GEORGIY L. STENCHIKOV

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PRESENT POSITION:

2009-present Professor of Earth Science, Division of Physical Science and Engineering, Earth Science and Engineering Program, King Abdullah University of Science and Technology, Kingdom of Saudi Arabia

AREAS OF EXPERTISE:

Climate Modeling, Numerical Fluid Dynamics, Radiation Transfer, Atmospheric Physics

EDUCATION:

1989 Habilitation, Modeling of the Large-Scale Anthropogenic Impacts on Climate, Computer Center of the Russian Academy of Sciences, Moscow, Russia

1977 Ph.D., Numerical and Analytical Study of Weak Plasma Turbulence, Moscow Physical Technical Institute, Dolgoprudny, Russia

1973 M.S., Physics and Mathematics (with distinction), Moscow Physical Technical Institute, Dolgoprudny, Russia

PREVIOUS POSITIONS HELD:

1998-2009 Research Professor, Department of Environmental Sciences, Rutgers University, USA

1992-1998 Senior Research Scientist, Department of Meteorology, University of Maryland, College Park, USA

1976-1992 Head of the Branch of Mathematical Modeling of Anthropogenic Impacts (previously Senior Research Scientist and Junior Research Scientist), Computer Center of the Russian Academy of Sciences, Moscow, Russia

PROFESSIONAL EXPERIENCE:

2020 Task Force Member of Circular Economy, S20, KAUST

2020 Task Force Member of Climate Change Initiative for the Eastern Mediterranean and Middle East (EMME), Cyprus Institute

2019-2020 Task Force Member of Air Quality, KAUST

2018 Member of the Scientific Program Committee for the International Conference "Climate Change in the Mediterranean and the Middle East: Challenges and Solutions" (www.climatechange2018.org), 18-19 May, 2018

2018 Review Panel Member for the Deutsche Forschungsgemeinschaft (DFG) on VolImpact proposal, considering effect of explosive volcanic eruptions on climate, Greifswald, Germany, 12-13 September 2018

2017 Participated in the Air Quality and Climate Change in the Arabian Basin (AQABA) ship campaign in June-July 2017 and organized the AQABA workshop at KAUST on 10-12 June 2017

2016 Organized and hosted balloon campaign in cooperation with NASA Langley Research Center to study aerosol vertical distribution and effect of Indian Monsoon outflow, KAUST, August, 2016

2016 Organized and convened the climate physics symposium within the KAUST Winter Enrichment Program, 11-12 January 2016

2015	Participated in Climate Summit COP21 as a science representative from Saudi Arabia (https://tinyurl.com/yyb9veqk), Paris, December, 2015
2015	Organized and convened the Dust and Renewable Energy Workshop with participation of National Center of Atmospheric Research, Boulder, US, Desert Research Institute, Reno, US, Presidency of Meteorology and Environment, KSA, and ARAMCO, KSA, KAUST, 27-28 October 2015
2015	Organized and hosted balloon campaign in cooperation with NASA Langley Research Center to study aerosol vertical distribution and effect of Indian Monsoon outflow, KAUST, August, 2015
2013-2014	Member of the Program Committee for International Conference on Aerosols and Atmospheric Optics, Institute of Atmospheric Physics, Russian Academy of Sciences, Moscow, Russia
2013-2015	Expert for the Science and Coordination Committee of the Russian Federal Program "Study on Prioritized Directions of Development of the Russian Science-Technology Complex" for the period of 2014-2020
2013-2016	Expert for the K.A.CARE/NREL Renewable Resource Monitoring and Mapping (RRMM) Program in Saudi Arabia
2011-2014	Expert for the United Nations Economic and Social Commission for Western Asia (ESCWA) coordinated Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR)
2012-present	Editorial Board Member of the Elsevier Journal *Urban Climate*
2012-present	Established and maintain the NASA AERONET site at KAUST for aerosol monitoring
2012	Organized and Convened a Climate Modeling Symposium, KAUST, Thuwal, 14-15 January 2012
2011	Conducted first ever ground-based aerosol observations at the Red Sea during the KAUST 5-legg ship campaign. The obtained results are published at the NASA AERONET MARITIME website: https://tinyurl.com/y5pdptxf
2011	Organized (jointly with Max Planck Institute for Meteorology, University of Hamburg, and Karl Friedrich von Weizacker Centre for Science and Peace Research) and Convened, International conference on Severe Atmospheric Aerosol Events, University of Hamburg, 11-12 August 2011
2011	Organized (jointly with OCCAM, University of Oxford, UK and NCED, University of Minnesota, US) and convened the International Workshop on Quantitative Descriptions of Earth Surface Processes, KAUST, Saudi Arabia, 20-24 June 2011
2011	Co-convened the session CL3.9 "Geoengineering techniques and what does volcanic activity tells us?" at the European Geosciences Union General Assembly 2011 in Vienna, Austria, 4-8 April 2011
2011	Co-authored the Scientific Assessment of Ozone Depletion: 2010, Global Ozone Research and Monitoring project – Report No. 52, 516 pp., World Meteorological Organization, Geneva, Switzerland, 2011
2010	Chaired the session CL4.11 "Volcanic Activity and the Earth System" at the European Geosciences Union General Assembly 2010 in Vienna, Austria, 2-7 May 2010
2010	Co-convened the session CL3.3 "Geoengineering" at the European Geosciences Union General Assembly 2010 in Vienna, Austria, 2-7 May 2010
2010	Expert in the SPARC/WCRP report on Chemistry-Climate Model Validation Activity
2008	Convened and chaired the session at the 2007 AGU Joint Assembly "Geoengineering as a Solution to Global Warming?" 15-19 December, San Francisco (with A. Robock and R. Turco)
2007	Expert for Nobel Prize winning IPCC AR4 report
2007	Convened and chaired the session at the 2007 AGU Joint Assembly "Twenty five years after El Chichon: Volcanic aerosols and their climatic effects" 22-25 May, Acapulco,

	Mexico (with A. Robock and J. Antuna)
2006	Convened the session at the 2006 AGU Fall Meeting "U08: Environmental Consequences of Regional Nuclear Conflicts." (with R. Turco, B. Toon, and A. Robock)
2005-2007	Contributed to the International Panel for Climate Change (IPCC) Forth Assessment Report, Chapter 2 "Changes in atmospheric constituents and radiative forcing"
2004-2009	Served on the International Advisory Board for the PEP Virtual Institute, National Helmholtz Society, Germany
2004	Convened and chaired the session at the 2004 AGU Fall Meeting "Methods in Regional Climate Modeling"
2004	Convened and chaired the session "Volcanic Effect on Climate and Weather" at the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) 2004 General Assembly "Volcanism and its Impact on Society" Pucon, Chili
2002	Convened and chaired the session at the 2002 AGU Fall Meeting "Regional Climate Modeling"
2002	Served on the program committee for Chapman Conference on Volcanism and the Earth's Atmosphere, Santorini, Greece, June 17-21, 2002
1999	Convened and chaired the session "Volcanic Eruptions and Climate" at the 1999 AGU Fall Meeting
1998-2004	Led the task for Intercomparison of Simulations of the 1991 Pinatubo eruption in the GCM Reality Intercomparison Project for the Stratosphere (GRIPS) coordinated by the International Committee on Stratospheric Processes and Their Role in Climate (SPARC).
1990-1991	Served on the USSR National Committee on the Climate Research Program.
1982-1990	Contributed to the International Studies on Environmental Consequences of Nuclear War (ENUWAR) coordinated by Scientific Committee on Problems of the Environment (SCOPE). Served as an editor of Russian translation of SCOPE 28, Vol. 1, *Environmental Consequences of Nuclear War*, 1985.

TEACHING EXPERIENCE:

2009-present	Member of the Earth Science Graduate Program, KAUST
2009-present	Member of the Marine Science Graduate Program, KAUST
2009-present	Member of the Applied Mathematics and Computational Science Graduate Program, KAUST
2006-2010	Member of the Mechanical and Aerospace Engineering Graduate Program, Rutgers University
2005-2016	Member of the Graduate Program of Atmospheric Sciences, Rutgers University
1998-2016	Member of the Graduate Program of Environmental Sciences, Rutgers University
1998-2016	Lecturing and supervising graduate students, Rutgers University
1992-1998	Lecturing and supervising graduate students, University of Maryland
1991-1992	Member of the Institutional Doctoral Committee of the Institute of Mathematical Modeling of the Russian Academy of Sciences
1985-1992	Associate Professor, Moscow Physical Technical Institute (part time), lecturing and supervising graduate students
1978-1985	Assistant Professor, Moscow Institute of Radio Electronics and Automation (part time), lecturing

Courses taught:

2010-present	ErSE 211-Global Geophysics for graduate students, KAUST
2009-present	ErSE 201-Geophysical Fluid Dynamics I for graduate students, KAUST.
2009-present	ErSE 301-Geophysical Fluid Dynamics II for graduate students, KAUST.
2007-2008	Fundamentals of Atmospheric Science (The graduate-level course on Radiation Transport and Boundary Layer), Rutgers University

2007-2008	Physical Meteorology (The undergraduate-level course on atmospheric physics), Rutgers University
2007-2008	Modeling of Climatic Change (The graduate-level course focused on numerical model development and application), Rutgers University
2006-2007	Physical Meteorology, Rutgers University
2003-2004	Special Problems in Industrial and System Engineering for Industrial Engineering students, Rutgers University
2002-2003	Modeling of Climatic Change, Rutgers University
2001-2002	Fundamental Concepts of Environmental Sciences, Rutgers University
1999-2000	Modeling of Climatic Change, Rutgers University
1992-1998	Special lectures at the University of Maryland on climate modeling, ozone effects on climate, aerosol radiative forcing, and aerosol climate impact
1985-1992	Mathematical Modeling of Climate, Moscow Physical Technical Institute for mechanical engineering, applied math, and physics students
1978-1985	Numerical Methods for Engineers, Moscow Institute of Radio Electronics and Automation

SUPERVISING:

Postdoctoral Fellows

- Dr. Matteo Zampieri, KAUST
- Dr. Rachid Abida, KAUST
- Dr. Stoitchko Kalederski, KAUST
- Dr. Jish Prakash, KAUST
- Dr. Basit Khan, KAUST
- Dr. Weichun Tao, KAUST
- Dr. Dionysios.Raitsos, KAUST
- Dr. Suchithra Sundaram, KAUST
- Dr. Alex Ukhov, KAUST
- Dr. Anatolii Anisimov, KAUST
- Dr. Paola Crippa, KAUST
- Dr. Liping Deng, KAUST
- Dr. Udaya Gunturu, KAUST
- Dr. Mohamed Abdelkader, KAUST
- Dr Zeeshaan Shahid, KAUST
- Dr. Sagar Parajuli, KAUST
- Dr. Sergey Osipov, KAUST
- Dr. Abdul Malik, KAUST
- Dr. Richard Bantges, Imperial College London
- Dr. Olga Zolina, Joseph Fourier University, France
- Dr. Gonzalo Miguez-Macho, Rutgers University
- Dr. Luke Oman, Rutgers University

Ph.D. Students

- Yasser Alshehri, 2019-present, Ph.D. student, KAUST
- Diego Blanco Rojas, 2015-present, Ph.D. student, KAUST
- Evgeniya Volkova, 2015-present, Ph.D. student, KAUST
- Andrew Yip, 2013-2018, Ph.D. student, KAUST
- Alexandr Golenkov, 2012-2013, Ph.D. student, KAUST
- Sergey Osipov, 2011-2017, Ph.D. student, KAUST

- Jerry Raj, 2011-2019, Ph.D. student, KAUST
- Evgeniya Predybaylo, 2011-2019, Ph.D. student, KAUST
- Muhammad Dogar, 2010-2018, Ph.D. student, KAUST
- Hamza Kunhu Bangalath, 2010-2016, Ph.D. student, KAUST
- Hoang Vu Nguyen, 2010-2014, Ph.D student, KAUST
- Pedro De La Torre, 2010-2014, Ph.D. student, Ph.D., KAUST
- Xuxin Ma, 2012-2015, Ph.D. student, Ph.D., KAUST
- Rebecca Allen, 2012-2015, Ph.D. student, Ph.D., KAUST
- Manu Ana Thomas, Ph.D., February, 2008, Effect of Volcanic Aerosols on Climate, Max-Plank Institute for Meteorology, Germany (with Hans Graf and Claudia Timmreck)
- Lesley Ott, Ph.D., 2006, Effect of Deep Convection on Regional and Global Chemical Balances, Department of Meteorology, University of Maryland, College Park (with Ken Pickering)
- Luke Oman, Ph.D., December, 2005, Effects of high latitude volcanic eruptions on climate, Department of Environmental Sciences, Rutgers University (with Alan Robock)
- Juan Carlos Antuña, Ph.D., 2002, Comparison of SAGE II and lidar stratospheric aerosol extinction datasets after the Mt. Pinatubo eruption, Department of Environmental Sciences, Rutgers University (with Alan Robock)
- Rokjin Park, Ph.D., 2001, A study of interaction of regional- and global-scale atmospheric chemistry, transport, and climate processes: Modeling, case-studies, comparison with field observations, Department of Meteorology, University of Maryland, College Park (with Ken Pickering)
- Dmitriy Koryavov, Ph.D., 1989, A Variational Discretization Method for Designing of Finite-Difference Models in Geophysical Hydrodynamics, Moscow Physical Technical Institute, Dogoprudny, Russia
- Dmitriy Turkov, Ph.D., 1988, GCM Study of the Effect of the Land's Surface to the Earth's Climate, Computer Center and Institute of Geography of Russian Academy of Sciences, Moscow, Russia

Masters Students

- Hjortur Jonasson, 2013-2014, MS student, KAUST
- Santiago Arango, 2012-2013, MS student, KAUST
- Anna Scott, 2012-2014, MS Thesis student, KAUST
- Fawwad Qureshi, 2012, MS Thesis student, KAUST
- Weigang Li, 2011-2012, MS Thesis student, KAUST
- Rebecca Allen, Spring 2010, MS student, KAUST
- Roald Akberov, MS, December, 2007, *An Improved Numerical Model for Calculations of Transport and Size Distributions of Atmospheric Aerosols and Cloud Droplets*, Department of Mechanical and Aerospace Engineering, Rutgers University

HONORS AND AWARDS:

2020 Editors' Highlights of the paper "The role of the SO_2 radiative effect in sustaining the volcanic winter and soothing the Toba impact on climate" published on Eos.org: https://tinyurl.com/yxczvzfz

2007 Co-authored the Nobel Prize winning IPCC AR4 report

2006 AGU Journal Highlight Award for the paper by T. Delworth, V. Ramaswamy, and G. Stenchikov, 2005: The impact of aerosols on simulated ocean temperature and heat content in the 20th century, Geophys. Res. Lett., DOI 10.1029/2005GL024457

2004 NOAA Outstanding Scientific Paper Award for 2003 for the paper by B. J. Soden, R. T. Wetherald, G. L. Stenchikov, and A. Robock, 2002: Global Cooling After the Eruption of

Mt. Pinatubo: A Test of Climate Feedback by Water vapor, Science, 296, 727-730.

2003 The National Aeronautics and Space Administration Group Achievement Award "in recognition of outstanding accomplishments and contributions to the extremely successful Cirrus Regional Study of Tropical Anvils and Cirrus Layers - Florida Area Cirrus Experiment (CRYSTAL-FACE) based in the Florida Everglades region in July 2002"

1986 Prize of the Council of Ministers of the USSR for the development of multi-tasking software

1985 Gold Medal Award of the National Exhibition of the Economy Achievements of the USSR for the climate impact studies

PRESS COVERAGE:

2020 March 8, Arab News, Scientists discover Middle East dust cools Red Sea

2010 April 26, Interview with IRIN (Newsletter of UN Office for the Coordination of Humanitarian Affairs) about Iceland's Eyjafjallajökull volcano eruption

2010 February 3, Interview with Radio OON on Nuclear Winter Theory and Climatic Effects of a Regional Nuclear War

2009 November, Interview with Newsweek/Russia on Geoengineering

2006 Panelist and Presenter at the Press Conference on Environmental Consequences of Regional Nuclear Conflicts at the 2006 Fall AGU Meeting in San Francisco on December 11, 2006

2006 NASA featured research paper by L. Oman, A. Robock, G. L. Stenchikov, and T. Thordarson, 2006: High-Latitude Eruptions Cast Shadow over the African Monsoon and the Flow of the Nile, *Geoph. Res. Lett.*, ***33***, L18711, doi:10.1029/2006GL027665 at: https://tinyurl.com/y3ssk7rv. The story has had multiple pickups worldwide.

2006 ScienCentral News (for ABC) featured the study by G. Stenchikov, N. Lahoti, P. Lioy, P. Georgopoulos, D. Diner, and R. Kahn, 2006: Multiscale Plume Transport from Collapse of the World Trade Center on September 11, 2001, Environmental Fluid Mechanics, doi: 10.1007/s10652-006-9001-8

2006 New Jersey News presented a TV interview with Dr. Stenchikov on the above paper on September 8, 2006

2006 Daily Targum of March 20 highlighted the paper by V. Ramaswamy, M. D. Schwarzkopf, W. Randel, B. Santer, B. J. Soden, G. Stenchikov, Anthropogenic and natural influences in the evolution of lower stratospheric cooling, *Science, 311*,.1138-1141, 2006

2005 NASA "top story" on August 11, 2005 highlighting the paper by L. Oman, A. Robock, G. Stenchikov, G. Schmidt, and R. Ruedy, 2005: Climatic Response to High Latitude Volcanic Eruptions, *J. Geophys. Res., 110*, D13103, DOI:10.1029/2004JD005487.

2003 NASA "top story" on March 12, 2003 highlighting the paper by Stenchikov et al., Arctic Oscillation response to the 1991 Mount Pinatubo eruption: Effects on volcanic aerosols and ozone depletion, 107, D24, 4803, DOI:10.1029/2002JD002090, 2002

GRANTS

On-going:

1. Belmont Forum, Coastal OceAn SusTainability in Changing Climate (COAST), KAUST and P.P. Shirshov Institute of Oceanology, RAS, $220,000, April 1, 2020 - March 31, 2023 (Dr. Stenchikov – co-PI)
2. KAUST-CRG3/Max Planck Institute for Chemistry/National Center for Atmospheric Research, Combined Radiative and Air Quality Effects of Anthropogenic Air Pollution and Dust over the Arabian Peninsula, March 1, 2015 –June 28, 2020, $ 1,172,799, no-cost extension (Dr. Stenchikov – PI)

Completed:

3. EU Cost Action: International Network to Encourage the Use of Monitoring and Forecasting Dust Products, Barcelona Supercomputing Center, July 15, 2017-July 14, 2020, no funding (Dr. Stenchikov Co-I)
4. KAUST-CRG4/Space-time Statistical Models for Wind Field Forecasting with High Performance Computing, April 1, 2016-March 31, 2019, no funding (Dr. Stenchikov Co-I)
5. KAUST-CRG4/Statistical Process Monitoring and Risk Assessment for Engineering and Spatial Environmental Applications, April 1, 2016-March 31, 2019, no funding (Dr. Stenchikov Co-I)
6. SABIC, Assessment of the near-surface and elevated wind power resources over Saudi Arabia, October 1, 2013-September 30, 2017, $1,017,917 (Dr. Stenchikov PI)
7. KAUST-CRG1/Imperial College London, Quantifying the Radiative Impact of Dust aerosol over the Arabian Peninsula and Red Sea and its implications for local, regional and global climate, January 1, 2013-December 31, 2015, $1,200,000 (Dr. Stenchikov PI)
8. KAUST-GRP/Oxford University-OCCAM, GRP Collaborative Fellow Proposal, Modelling the Interaction of Atmospheric Flow with a Sandy Surface, January 1, 2012-December 31, 2015, $160,000 (Dr. Stenchikov PI)
9. KAUST-AEA/UT Austin, Refinement of Dust Entrainment and Transport Dynamics for Input into the Next Generation Coupled Land–Atmosphere Models, September 1, 2011-August 31, 2014, $360,000 (Dr. Stenchikov PI)
10. KAUST-AEA/UT Austin, Dust Storms and Climate Change, July 1, 2010-June 30, 2013, $146,149 (Dr. Stenchikov PI)
11. NASA/UMD, Tropospheric Transport Processes for Trace Gases and Aerosols: Regional-to-Global Chemistry and Climate Consequences, July 1, 2008-June 30, 2011, $88,810, (Dr. Stenchikov PI)
12. NSF, ATM-0730452, Collaborative Research in Evaluation of Suggestions to Geoengineer the Climate System Using Stratospheric Aerosols and Sun Shading, November 1, 2007-October 31, 2010, $627,000 (Dr. Stenchikov Co-PI)
13. NASA, NNG05GB06G, Calculation of radiative characteristics of volcanic aerosols using satellite observations, November 1, 2004-October 31, 2008, $225,000 (Dr. Stenchikov PI)
14. NSF, ATM-0351280, Stratospheric aerosol data assimilation for climate studies, March 15, 2004-February 28, 2008, $298,999 (Dr. Stenchikov PI)
15. UCAR/GFDL, Impact of Volcanic Eruptions on ENSO, Ocean Heat Uptake, and Sea Level, October 1, 2007-December 31, 2007, $45,000, (Dr. Stenchikov PI)
16. Max Planck Institute for Meteorology, Hamburg, Germany, Visiting Scientist Award, August 26-September 23, 2007, $8,000, (Dr. Stenchikov PI)
17. UCAR/GFDL, Study of Volcanic Impact and ENSO Interaction, October 15, 2006-December 14, 2006, $35,000, (Dr. Stenchikov PI)
18. UCAR/GFDL, Volcanic Test of the Stratosphere-Troposphere Interaction, September 15, 2005-December 14, 2005, $45,000, (Dr. Stenchikov PI)
19. IPCC (International Panel for Climate Change) AR4 Model Analysis Project, Evaluation of volcanic climate effects in the IPCC historic runs, September 1, 2004-May 31, 2005 (no charge) (Dr. Stenchikov PI)
20. NJDEP, Regional modeling of PM2.5 atmospheric transport from remote and local sources in NJ, April 15, 2004-September 14, 2006, $54,897 (Dr. Stenchikov PI)
21. UCAR/GFDL, S04-44290, Effect of stratospheric aerosols on climate, January 20, 2004-April 19, 2004, $43,344, (Dr. Stenchikov PI)
22. DOE, Decadal Climate Studies with Enhanced Variable and Uniform Resolution GCMs Using Advanced Numerical Techniques, September 15, 2004-September 14, 2004 (Dr. Stenchikov Co-I, collaborated at no charge).
23. NASA/UMD, Tropospheric transport processes for trace gases and aerosols: Regional-to-global chemical and climate consequences, November 1, 2003-October 31, 2006, $75,000 (Dr. Stenchikov

PI on subcontract)

24. NSF, Climatic Effects of the 1783-1784 Laki Volcanic Eruption, August 15, 2003-August 14, 2007, $481,789 (Dr. Robock PI, Dr. Stenchikov Co-PI)
25. NJ Department of Transportation, Emissions and atmospheric transport of PCBs and Hg from stabilized harbor sediments, June 1, 2003-May 31, 2005, $223,486 (Dr. Stenchikov Co-PI)
26. EPA/UMDNJ, Reconstruction of dust/smoke plume that resulted from the collapse of the Twin Towers and the fires that burned at the site of the WTC, September 1, 2002- January 31, 2004, $35,276 (The project is based at EOHSI; Dr. Stenchikov P. I. on a subcontract).
27. NSF, Three-Dimensional Cloud-Resolving Simulations of Trace Gas Transport, Lightning NOx Production, and Photochemistry in Observed Deep Convection, September 1, 2000-August 31, 2004, $180,000 (Dr. Stenchikov PI)
28. NASA/UMD (subcontract with the University of Maryland), Chemical Tracer Transport in CRYSTAL-FACE: Mesoscale Forecasts and Cloud Model Analyses, January 15, 2002-January 14, 2005, $70,854 (Dr. Stenchikov PI on subcontract)
29. NSF, Climate sensitivity to absorbing tropospheric aerosols in experiments with a general circulation model, February 1, 2002-January 31, 2005 (Jan Perlwitz, PI, The project was based at GISS in New York, Dr. Stenchikov collaborated at no charge)
30. CEP, Diagnostics and improvement of the turbulence parameterization in the Regional Atmospheric Modeling System (RAMS), August, 2002-July, 2003, $10,000 (Dr. Stenchikov PI)
31. NASA/GISS cooperative agreement, Climate downscaling, 2002-2003 (Dr. Robock PI, Dr. Stenchikov Co-I.)
32. NASA (subcontract with the University of Maryland), "Tropospheric Convection and Stratosphere-Troposphere Exchange: Effects on Photochemistry, Aerosols, and Climate", April 1, 2000-March 31, 2003, $175,000 (Dr. Strenchikov PI on subcontract)
33. NSF, Volcanic Eruptions and Climate, April 1, 2000-March 31, 2003, $270,000 (Dr. Robock-PI, Dr. Stenchikov Co-PI)
34. NASA, Volcanic Eruptions and Climate, April 1, 2000-March 31, 2003, $180,000 (Dr. Robock PI, Dr. Stenchikov Co-PI)
35. NASA, NAG1-2154, SAGE II Validation with a Global Lidar Network, February 1, 1999-January 31, 2002, $249,933 (Dr. Robock PI, Dr. Stenchikov Co-I.)
36. DOE, Variable Resolution GCMs for Regional and Subregional Decadal Climate Change Studies, May 15, 1998-May 14, 2001, $450,000, (Dr. Fox-Rabinovitz, PI, Dr. Stenchikov Co-I.)
37. NSF, ATM-9528201, Climatic Effects of Volcanic Eruptions, March 1, 1996-February 28, 2000, $165,000 (Dr. Robock, PI, Dr. Stenchikov Co-PI)
38. DOE, LWT-6212307506, Great Plains National Institute for Global Environmental Change, The Diurnal Cycle over the Great Plains in the Future: Mechanisms and Spatial Distribution, July 1, 1996-June 30, 2000, $205,000 (Dr. Stenchikov PI)
39. NASA, NAG-53678, Mission to Planet Earth, Tropospheric Convection and Stratosphere-Troposphere Exchange: Effects on Photochemistry, Aerosols, and Climate, January 15, 1997-January, 14, 2000, $840,000. Rutgers University subcontract with University of Maryland (Dr. Stenchikov PI)
40. NASA, NAGW-4912, NAG-53739, NAG-5-7913, Climatic Effects of Volcanic Eruptions, December 1, 1995-December 31, 1999, $210,000 (Dr. Stenchikov PI)
41. NSF, ATM-9627179, Numerical Simulation of Clouds and Photochemistry for STERAO-A Deep Convection: Nowcasts and Post-mission Diagnostic Studies, July 15, 1996 - July 14, 1998, $160,000 (Dr. Pickering PI, Dr. Stenchikov Co-I)
42. NASA, NCC-555, Development of Stretched Grid GCM for Global and Regional Studies and Applications: Numerical Problem Study Using the ARIES/GEOS Dynamical Core, October 1, 1995- September 30, 1998, $100,000, (Dr. Fox-Rabinovitz-PI, Dr. Stenchikov Co-I)
43. NASA, NAG 5-1835, Climate Model Calculations of The Effects of Volcanoes on Global Climate, December 1, 1991-September 30, 1996, $439,000, (Dr. Robock PI, Dr. Stenchikov, Co-I)

44. EPA, Ozone Production in the Non-urban Troposphere: Model Calculations for Case Studies, August 1, 1992-April 30, 1996, $321,273, (Dr. Dickerson PI, Dr. Stenchikov Co-I)

SERVICE

For University:

- Program Chair, Earth Sciences and Engineering Program, KAUST, 2009-present
- Member of the ErSE search committee, KAUST, 2020-present
- Member of Air Quality Task Force, KAUST, 2019- present
- Member of the University Curriculum Committee, KAUST, 2018-present
- Member of the Academic Conceal, KAUST, 2012-2013
- Member of the KAUST Resource Stewardship Committee, KAUST, October 2010-May 2011
- Member of ErSE Search Committee, KAUST, 2010-2016
- Member of CEMSE.AMCS search committee, KAUST, 2014-2015
- Member of the University Curriculum Committee, KAUST, 2009-2013
- Member of the ErSE Program Curriculum Committee, KAUST, 2014-2016
- Member of the Dissertation Proposal Defense Committee for Ahmad Kadoura, March 12, 2014
- Member of the Dissertation Proposal Defense Committee for Rebecca Allen, January 28, 2014
- Member of the Dissertation Proposal Defense Committee for Ph.D. student Wei Gao, February 6, 2014
- Member of the Dissertation Defense Committee for Wenbin Xu, October 24, 2013
- Member of the Qualifying Exam Committee for Sabique Langodan, KAUST, January 5, 2013
- Member of the Qualifying Exam Committee for Rebecca Allen, KAUST, December 15, 2012
- Member of the Qualifying Exam Committee for Ahmad Kadoura, KAUST, July 21, 2012
- Member of the MS-Thesis committee for Hosam Osman, KAUST, April 16, 2012
- Member of the MS-Thesis committee for Bertrand Rioux, KAUST, January 17, 2012
- Judging at the First KAUST Student Research Symposium, KAUST, October 23, 2010
- Member of the MS-Thesis committee for Rebecca Allen, KAUST, May 18, 2011
- Member of the MS-Thesis committee for Mohamad Elgharamti, KAUST, December 12, 2010
- Member of the Ph.D. committee for Matt Georgescu, Rutgers University, January 2008
- Member of the Ph.D. committee for Chaochao Gao, Rutgers University, December 2007
- Member of the Admission Committee for Graduate Program in Atmospharic Sciences, 2006-present
- Chair of the Department of Environmental Sciences Computer Committee, 2005 – present
- Member of the Research Subcommittee of the Rutgers University Information Technology Strategic Planning Committee, 2004-2006
- Member of the Ph.D. committee for Michel Previdi, Rutgers University, December 2005
- Member of the Ph.D. committee for Luke Oman, Rutgers University, December 2005
- Member of the Department of Environmental Sciences search committee for Computer System Administrator, 2005
- Member of the Ph.D. Qualifying Exam Committee for Thomas Atkins, Rutgers University, October, 2004
- Member of the Ph.D. Qualifying Exam Committee for Chaochao Gao, Rutgers University, October, 2004
- Member of the Ph.D. Qualifying Exam Committee for Haibin Li, Rutgers University, October, 2004
- Reviewer on the George H. Cook Scholars Program Study by Megan Linkin, September 2003 – May 2004
- Member of the Department of Environmental Sciences space committee, January, 2003 – present

- Member of the Ph.D. committee for Lifeng Luo, Rutgers University, January 2003
- Member of the M.S. committee for Luke Oman, Rutgers University, April 23, 2003
- Member of Ph.D. qualifying exam committee for Luke Oman, Rutgers University, August 25, 2003
- Member of the M.S. committee for Tao Zeng, July 9, 2002, Rutgers University
- Member of the M.S. committee for Changsub Shim, July 9, 2002, Rutgers University
- Member of the Department Search Committee for Atmospheric Physics Assistant Professor, Rutgers University, February, 2001
- Member of the Ph.D. committee for Rokjin Park, University of Maryland, August 2001
- Member of the M.S. committee for Lori Thompson, Rutgers University, December 2001
- Member of the Ph.D. committee for Alex DeCaria, University of Maryland, June 2000
- Member of the Ph.D. comprehensive exam committee for Paul Wishansky, Rutgers University, March 23, 1999

For Scientific Community and Society:

- Participants of Climate Summit COP 21 representing Saudi Arabia, Paris, December 1-15, 2016
- Panel Reviewer for the NASA Atmospheric Composition Modeling and Analysis Program (ACMAP), July 25-26, 2007
- President of the Board of the L'Ambiance Condominium Association (served as a member of the Board since 2002), 2006-2009
- Panel Reviewer for the EPA Program "STAR Implications of Tropospheric Air Pollution for Surface UV Exposures," April 27, 2006, Washington, DC, 2006
- Paper reviewer for Journal of Geophysical Research, Journal of Atmospheric Sciences, Science, Numerical Methods for Partial Differential Equations, Geophysical Research Letters, Journal of Meteorological Society of Japan, Monthly Weather Review, Journal of Climate, Journal of Hydrometeorology, 1996-present
- Proposal reviewer for NASA, National Academy of Sciences (USAID program), National Institute of Global Environmental Change (NIGEC), NSF, Natural Environment Research Council, EPA, 1996-present
- Paper reviewer for IZVESTIYA Academy of Sciences USSR Atmospheric and Oceanic Physics, and USSR Computational Mathematics and Mathematical Physics, 1986-1992

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(The publication list is divided into three sections based on the subject of the research: Fluid Dynamics, Plasma Physics, and Climate/Environmental Modeling)

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1. Andreev, N. E., Silin, V. P., & Stenchikov, G. L. (1978). Plasma deformation by pondermotor force and accompanying effects (in Russian), . *Preprint N 226, Phys. Lebedev Institute of the USSR AS*, 19 pp.
2. Andreev, N. E., Silin, V. P., & Stenchikov, G. L. (1979). Nonlinear interaction of radiation with plasmas accounting for of density by pondermotor force (in Russian). *Preprint N 113, Phys. Lebedev Institute of the USSR AS*, 29 pp.
3. Aleksandrov, V. V., & Stenchikov, G. L. (1983). On the modeling of the climatic consequences of the nuclear war. *The proceedings on Applied Mathematics the USSR Academy of Sciences, Computing Center*, 21 pp.
4. Aleksandrov, V. V., Moiseev, N. N., Skorohodov, S. L., & Stenchikov, G. L. (1984). The recent studies of environmental consequences of a nuclear war (in Russian). *Report of the Computing Center of USSR Academy of Sciences*, 107 pp.
5. Aleksandrov, V. V., & Stenchikov, G. L. (1985). Nuclear winter - numerical experiment (in Russian). *Zemlya i Vselennaya (Earth and Universe), 4*, 26-30.
6. Stenchikov, G. L. (1985). Mathematical modeling of climate (in Russian). *Priroda, 6*, 39-50.
7. Stenchikov, G. L. (1985). Climatic consequences of nuclear war: injections and spread of the optically active pollutants in the atmosphere (in Russian). *Contributions on Applied Mathematics USSR Academy of Sciences, Computing Center of the USSR Academy of Sciences*, 34 pp.
8. Stenchikov, G. L. (1985). Numerical modeling of the influence of the atmospheric pollution on climate and nature. *The Proceedings on Applied Mathematics the USSR Academy of Sciences, Computing Center of the USSR Academy of Sciences*, 19 pp.
9. Stenchikov, G. L., & Carl, P. (1985). Climatic consequences of nuclear war: Sensitivity against large-scale inhomogeneities in the initial atmospheric pollutions. *Preprint of the Academy of Sciences of the German Democratic Republic, Berlin*, 96 pp.
10. Stenchikov, G. L. (1985). Possible climatic consequences of a nuclear war as a result of injection and spread of optically active impurities in the atmosphere. In *Proceedings of the 9th International Cloud Physics Conference* (pp. 952-963). Tallin, USSR.
11. Svirezhev, J. M., Aleksandrov, G. A., Arkhipov, P. L., Armand, A. D., Belotev, N. V., Denisenko, E. A., Fesenko, S. V., Krapivin, V. F., Logofet, D. O., Ovsjannikov, L. L., Pak, S. B., Paseko, V. P., Pisarenko, N. F., Rasshevajkin, V. N., Sarancha, D. A., Semenov, M. A., Shmidt, D. A., Stenchikov, G. L., Tarko, A. M., Vedjushkin, M. A., Vilkova, L. P., & Voinov, A. A. (1985). Ecological and demographic consequences of nuclear war In Y. M. Svirezhev (Ed.), *Proceedings on Applied Mathematics* (pp. 267). Moscow, Computing Center of USSR Academy of Sciences.
12. Arhipov, P. L., Stenchikov, G. L., & Turkov, D. V. (1987). Study of land surface effects on climate (in Russian). *Contributions on the Applied Mathematics, Moscow. Computing Center of the USSR Academy of Sciences*, 24 pp.

13. Stenchikov, G. L., & Turkov, G. L. (1988). Calculation of seasonal regimes of atmospheric circulation (in Russian). *Contributions on applied mathematics, Moscow, Computing Center of the USSR Academy of Sciences*, 27 pp.
14. Stenchikov, G. L. (1989). Mathematical modeling of the climatic effects of the week aerosol pollution. In *Proceedings of the Soviet-American Symposium: Atmospheric Aerosol and Climate*. USSR, Obninsk.
15. Fox-Rabinovitz, M. S., Stenchikov, G. L., Suarez, M. J., & Takacs, L. L. (1996). A finite-difference GCM dynamical core with a variable resolution stretched grid. *GAS/JCS, Working Group on Numerical Experimentation, WMO/TD - N0. 734, Rep. # 23*, 3.13-13.14.
16. Stenchikov, G. L., Kirchner, I., Robock, A., Graf, H.-F., Antuña, J. C., Grainger, R., Lambert, A., & Thomason, L. (1997). Radiative Forcing from the 1991 Mount Pinatubo Volcanic Eruption. *Report No. 231, Max-Planck-Institut für Meteorologie, Hamburg, Germany*, 40 pp.
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18. Stenchikov, G., Gray, S., Gamazaychikov, M., Park, R., & Robock, A. (1998). The Study of Regional Climate and Chemical Processes with Single Column Models. In *Proceedings of the 8th Atmospheric Radiation Measurement (ARM) Science Team Meeting, March 23-27* (pp. 723-724). Tucson, Arizona.
19. Stenchikov, G. (2005). Sensitivity of the Arctic Oscillation to Volcanic Forcing in the IPCC AR4 Models. In *Reports on Polar and Marine Research, Arctic Climate Workshop, Alfred Wegener Institute for Polar and Marine Research* (pp. 116-122). Potsdam, Germany, 5-7 September 2005.

INVITED TALKS:

1. Stenchikov, G. L.: Nuclear Winter. Presented at *All Moscow Seminar of All Union Society "Znanie", Moscow Workshop*. December 9, 1986.
2. Stenchikov, G. L.: Long-term climatic consequences of nuclear war caused by mixing of the ocean upper layer. Presented at *SCOPE ENUWAR Workshop*, Bangkok. February 9-13, 1987.
3. Stenchikov, G. L.: Climate consequences of nuclear war: The change of the land surface properties and climate variations. Presented at *SCOPE ENUWAR Workshop*, Geneva November 16-20, 1987.
4. Stenchikov, G. L.: Mathematical Modeling of Nuclear Winter Effects. Presented at *16th Nordic Meteorologists' Meeting*, Reykjavik, Iceland. August 6-9, 1988.
5. Stenchikov, G. L. and Carl, P.: First acute phase stress matrix calculations using the CCAS tropospheric general circulation model, *SCOPE ENUWAR Moscow Workshop*, 21-25 March 1988.
6. Stenchikov, G. L.: Modeling of the anthropogenic impacts on climate, *SCOPE Workshop "Effect of climate change on production and decomposition in coniferous forests and grasslands",* London, 1990.
7. Stenchikov, G. L.: The problems of simulation of the biota and climate interaction, *SCOPE Seminar "Geography of Organic Matter Production/Decomposition",* Poland, 1991.
8. Stenchikov, G. L. and Robock, A.: Climatic Effects due to water vapor amount increase in the stratosphere after the Pinatubo eruption. *EOS Supplement, AGU 1993 Fall Meeting*, 114., 1993
9. Robock, A., Taylor, K. E., Stenchikov, G. L., and Liu, Y.: GCM Test of Possible Mechanism for El Nino Triggering by the El Chichón Ash Cloud. *EOS Supplement, AGU 1993 Fall Meeting*, 114., 1993
10. Stenchikov, G. L., Fox-Rabinovitz, M., Suarez, M., and Takacs, L.: GCM calculations with regional resolution by stretched grids, *Max-Planck Institut fur Meteorologie,* Hamburg, Germany, August 16, 1995.
11. Stenchikov, G. L., Robock, A., and Dickerson, R. R.: Modeling of Climatic Effects and Vertical Distribution of AEROCE-Observed Gases and Aerosols, *AEROCE Workshop,* Miami, Florida, November 18-19, 1995.
12. Stenchikov, G. L., Graf, H., Robock, A., Kirchner, I., and Antuña, J. C.: Volcanic aerosol

perturbation experiments, *GCM-Reality Intercomparison Project for SPARC (GRIPS) Workshop,* Berlin, Germany, March 3-5, 1997.

13. Stenchikov, G. L., Dickerson, R., and Kondragunta, S.: Photochemical Forcing of Tropospheric Aerosols and Enhancement of Tropospheric Ozone Production, *Max Planck Institut fur Meteorologie,* Hamburg, Germany, September 11, 1997.
14. Stenchikov, G. L.: Impact of Aerosols on Photochemical Ozone Production, *EOS Investigators Working Group Meeting,* Atlanta, Georgia, November 4-6, 1997.
15. Stenchikov, G. L.: The Effect of Volcanoes on Climate, *Symposium sponsored by the Technology Forum of the Spectroscopy Society of Pittsburgh "Climatic Upheavals: the Implications for Our Society",* Pittsburgh, PA, January 10, 1998.
16. Pickering, K. and Stenchikov G. L.: Tropospheric Convection and Stratosphere-Troposphere Exchange: Effects on Photochemistry, Aerosols, and Climate, *Workshop on Chemistry/Climate Interactions*, Goddard Institute for Space Studies, New York, N.Y., May 14-15, 1998.
17. Stenchikov, G. L., Fox-Rabinivitz, M., and Gamazaychikov, M.: Physical Parameterizations on a Variable Resolution Grid: Test with a Single Column Model, *The Workshop on Variable Resolution Modeling*, University of Quebec at Montreal, Montreal, Canada, May 14-15, 1998.
18. Stenchikov, G. L., and Robock, A.: The diurnal cycle over the Great Plains, *Principal Investigator's Workshop,* Great Plains Regional center for Global Environmental Change, March 29-30, 1999.
19. Robock, A., Antuña, J., and Stenchikov G. L.: SAGE II validation with a global lidar network, *SAGE II Science Team Meeting,* Hampton University, Hampton VA., August 16-17, 1999.
20. Stenchikov, G. L.: Radiative Forcing and Climate Effects of Volcanic Aerosols, *Seminar at the Marine Sciences Research Center*, State University of New York, Stony Brook, Long Island, N.Y., January 26, 2000.
21. Stenchikov, G. L.: GCM Simulation of Climate Impact of the 1991 Mt. Pinatubo Eruption, *Climate and Radiation Branch Seminar Series*, NASA Goddard Space Flight Center, February 23, 2000.
22. Stenchikov, G. L., Numerical Modeling of Volcano Effect on Climate, *Seminar at the Department of Mechanical and Aerospace Eng.*, Rutgers University, Piscataway, NJ, February 9, 2000.
23. Allen, D., Pickering, K., Stenchikov, G. L., and Fox-Rabinovitz, M.: The impact of enhanced regional resolution on trace gas distributions in a global CTM, *Joint Workshop on Regional Climate Modeling*, Montreal, Canada, June 14-16, 2000.
24. Stenchikov, G. L., Fox-Rabinovitz, M., Pickering, K., and Park, R.: Study of interactive effects of convection, clouds, aerosols, and chemistry on regional climate, *Joint Workshop on Regional Climate Modeling*, June 14-16, 2000, Montreal, Canada.
25. Pickering, K., Stenchikov, G. L., Allen, D., Park, R., and Fox-Rabinovitz, M.: Convective transport: Effects on photochemistry and radiative forcing, *NASA/EOS Investigator Working Group Meeting*, Ft. Lauderdale, Florida, January 30-February 1, 2001,.
26. Stenchikov, G. L., and Robock, A.: SKYHI simulations of interactive effects of Mt. Pinatubo volcanic aerosols, QBO, and ozone changes, *GRIPS Workshop*, Max Planck Institute for Meteorology, Hamburg, Germany, February 26-28, 2001.
27. Stenchikov, G. L.: Modeling of climate impact of the 1991 Mt. Pinatubo eruption, *Seminar at the Climate Research Department*, Potsdam Institute for Climate Impact Research, Potsdam, Germany, March 6, 2001
28. Stenchikov, G. L.: Radiative forcing and climate effect of volcanic aerosols, *Seminar at the Department of Physics and Engineering Physics*, Stevens Institute of Technology, Hoboken, NJ, March 30, 2001.
29. Stenchikov, G. L. and Robock, A.: Volcanic eruptions and climate: Winter warming and summer cooling, *Seminar at the International Pacific research Center*, University of Hawaii at Manoa, Honolulu, Hawaii, April 20, 2001.
30. Stenchikov, G. L. and Robock, A.: QBO and Pinatubo aerosols effect on stratospheric temperatures, *SAGE II Science Team Meeting*, Hampton, VA, May 3-4, 2001.

31. Robock, A., Antuña, J., and Stenchikov, G. L.: SAGE II validation with a global lidar network, *SAGE II Science Team Meeting*, Hampton, VA, May 3-4, 2001.
32. Stenchikov, G. L.: Cloud-resolving simulations of STERAO-A and EULINOX convection, *Seminar at the Institute for Atmospheric Physics*, Deutsches Centrum für Luft und Raumfahrt, Oberpfaffenhofen, Germany, July 9, 2001.
33. Stenchikov, G. L., Robock, A., Hamilton, K., Ramaswamy, V., Schwarzkopf, M. D., and Ramachandran, S.: Interaction of volcanic aerosols, ozone changes, and the Quasi-biennial Oscillation determine the atmospheric response to the June 15, 1991 Pinatubo eruption, *Fall AGU Meeting*, San Francisco, December 10-15, 2001.
34. Stenchikov, G. L.: Arctic Oscillation response to the 1991 Mt. Pinatubo eruption, *Seminar at the Department of Oceanography*, Lamont-Doherty Earth Observatory of Columbia University, January 25, 2002.
35. Stenchikov, G. L. and Robock, A.: Atmospheric responses and stratosphere-troposphere interactions forced by the 1991 Mt. Pinatubo eruptions, *GRIPS workshop*, Tsukuba, Japan, March 12-15, 2002.
36. Stenchikov, G.L. and Robock, A.: Update on PINMIP, *GRIPS workshop*, Tsukuba, Japan, March 12-15, 2002.
37. Stenchikov, G. L.: Arctic oscillation response to the 1991 Mt. Pinatubo eruption, *Seminar at the Department of Meteorology*, University of Maryland, April 4, 2002.
38. Stenchikov, G. L.: Arctic oscillation response to the June 15, 1991 Mt. Pinatubo eruption, *Seminar at the Geophysical Fluid Dynamics Laboratory*, Princeton, April 10, 2002.
39. Stenchikov, G. L. and Hamilton, K.: Cloud-resolving model simulation of Hector and gravity waves up to the lower thermosphere, *DAWEX Workshop*, University of Hawaii, Honolulu, December 3-5, 2002.
40. Stenchikov, G. L., Pickering, K., and Selkirk, R.: CRYSTAL-FACE mesoscale model forecast intercomparison, *CRYSTAL-FACE science team meeting*, Salt Lake City, Utah, 24-28 February 2003.
41. Stenchikov, G. L., Hamilton, K., Robock, A., Ramaswamy, V., and Schwarzkopf, M. D.: Climatic response to the Mt. Pinatubo eruption in the SKYHI GCM with a realistic QBO, *2003 GRIPS Workshop*, Washington, DC, March 4-7, 2003.
42. Robock, A., and Stenchikov G. L.: Mechanisms of forced Arctic Oscillation response to volcanic eruptions, *Workshop on the role of the stratosphere in tropospheric climate*, Whistler, Canada, April 29 – May 2, 2003.
43. Stenchikov, G. L., Robock, A., Hamilton, G. K., Ramaswamy, V., and Schwarzkopf, M. D.: Stratospheric and tropospheric forcing of the Arctic Oscillation by the 1991 Mt. Pinatubo eruption, *XXIII General Assembly of the International Union of Geodesy and Geophysics*, Sapporo, Japan, June 30 – July 11, 2003.
44. Robock, A., and Stenchikov, G. L.: Volcanic eruptions and climate: Radiative forcing and dynamical responses, *XXIII General Assembly of the International Union of Geodesy and Geophysics*, Sapporo, Japan, June 30 – July 11, 2003.
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46. Stenchikov, G. L., Ramaswamy, V., and Schwarzkopf, M. D.: Volcanic Climate impact in the GFDL IPCC historic runs, *Geophysical Fluid Dynamics CMDT (Couple Model Development Team) seminar series*, October 7, 2004.
47. Stenchikov, G. L.: Volcanic Impact on the 20th Century Climate, *seminar at NASA Goddard Space Flight Center*, Greenbelt, MD, January 26, 2005.
48. Stenchikov, G. L.: Volcanic Test of Arctic Oscillation Sensitivity, *IAGA 2005 Scientific Assembly*, Toulouse, France, 18 - 29 July 2005.

49. Stenchikov, G. L.: Sensitivity of the Arctic Oscillation to Volcanic Forcing in the IPCC AR4 Models, *GLIMPSE Workshop*, Alfred Wegener Institute for Polar and Marine Research, Potsdam, Germany, 5-7 September 2005.
50. Stenchikov, G. L.: Radiative and Dynamical Impact of Volcanic Aerosols on Climate, *Decadal Variability Workshop*, Airlie Center, Warrenton, Virginia, October 17-20, 2005.
51. Stenchikov, G. L.: Simulation of transport and radiative effect of aerosol plumes: From 9/11 to "Nuclear Winter", *Naval Research Lab*., April 26, 2006.
52. Stenchikov, G. L.: Volcanic impact on atmospheric composition, temperature, and circulation, *Workshop on Climate Variability and Extremes During the Past 100 Years*, Gwatt, Switzerland, July 22-26, 2006.
53. Stenchikov, G. L.: Numerical modeling of aerosol plume from the collapse and fire of the World Trade Center on September 11, 2001, *Department of Mechanical and Aerospace Engineering*, Rutgers University , October 18, 2006.
54. Robock, A., Ammann, C., Oman, L., Shindell, D., and Stenchikov, G. L.: Can volcanic eruptions produce ice ages or mass exticntions, *2006 Fall AGU Meeting*, San Francisco, December 11-15, 2006.
55. Pickering, K., Ott, L., Huntemann, T., DeCaria, A., Stenchikov, G. L., Allen, D., and Tao, W.: New information from observations and cloud-resolving models leads to improvements in lightning NOx parameterizations for global chemical transport models, 2006 .
56. Stenchikov, G. L., Fromm, M., and Robock, A.: Regional simulations of stratospheric lofting of smoke plumes, *2006 Fall AGU Meeting*, San Francisco, December 11-15, 2006.
57. Oman, L., A. Robock, Stenchikov, G. L., T. Thodarson: Modeling of climate response of the Laki Eruption – Benjamin Franklin was right, 2006 Fall AGU Meeting, San Francisco, December 11-15, 2006.
58. Stenchikov, G. L.: 2007 Impact of Long-lived Stratospheric Aerosols on Atmospheric Composition, Temperature, and Circulation, *Seminar at the Department of Atmospheric and Oceanic Sciences*, *UCLA*, January 24, 2007.
59. Stenchikov, G. L.: 2007 Impact of Volcanic Aerosols on Atmospheric Temperature and Circulation, *Seminar at Lamont-Doherty Earth Observatory of Columbia University*, February 16, 2007.
60. Timmreck, C., Thomas, M., Esch, M., Giorgetta, M., Graf, H., Haak, H., Jungclaus, J., Mueller, W., Roeckner, E., and Stenchikov, G. L.: Interactions between volcanic eruptions and El Nino studies with a coupled atmosphere-ocean model, *AGU Joint Assembly "Twenty five years after El Chichon: Volcanic aerosols and their climatic effects"*, Acapulco, Mexico, 22-25 May, 2007.
61. Stenchikov, G. L.: Volcanic Impact on Ocean: ENSO, Ocean Heat Uptake, and Sea Level, *Seminar at Potsdam Institute for Climate Impact Studies (PIK)*, September 19, 2007.
62. Stenchikov, G. L.: Volcanic Impact on Ocean: ENSO, Sea Level, Heat Uptake, and MOC, *Seminar at NOAA Geophysical Fluid Dynamics Laboratory*, November 28, 2007.
63. Stenchikov, G. L.: Numerical Modeling of Multiscale Environmental Flows, *Seminar at University of Texas at Austin, The Institute for Computational Engineering and Sciences*, August 6, 2008.
64. Stenchikov, G. L.: Volcanic Impact on Oceans, Seminar at Lamont-Doherty Earth Observatory, *Columbia University*, February 4, 2009.
65. Stenchikov, G. L.: Long-term ocean response to short-term volcanic forcing, *Seminar at Woods Hole Oceanographic Institute, Dept. of Physical Oceanography*, April 6, 2009.
66. Stenchikov, G. L.: Impact of Volcanic Aerosol Forcing on the ENSO Cycle, Texas A&M University, *Institute of Applied Mathematics and Computational Sciences (IAMCS) Workshop*, May 28-29, 2009.
67. Stenchikov, G. L.: Long-term Ocean Response to Short-term Volcanic Forcing, *Seminar at University of Texas, Austin, The Institute for Computational Engineering and Sciences*, July 27, 2009.

68. Stenchikov, G. L.: Coupled Climate Model Simulations of the Pinatubo and Tambora Impacts, *Volcano Meeting, ETH*, Zurich, 8-9th July 2009.
69. Stenchikov, G. L.: Long-term Ocean Response to Short-term Volcanic Forcing, *Seminar at University of Maryland*, June 3, 2009.
70. Stenchikov G. L. and Malyshev, S.: Boundary Layers in the Climate System and in Global Climate Models, Planetary Boundary Layers and Climate Change, *Kirstenbosch Botanical Gardens*, Cape Town, South Africa, 26 - 28 October 2009.
71. Stenchikov, G. L.: Impact of Solar Radiation Management on Oceans, *"Strategic Workshop on Geoengineering Research"*, Hamburg, Germany, November 25-26, 2009.
72. Stenchikov, G. L.: Long-term Ocean Response to Short-term Volcanic Forcing, *Seminar at Max Planck Institute for Meteorology*, Hamburg, Germany, November 27, 2009.
73. Stenchikov, G. L.: Long-term Ocean Response to Short-term Volcanic Forcing, *Seminar at Physics Department*, Imperial College, London, December 3, 2009.
74. Stenchikov, G. L.: Long-term Ocean Response to Short-term Volcanic Forcing, *Seminar at Institute of Numerical mathematics, Russian Academy of Sciences*, Moscow, Russia, January 20, 2010.
75. Stenchikov, G. L.: The Red Sea Research Center at KAUST, POGO-11 (Partnership for Observation of the Global Oceans) *Meeting (January 26-28), Shirshov's Oceanography Institute of the Russian Academy of Sciences*, Moscow, January 27, 2010.
76. Stenchikov, G. L.: Environmental Consequences of a Nuclear War: Nuclear Winter Theory of 1980s and Nuclear Proliferation in the 21st Century, *WEP lecture at KAUST*, January 30, 2010.
77. Stenchikov, G. L.: Calculation of Transport, Environmental Effects, and Life Time of Smoke from Strong Fires, *Keynote Speaker at Enviro Arabia 2010, Bahrain Society of Engineers*, April 16-18, 2010.
78. Stenchikov, G. L.: Volcanic test of climate mechanisms, *OCCAM*, Oxford University, July 2, 2010.
79. Stenchikov, G. L.: Effect of volcanic stratospheric aerosols on climate, *Finnish Meteorological Institute*, August 16, 2010.
80. Stenchikov, G. L.: Global modeling of atmospheric and oceanic processes, *Kaust Supercomputer Laboratory User Day Conference*, October 30, 2010.
81. Stenchikov, G. L.: Calculation of radiative forcing and climate impact of large aerosol plumes, *German Aerospace Center, Institute for Atmospheric Physics*, November 16, 2010.
82. Stenchikov, G. L.: SRM Impact on Ocean and Related Effects, *GeoMIP Workshop*, Rutgers University, New Brunswick, NJ, February 10-12, 2011.
83. Stenchikov, G. L., Robock, A., and Fromm, M.: Regional Simulation of Stratospheric Lofting of Smoke Plumes from Urban Fires, *AAAS Annual Meeting*, Washington, February 17-21, 2011.
84. Stenchikov, G. L.: Aerosols and Ocean Color Observations over Red Sea and Arabian peninsula: Installation and Scientific Applications, Aeronet-Ocean Color International Workshop, *NASA Goddard Space Flight Center*, Greenbelt, MD, February 23-24, 2011.
85. Stenchikov, G. L.: Analysis of Regional Climate Change in Middle East, North Africa, and Mediterranean, International Workshop "Integration of Geospheres in Earth Systems: Modern Queries to Environmental *Physics*, *Modelling*, *Monitoring* & *Education*" , Dubrovnik Croatia, April 30-May 3, 2011.
86. Stenchikov, G. L.: Volcanic Test of Arctic Oscillation Sensitivity, *International Conference on Climate Changes in Polar and Sub-polar Regions, Institute of Atmospheric Physics*, Moscow, Russia, May 17-19, 2011.
87. Stenchikov, G. L.: Study the recent period of rapid warming in Middle East and North Africa, *Weekly Seminar, Geophysical Fluid Dynamics Laboratory*, Princeton, USA, August 4, 2011.
88. Stenchikov, G. L.: Simulating dispersion and self-lofting of large smoke plumes with a fine-resolution regional model, *Conference on Severe Atmospheric Aerosol Events, University of Hamburg*, Germany, August 11-12, 2011.

89. Stenchikov, G. L.: Modeling and observation of rapid warming in Middle East and North Africa, *The atmospheric division seminar*, Max Planck Institute for Meteorology, Hamburg, Germany, August 24, 2011.
90. Stenchikov, G. L.: Assessing regional dust climate impact in Middle East, North Africa, and Mediterranean, 6th International *Workshop on sand/dust storms and associated dust fall*, University of Athens, 7-9 September, 2011.
91. Stenchikov, G. L.: Time Evolution of Climate Response to Supervolcano Eruption, *2011 Fall AGU Meeting*, San Francisco, December 5-9, 2011.
92. Stenchikov, G. L.: Quantifying Regional Climate Sensitivity to Radiative Forcing in Middle east and North Africa, *Seminar at Physics Department*, Imperial College London, March 9, 2012.
93. Stenchikov, G. L.: Education and Research Programs at KAUST, *First International Conference of Russian-Speaking Science and Technology Professionals*, Cambridge, March 10-11, 2012.
94. Stenchikov, G. L.: Regional Climate Response to a Global Volcanic Forcing, *Seminar at the Department of Physics*, Oxford University, March 15, 2012.
95. Stenchikov, G. L.: Regional Climate Response to Radiative Forcing in North Africa and Arabian Peninsula, *Workshop on Tropical and Extratropical Interactions in Climate, Center for Prototype Climate Modeling*, New York University Abu Dhabi Institute, 20-22 March, 2012.
96. Stenchikov, G. L.: Quantifying Dust Effect on the Red Sea, *4th Annual IAMACS Spring Symposium*, KAUST, Thuwal, SA, May 6-7, 2012.
97. Stenchikov, G. L.: High-resolution Global Climate Modeling for the Arab Region, Regional *Workshop on RCM Applications and Analysis, United Nations Economic and Social Comission for Western Asia (ESCWA)*, UN House, Beirut, Lebanon, 2-4 July 2012.
98. Stenchikov, G. L.: Regional climate response to radiative forcing in Middle East and North Africa, *Conference on Energy, Water, and Climate Change – Building Bridges between Europe and MENA*, Cyprus Institute, Nicosia, Cyprus, 10-12 Deceber, 2012.
99. Stenchikov, G. L.: Estimationg of Radiative Forcing in Middle east and North Africa using satellite and ground-based observations, *Seminar at Physics Department*, Imperial College London, July 8, 2013.
100. Stenchikov, G. L.: Simulating dust size distribution and radiative effect on regional and global scales, *NASA Goddard Institute for Space Studies*, NY, USA, July 2, 2013.
101. Stenchikov, G. L.: Could volcanoes freeze ocean, *Department of Climate, Atmosphere, Ocean Science*, New York University, Courant Institute of mathematical Sciences, NY, USA, October 16, 2013.
102. Stenchikov, G. L.: Simulating Middle East climate using global and nested models, *Rutgers University, Department of Environmenta Sciences*, New Brunswick, USA, December 6, 2013.
103. Stenchikov, G. L.: Constant versus Periodic Volcanic Forcing Impact on the Ocean Heat Content, *NOAA Geophysical Fluid Dynamics Laboratory*, Princeton, USA, December 3, 2013.
104. Stenchikov, G. L.: Simulating Regional Climate in Middle East and North Africa Using Global and Nested Models, *National Center for Atmospheric Research*, Boulder, Colorado, USA, 12 June 2014.
105. Stenchikov, G. L.: Quantifying radiative forcing from volcanic aerosols, *Geophysical Fluid Dynamics Laboratory*, Princeton, NJ, USA, 3 July 2014.
106. Stenchikov, G. L.: Quantifying dust plume spatial structure and aerosol size distribution using model simulations and DLR data collection from the SAMUM-I experiment in North Africa, *German Space Agency (DLR), Institute of Atmospheric Physics*, Oberpfaffenhofen, Germany, 19 August 2014.
107. Stenchikov, G. L.: Simulation of the impact of a major Arabian dust storm on the atmospheric radiative balance, International Conference on Aerosols and Atmospheric Optics, *Institute of Atmospheric Physics, Russian Academy of Sciences, Moscow, Russia*, 21 October 2014.
108. Stenchikov, G. L.: Test of high-resolution global and regional model projections, *WCRP CORDEX-MENA meeting*, Cyprus Institute, Nicosia, Cyprus, 27-28 November, 2014.

109. H. Bangalath and Stenchikov, G. L.: Role of dust direct radiative effect on the tropical rain belt over MENA, Workshop on Regional Climate Modeling of the Indian Ocean and Arabian Peninsula, *New York University Abu Dhabi, Center for Prototype Climate Modeling*, Abu Dhabi, UAE, 19-20 January, 2015.
110. J. Raj, Stenchikov, G. L.: West African Monsoon Simulated in a High-resolution AGCM, Workshop on Regional Climate Modeling of the Indian Ocean and Arabian Peninsula, *New York University Abu Dhabi, Center for Prototype Climate Modeling*, Abu Dhabi, UAE, 19-20 January, 2015.
111. M. Dogar, Stenchikov, G. L.: Regional climate response in Middle East and North Africa to low-latitude explosive volcanism, *Workshop on Regional Climate Modeling of the Indian Ocean and Arabian Peninsula*, New York University Abu Dhabi, Center for Prototype Climate Modeling, Abu Dhabi, UAE, 19-20 January, 2015.
112. Osipov, S. and Stenchikov, G. L.: Diurnal cycle of the clear-sky dust instantaneous direct radiatice forcing over the Arabian Peninsula, *Workshop on Regional Climate Modeling of the Indian Ocean and Arabian Peninsula*, New York University Abu Dhabi, Center for Prototype Climate Modeling, Abu Dhabi, UAE, 19-20 January, 2015.
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