Institute of Applied Physics.

1977-1998. Chief/Head/Senior Scientist, Institute of Applied Physics.

1972-1977. Associate/Assistant Scientist, Scientific Research Radiophysical Institute, Gorky.

1970-1972. Assistant Scientist, Gorky State University, Gorky (now – Nizhny Novgorod).

**HONORS:**

2007. **Honoured Worker of Science and Education.** Awarded by the Russian Academy of Natural Sciences

2006. **The EGU Sergey Soloviev Medal.** Awarded by the European Geosciences Union  
“In recognition of his world leadership in predicting the consequences of tsunamis and rogue waves, and in the avoidance and mitigation of these severe natural hazards”  
[http://www.copernicus.org/EGU/awards/medallists/\\_2006/sergey\\_soloviev.html](http://www.copernicus.org/EGU/awards/medallists/_2006/sergey_soloviev.html)

2006. **Vernadsky’s Medal.** Awarded by the Russian Academy of Natural Sciences “In outstanding contribution to national science”.

1999. **The George Soros Professor.** Awarded by International Soros Science Education Program.  
“In recognition and appreciation of outstanding contributions to world science and science education”.

1997. **The State Prize of the Russian Federation** in Science and Engineering (former Lenin Prize)  
“Study of Intense Noise Waves and Nonlinear Structures in Non-Dispersive Media”

1996. **The International Science Foundation Prize.**  
“Best Popular Scientific Paper: Solitons in Water”

1993-2001. Russian State Grant for Distinguished Scientists

1993. **The William Mansfield Adams Award** (The International Natural Hazards Society).  
“In Recognition of Outstanding Long-Term Contributions to Tsunami Research”

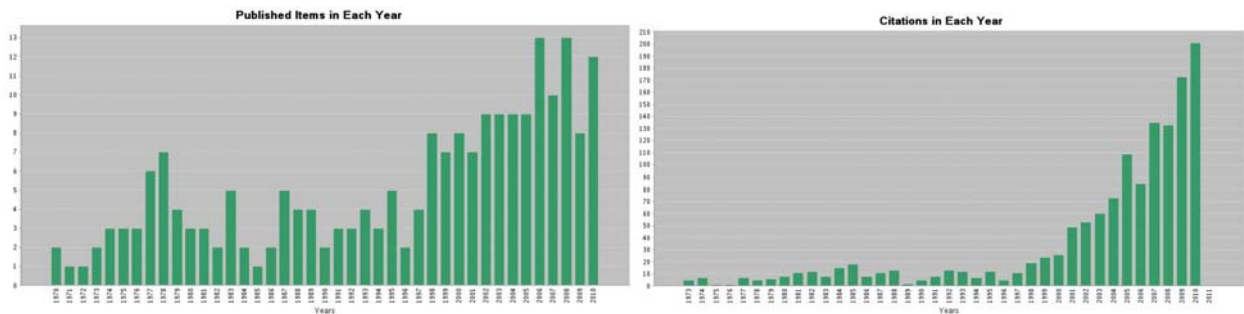
1991. **The Nekashizuka Award** (The International Tsunami Society).  
“Best Papers Presented on Tsunami Research”

1985. **The State Medal** (USSR).  
“Contribution in the Science”

### **RESEARCH INTERESTS:**

- Nonlinear Waves, Waves in Random Media, Nonlinear Evolution Equations, Asymptotic Methods.
- Ocean and Atmospheric Waves, Space Oceanography, Dynamics of Coastal Zone, Pollutant Dynamics.
- Natural Hazards, Earthquakes, Tsunamis, Floods, Freak Waves.

**LIST OF PUBLICATIONS:** (total 456 –separated file) *h* – index: 17



### **PROFESSIONAL ACTIVITIES:**

- Member of Editorial Board for Springer Book Series “Advances in Geophysical and Environmental Mathematics and Mechanics”, 2006-
- Member of the Editorial Board for Int. “Open Oceanography Journal” (Bentham Science Publishers), 2008-.
- Member of the Editorial Board for “Fundamental and Applied Hydrophysics” (St Petersburg, Russia), 2009-
- Member of the Editorial Board for “Journal of Korean Society of Coastal and Ocean Engineers”, 2003-.
- Member of the Editorial Board for Int. J. "Natural Hazards" (Kluwer/Springer), 1994-2010.
- Member of the Editorial Board for “Izvestiya, Russian Academy of Engineering Sciences”, 2000-2003.
- Member of the Int. Advisory Board of "Bulletin of the Russian Academy of Sciences. Physics of Vibrations", Allerton Press, Inc., 1992 - 1998.
- Member of Scientific Advisory Board for “Tsunami Science and Engineering Handbook” of “Civil and Environmental Engineering Handbook Series” by J. Ross Publishing Company, 2007-.
- Chairman, Soloviev’s Medal Committee, European Geophysical Union, 2010-2014.
- Member of the IUGG Tsunami Commission (1995-).
- Member of the IAPSO Commission on Natural Marine Hazards (1988-).
- Secretary of the EGU Sea and Ocean Hazards Section (2000-2007).
- INTAS Expert (1997-2006).
- Member of Oceanographic Section of National (Russia) Geophysical Committee (2007-).

- Member of the Russian Tsunami Commission (1993-).
- Member of the Expert Council of the Russian Foundation for Basic Research (National Science Foundation) (1996-2000).
- Member of the Nonlinear Dynamics Council of the Russian Academy of Sciences (1987-1998).
- Member of the Committee on Numerical Simulation of Wave Motions in the Fluid, the Siberian Branch of the Russian Academy of Sciences (1985-).
- Member of the Institute Senate (1999-2003).
- Guest Editor for Natural Hazards and Earth System Sciences (2001, 2003, 2006, 2010, 2011), Marine Geology (2005), European J Mechanics (2006), Nonlinear Processes in Geophysics (2009), European Physical Journal (2010), Open Oceanography J (2010).
- Reviewer of Physica D; Physical Letters A; Proc. Royal Soc. London; J Nonlinear Mathematical Physics; SIAM Applied Math., Applied Mathematical Modelling; J Eng Mathematics; J Fluid Mechanics; European J of Mechanics; Nonlinear Processes in Geophysics; Geophysical Research Letters; J. Geophysical Research; Geophys. Int. J; J Phys. Oceanography; Ocean Modelling; Annales Geophysicae, Physics and Chemistry of the Earth; Natural Hazards, Natural Hazards and Earth System Sciences, Pure and Applied Geophysics, ISET Journal of Earthquake Technology, Marine Geology; Geo-Marine Letters; Ocean Engineering; Applied Ocean Research and national journals: JETP; Oceanology; Izvestiya, Atmospheric and Oceanic Physics; Radiophysics and Quantum Electronics, Fundamental and Applied Hydrophysics.

***CONVENER and MEMBER of INT. ORG. COMMITTEES (1994-):***

- Convener, Symposium "Water Waves", 2d European Fluid Mechanics Conference, Warsaw, Poland, September 1994.
- Convener, Session "Tsunami Risk Estimation", Int. Workshop "Tsunami Mitigation and Risk Assessment", Petropavlovsk-Kamchatsky, Russia, August 1996.
- Convener, Session "Oceanic Hazardous Events", Int. Conf. PACON'99 (Symposium on Humanity and the World Ocean: Interdependence at the dawn of the New Millennium), Moscow, Russia, June 1999.
- Member of Org. Committee of the Int. Workshop JONSMOD/MEDMOD (Joint modelling of the North and Mediterranean Seas). Toulon, France, July 2000.
- Co-convener, Session "Tsunamis", EGS/EGU Assemblies, Nice, France, March 2001; April 2002; April 2003; April 2004, Vienna, Austria, April 2005; April 2006; April 2007; April 2008, April 2009.
- Member of the Program Committee of Int. Conf. "Frontiers of Nonlinear Physics", Nizhny Novgorod, Russia, July 2001; July 2004.
- Co-Director, NATO Advanced Research Workshop "Underwater Failure Mechanisms on Tsunami Generation, Modeling, Tsunami Risk and Mitigation", Istanbul, Turkey, May 2001.
- Convener, Session "Sea Hazardous Events: Storm and Freak waves and Flooding", EGS/EGU Assemblies, Nice, France, April 2002; April 2003; April 2004; Vienna, Austria, April 2005.
- Member of the Int. Programme Committee of Int. Workshop "Local tsunami warning and mitigation", Petropavlovsk-Kamchatskiy, Russia, September 2002.
- Member of the Int. Scientific Committee of "Hazards 2002", Antalia, Turkey, October 2002.

- Co-convenor of Session “Tsunamis: Their Science, Engineering and Hazard Mitigation”, IUGG General Assembly, Sapporo, Japan, July 2003.
- Co-Chair of the Int. Conference “Nonlinear Phenomena in Environmental Research”, Nizhny Novgorod-Moscow, Russia, September 2003.
- Member of Scientific Committee of the Advanced Study School “Nonlinear Processes in Marine Sciences”, Hageri, Estonia, October 2003.
- Member of the Org. Committee of the National School “Nonlinear Waves”, Nizhny Novgorod, Russia, March 2004; March 2006.
- Convener, Session “Extreme Waves”, AGU and Canadian Geophysical Society Springer Meeting, Montreal, Canada, May 2004.
- Co-convenor of Union Symposium “The Sumatra Earthquake and the Indian Ocean Tsunami of 26 December 2004”, EGU Assembly, Vienna, Austria, April 2005.
- Member of Programme Committee of the Int. Conference “Nonlinear Phenomena in Environmental Research”, St Petersburg-Nizhny Novgorod, Russia, August 2005.
- Member of Int. Steering Committee of Int. Tsunami Symposium, Crete Island, Greece, June 2005.
- Convener, Session “Extreme Waves”, EGU General Assembly, Vienna, Austria, April 2006; April 2007; April 2008; April 2009; May 2010; April 2011.
- Member of Program Com., European Geosciences Union, Vienna, Austria, 2007.
- Co-convenor, Session “Tsunamis”, IUGG General Assembly, Perugia, Italy, July 2007.
- Member of Advisor Board of Conference on Marine Problems and Specific Solutions (COMPASS). Maldives, June 2008.
- Member of Program Com., Int. Tsunami Symposium, Novosibirsk, Russia, July 2009.
- Co-convenor, Session “Nonlinear Dynamics of Coastal Zone”, AOGS, Singapore, August 2009.
- Member of Sci. Committee of French – Russian Colloquium "Mechanics and environmental problems", 19<sup>th</sup> French Congress in Mechanics, Marseille, France, August 2009.
- Member of Scientific Committee of Int. Symposium on Historical Earthquakes and Conservation of Monuments and Sites in the Eastern Mediterranean Region. 500<sup>th</sup> Anniversary Year of the 1509 September 10, Marmara Earthquake, Istanbul, Turkey, September 2009.
- Member of Steering Com., SCSTW3: South China Sea Tsunami Workshop 3, Malaysia, November 2009.
- Chair of Mini-Symposium “Rogue Waves in Nature” and Member of Program Committee, IV Int. Conf. “Frontiers of Nonlinear Physics”, Nizhny Novgorod, Russia, July 2010.
- Co-convenor, Session “Nonlinear Dynamics of Coastal Zone”, European Geosciences Union, Vienna, Austria, April 2011.

***MEMBERSHIP IN SCI. SOCIETIES:***

- International Tsunami Society,
- International Hazards Society,

- American Geophysical Union,
- Russian Academy of Natural Sciences (elected).

***TEACHING APPOINTMENTS IN RUSSIA:***

1985-now. Professor in Applied Mathematics, Nizhny Novgorod State Technical University.

1997. Visiting Professor in Theoretical Physics, Nizhny Novgorod State University.

1996. Visiting Professor in Engineering Ecology, Moscow State Technological University.

1989. Visiting Professor in Oceanography, Leningrad Hydrometeorological Institute.

1983. Visiting Professor in Theoretical Physics, Far - East University, Vladivostok.

1975-1977. Senior Lecturer in Radiophysics, Gorky Polytechnical Institute.

***TEACHING EXPERIENCE in Russia and abroad:***

High School of Economics

- System Analysis (2010-)

Nizhny Novgorod State Technical University (former Gorky Polytechnical Institute):

- Mathematical Methods in Hazard Assessment (1999-),
- Mathematical Modelling in Environments (2000-),
- Physical Oceanography (1998),
- Fluid Mechanics (1997-1999),
- Mathematical Physics (1996-1998),
- Advanced Mathematics (1985-1997),
- Differential Equations (1989-1993),
- Generalized Functions (1985-1989),
- Nonlinear Waves (1975-1977),
- Asymptotic Methods (1986-1991).

Ecole Centrale Marseille (Marseille, France)

- Fluid Dynamics (2009)

Loughborough University, Loughborough, UK

- Nonlinear Waves and Marine Natural Hazards (2008-2009)

Universite des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe (French West Indies)

- Fluid Dynamics (2006-2008)
- Energy from Waves (2006-2007)

University of Western Australia and Curtin University of Technology (Perth, Australia)

- Marine Natural Hazards (2006)

Ecole Généraliste d'Ingénieurs de Marseille (Marseille, France):

- Tsunami Hydrodynamics (2005)

Ecole Supérieure de Mécanique, IMT - Technopole de Chateau - Gombert (Marseille, France):

- Module "Ocean" (2000 - 2003).

European Summer School "Waves in Geophysics" (Udine, Italy)

- Tsunami Hydrodynamics (2005)

Training Course on South Pacific Sea Level Monitoring Project (Adelaide, Australia):

- Tsunamis in Pacific (1997, 1998).

Nizhny Novgorod State University (Russia):

- Fluid Dynamics (1997).

Moscow State Technological University (Russia):

- Theory of Hazards and Accidences and Their Prediction (1996).

Israel Institute of Technology (Haifa, Israel):

- Water Waves (1994).

Tel-Aviv University (Tel-Aviv, Israel):

- Ocean Dynamics (1994).

Seoul National University (Korea):

- Nonlinear Dynamics of Coastal Zone (1993).

Institute of Hydroengineering (Gdansk, Poland):

- Nonlinear Dynamics of Coastal Zone (1989, 1990).

Leningrad Hydrometeorological Institute (Russia):

- Ocean Waves (1989).

Far - East State University (Vladivostok, Russia).

- Nonlinear Oscillations and Waves (1983).

Author of Textbook on Ocean Dynamics for Students, 1992. This textbook is recommended by the Russian Ministry of High Education.

Author of Manuals on Solitons of Envelope Waves in Media with Strong Dispersion (1988), on Mathematical Simulation of Environmental Catastrophes (2000, 2002), on Freak and Tsunami Waves (2001-2003), on Coastal Zone (2001-2003).

### ***VISITING APPOINTMENTS ABROAD, 2006 -2011***

- Department of Physics, Universite des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe (French West Indies). January – April 2011.
- Department of Mathematical Sciences, Loughborough University, UK, October 2010.
- Institut de Recherche sur les Phenomenes Hors Equilibre, Universite de la Mediterranee, Marseille, France, April - June 2010.
- Department of Physics, Universite des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe (French West Indies). December 2009 – March 2010.
- Ecole Centrale de Marseille, Marseille, France, August - October 2009.
- Leverhulme Visiting Professor, Department of Mathematical Sciences, Loughborough University, UK, April – July 2009.
- Department of Physics, Universite des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe (French West Indies). November 2008 – February 2009.
- Leverhulme Visiting Professor, Department of Mathematical Sciences, Loughborough University, UK, May – October 2008.
- Institute of Cybernetics, Tallinn University of Technology, Tallinn, Estonia, May 2008.

- Department of Physics, Universite des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe (French West Indies). November 2007 – March 2008.
- Department of Civil Engineering, Sungkyunkwan University, Suwon, Korea, May-June 2007.
- Department of Mathematical Sciences, Loughborough University, UK, March 2007.
- Department of Physics, Universite des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe (French West Indies). November 2006 – February 2007.
- Gledden Visiting Senior Fellowship, University of Western Australia, Perth, Australia, September – October 2006.
- Director of Research, Institut de Recherche sur les Phenomenes Hors Equilibre, Universite de la Mediterranee, Marseille, France, April - September 2006.
- Department of Physics, Universite des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe (French West Indies). November 2005 – February 2006.

### ***CONFERENCES AND WORKSHOPS, 2006-2011***

- Int. Workshop on anomalous waves in the ocean, 2010. National Cheng Kung University, Tainan, Taiwan, 29 Nov – 1 Dec. 2010.
- IV Int. Conference “Frontiers of Nonlinear Physics”, Nizhny Novgorod, Russia, July 2010.
- National School: Natural catastrophes: study, monitoring, forecast. Yuzhno-Sakhalinsk, Russia, June 2010.
- Colloque Franco Allemand ouvert a l’Europe du Nord “Environnement, Risques et Energies Renouvelables”, Marseille, France, June 2010.
- 10<sup>th</sup> National conference “Applied Technologies of hydro-acoustics and hydro-physics”. St Petersburg, Russia, May 2010.
- 7<sup>th</sup> General Assembly of European Geosciences Union, Vienna, Austria, May 2010
- Int. Conference "Mode Conversion, Coherent Structures and Turbulence", Moscow, November 2009.
- Int. Symposium on Historical Earthquakes and Conservation of Monuments and Sites in the Eastern Mediterranean Region (500<sup>th</sup> Anniversary Year of the 1509 September 10, Marmara Earthquake), Istanbul, Turkey, September 2009.
- 19<sup>th</sup> French Congress in Mechanics, Marseille, France, August 2009.
- 6<sup>th</sup> Annual Meeting Asia Oceania Geoscience Society, Singapore, August 2009.
- 5<sup>th</sup> Int. Conf. “Solitons, Collapses and Turbulence”. Chernogolovka, Russia, August 2009.
- Int. Tsunami Symposium, Novosibirsk, July 2009.
- 6<sup>th</sup> General Assembly of European Geosciences Union, Vienna, Austria, April 2009.
- CPNLW09 “Solitons in their Roaring Forties”, Nice, France, January 2009.
- National Nonlinear Dynamics Workshop, Moscow, Russia, December 2008; December 2009.
- First Int. Workshop “Caribbean Waves”, Gosier, Guadeloupe, December 2008.
- Scottish-Norwegian Workshop on internal waves, Oslo, Norway, October 2008.
- Int. Workshop “Waves in Fluids”, Paraty, Brazil, August 2008.



- SIAM Conference on Nonlinear Waves and Coherent Structures, Rome, Italy, July 2008.
- Workshop “Wave-flow interaction”, Keele, UK, June 2008.
- Conference on Marine Problems and Specific Solutions (COMPASS). Maldives, June 2008.
- 5th General Assembly of European Geosciences Union, Vienna, Austria, April 2008.
- National Scientific School “Nonlinear Waves – 2008”. Nizhny Novgorod, Russia, March 2008.
- First Latin American and Caribbean Congress of Theoretical and Applied Mechanics. Port of Spain, Trinidad and Tobacco, February, 2008.
- IUGG General Assembly, Perugia, Italy, July 2007.
- Workshop “Tsunami Disaster Mitigation for Eastern Korean Coast”. Sungkyankwan University, Suwon, Korea. June 2007.
- 4th General Assembly of European Geosciences Union, Vienna, Austria, April 2007.
- 3d National Conference «Manifestation of the deep processes on the sea surface. Nizhny Novgorod, Russia, April 2007.
- 2d Interdisciplinary Symposium on Mathematical Modeling in Modern Technologies and Economics. Athens, Greece, September 2006.
- Workshop “Risque de tsunamis en Méditerranée Occidentale”. Aix-en-Provence, France, June 2006.
- 3d General Assembly of European Geosciences Union, Vienna, Austria, April 2006.

#### ***SEMINARS, 2006-2011***

- Dep. Mathematical Sciences, Loughborough University, Loughborough, UK, 2010.
- Department of Engineering, University of Warwick, Coventry, UK, 2010.
- Math Dep., University of Reading, UK, 2010.
- Math Dep., University of Plymouth, UK, 2010.
- Math Dep., University College London. UK, 2010.
- Department of Physics, University of Antilles, Pointe-a-Pitre, Guadeloupe, 2010.
- Laboratoire Gevrey Mathématique Physique, Université de Bourgogne, Dijon, France, 2009.
- Ecole Centrale de Lyon, Lyon, France, 2009.
- Institut de Recherche sur les Phenomenes Hors Equilibre, Université de la Méditerranée, Marseille, France, 2009.
- Department of Physical Geography, University of Blaise Pascal, Clermont-Ferrand, France, 2009.
- Department of Engineering, University of Warwick, Coventry, UK, 2009.
- Dep. Mathematical Sciences, Loughborough University, Loughborough, UK, 2009.
- Department of Applied Mathematics, University of Waterloo, Waterloo, Canada, 2009.
- Department of Mathematics, McMaster University, Hamilton, Canada, 2009.
- Dep. Geography, Hull University, Hull, UK, 2008

- Dep. Mathematics, University of East Anglia, Norwich, UK, 2008.
- Institute of Cybernetics, Tallinn University of Technology, Tallinn, Estonia, 2008.
- Dep. Mathematical Sciences, Loughborough University, Loughborough, UK, 2008.
- Institut für Strömungsmechanik und Wärmeübertragung, Technischen Universität Wien, Vienna, Austria, 2008.
- Department of Mathematics, University of Antilles, Pointe-a-Pitre, Guadeloupe, 2008.
- Department of Mathematics, McMaster University, Hamilton, Canada, 2008.
- Department of Mathematics, McMaster University, Hamilton, Canada, 2007.
- Department of Mathematics, University of Waterloo, Waterloo, Canada, 2007.
- Dep. Mathematical Sciences, Loughborough University, Loughborough, UK, 2007.
- Dep. Civil Engineering, Sungkyunkwan University, Suwon, Korea, 2007.
- Department of Mathematics, Université des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe, France, 2007.
- Bureau of Meteorology. Melbourne, Australia, 2006.
- Faculty of Engineering and Industrial Sciences. Swinburne University of Technology, Melbourne, Australia, 2006.
- School of Mathematics and Statistics. University of Sydney, Sydney, Australia, 2006.
- Department of Mathematics and Applied Sciences. University of Wollongong, Wollongong, Australia, 2006.
- Department of Civil and Resource Engineering, University of Western Australia, Perth, Australia, 2006.
- CSIRO Petroleum, Perth, Australia, 2006.
- Department of Explored Geophysics, Curtin University of Technology, Perth, Australia, 2006.
- Laboratoire de Meteorologie Dynamique, Ecole Normale Supérieure. Paris, France, 2006.
- Department of Physics, Université des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe, France, 2006.

***SUPERVISION OF Ph.D. THESES (17):***

1. Shavratsky S.Kh. Transformation and Breaking of Steady - State Waves in Nonlinear Dispersive Media (Radiophysics). Gorky State University, Gorky, 1977 (together with Prof. A.N. Malakhov).
2. Ermakov S.A. Statistical Effects at Internal Wave Propagation in the Ocean (Geophysics). Marine Hydrophysical Institute, USSR Academy of Sciences, Sevastopol, 1981. He has got highest degree in Russia, Dr. Sci. in 2008.
3. Mazova R.Kh. The Theory of Climbing of Non-Breaking Tsunami on a Beach (Oceanology). Institute of Oceanology, USSR Academy of Sciences, Moscow, 1984. She has got Dr. Sci. in 2007.
4. Klevanny K.A. The Dissipation Influence on Tsunami Propagation and Run-Up (Oceanology). Arctic and Antarctic Scientific Research Institute, Leningrad, 1985. He has got Dr. Sci. in 2000.
5. Dolina I.S. Applied Hydrodynamics of Internal Waves (Oceanology). Arctic and Antarctic Scientific Research Institute, Leningrad, 1985.

6. Mirchina N.R. Influence of Nonlinear and Dispersive Effects on the Propagation of Tsunami Waves (Oceanology). Arctic and Antarctic Scientific Research Institute, Leningrad, 1987.
7. Shevchenko G.V. Influence of Ocean Topography on Generation and Dissipation of Long Waves on Shelf (Oceanology). Pacific Institute of Oceanology, USSR Academy of Sciences, Vladivostok, 1987. He has got Dr. Sci degree in 2006.
8. Talipova T.G. Elasticity Properties of Sea Surface Active Films and Their Influence on Wind Waves (Geophysics). Institute of Applied Physics, USSR Academy of Sciences, Gorky, 1989. She has got Dr. Sci Degree in 2004 under my supervision. Dr. Sci. Thesis “Dynamics of long nonlinear internal waves in stratified fluid”.
9. Kochergin I.E. Methods of Tsunami Parameter Calculations (Oceanology). Pacific Institute of Oceanology, USSR Academy of Sciences, Vladivostok, 1990.
10. Kurkin A.A. Study of the nonlinear interaction of the waves in the rotating ocean by Hamilton formalism method (Oceanology). Institute of Oceanology, Russian Academy of Sciences, Moscow, 1999. He has got Dr. Sci Degree in 2005 under my supervision. Dr. Sci. Thesis “Nonlinear and unsteady dynamics of the trapped waves in the coastal zone”.
11. Ryabov I.A. Hydrodynamics of the long tsunami-like waves: numerical simulation and statistical analysis (Mechanics of Fluid, Gas and Plasma). Nizhny Novgorod State Technical University, Nizhny Novgorod, 2002.
12. Slunyaev A.V. Dynamics of the large-amplitude internal and surface waves in the ocean (Physics of Atmosphere and Hydrosphere). Institute of Applied Physics, Nizhny Novgorod, 2002.
13. Poloukhina O.E. Generalized Korteweg – de Vries equation in the theory of nonlinear internal waves in stratified flows (Mechanics of Fluid, Gas and Plasma). Nizhny Novgorod State Technical University, Nizhny Novgorod, 2002.
14. Poloukhin N.V. Modelling of the nonlinear internal waves in the World Ocean (Oceanography). Institute of Oceanology, Moscow, 2005.
15. Didenkulova I.I. Runup of long waves on a beach and analysis of real events (Fluid Mechanics). Nizhny Novgorod State Technical University, Nizhny Novgorod, 2006.
16. Sergeeva A.V. Nonlinear dynamics of random waves in shallow water (Fluid Mechanics). Nizhny Novgorod State Technical University, Nizhny Novgorod, 2006.
17. Didenkulova I. Long wave dynamics in the coastal zone (Civil Engineering). Tallinn University of Technology, Tallinn, Estonia, 2008 (together with Prof. T. Soomere).

***RESEARCH GRANTS, PRINCIPAL INVESTIGATOR, 2005 –***

**Active:**

- Catastrophic sea waves: models and numerical simulations. Project 5.3 of the National Program “Fundamental Problems of Nonlinear Dynamics”. Russian Academy of Sciences. 2006-2010.

**Completed:**

- Model Development and Risk Analysis for Tsunamis in the Black Sea and Mediterranean. Joint Russian –Turkish grant. Russian Fund for Basic Research No. 09-05-91222. 2009-2010.
- Models of strongly nonlinear waves with applications to the marine natural hazards forecasting. Russian Foundation for Basic Research. No. 08-05-00069. 2008-2010.

- Nonlinear Waves in Shallow Water. Joint Russian – UK grant. Russian Fund for Basic Research No. 08-05-91850. 2008-2010.
- Mathematical modeling of mixing and dispersion effects in the shallow waters of the coastal zone. INTAS (together with France, UK and Italy). No. 06-1000013-9236. 2007-2008.
- Forecasting of the marine natural hazards based on model of nonlinear waves. Russian Foundation for Basic Research. No. 05-05-64265. 2005-2007.
- Dynamics of internal solitons on shelves of East China and Japan Seas. Joint Russian – Chinese grant 04-05-3900. 2005-2007.
- Large amplitude sea waves: physical and mathematical models. Project 5.3 of the National Program “Mathematical Methods of Nonlinear Dynamics”. Russian Academy of Sciences. 2003-2005.
- Control of nonlinear waves and vortices by synchronization. INTAS (together with Denmark, UK and Israel) No. 03-51-4286. 2004-2006.
- Strongly nonlinear internal waves in lakes: generation, transformation and meromixis. INTAS (together with Germany, UK and Ukraine). No. 03-51-3728. 2004 – 2006.

#### **Expeditions and Field Surveys (2000-):**

- Ship Wave Impact on the coasts. Aegna Island, Estonia, July 2008.
- Tsunami Field Survey in Guadeloupe due to Martinique earthquake (28/11/07,  $M = 7.4$ ), November 2007.
- Tsunami Field Survey at India due to 2004 Sumatra earthquake. March 2005.
- Tsunami Field Survey at Les Saintes due to earthquake (21/11/04,  $M = 6.3$ ) in Dominica Passage. January 2005.
- Tsunami Field Survey at Guadeloupe due to earthquake (21/11/04,  $M = 6.3$ ) in Dominica Passage. November 2004.
- Tsunami Field Survey at Montserrat and Antigua (Caribbean Sea) due to Volcano Eruption on Montserrat (12 July 2003). January – February 2004.
- Tsunami Field Survey at Guadeloupe due to Volcano Eruption on Montserrat (12 July 2003). November 2003.
- Historical Tsunami Field Survey at Guadeloupe (French West India). May 2001.

#### **PUBLIC RELEASE (after 1996):**

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