

Пълен списък на публикации на д-р Боряна Ценова:

а) Статии в списания с ISI импакт фактор (общо 8 +1 броя)

- статии, представени за придобиване на академичната и научна степен “доктор” (2 броя)

[a1.](#) R. Mitzeva, C. Saunders, B. Tsenova, 2005. A modeling study of the effect of cloud saturation and particle growth rates on charge transfer in thunderstorm electrification, Atmospheric Research, 76, 206 – 221, ([doi:10.1016/j.atmosres.2004.11.019](https://doi.org/10.1016/j.atmosres.2004.11.019))

[a2.](#) R. Mitzeva, C. Saunders, B. Tsenova, 2006. Parameterisation of non-inductive charging in thunderstorm regions free of cloud droplets, Atmospheric Research, 82, 102-111, ([doi:10.1016/j.atmosres.2005.12.006](https://doi.org/10.1016/j.atmosres.2005.12.006))

- статии, след придобиване на академичната и научна степен “доктор” (6+1 броя)

[a3.](#) B. Tsenova, R. Mitzeva, C. Saunders, 2009. A modelling study of the effect of ice particle sizes and relative velocity on ice-crystal/graupel collisional charge transfer, Atmospheric Research, 91, 250-258, ([doi:10.1016/j.atmosres.2008.04.008](https://doi.org/10.1016/j.atmosres.2008.04.008)).

[a4.](#) Rumjana Mitzeva, Boryana Tsenova, Rachel Albrecht and Walt Petersen, 2009. The study of charge structure sensitivity in simulated thunderstorms, Atmospheric Research, 299-309, ([doi:10.1016/j.atmosres.2008.05.014](https://doi.org/10.1016/j.atmosres.2008.05.014))

[a5.](#) B. D. Tsenova, R. P. Mitzeva, 2009. New parameterization of non-inductive charge transfer based on previous laboratory experiments, Atmospheric Research, 79-86, ([doi:10.1016/j.atmosres.2008.07.001](https://doi.org/10.1016/j.atmosres.2008.07.001))

[a6.](#) A. Savtchenko, R. Mitzeva, B. Tsenova, S. Kolev, 2009. Analysis of lightning activity in two thunderstorm systems producing sprites in France, Journal of Atmospheric and Solar-Terrestrial Physics, 12, 1277-1286 ([doi:10.1016/j.jastp.2009.04.010](https://doi.org/10.1016/j.jastp.2009.04.010))

[a7.](#) B. Tsenova, R. Mitzeva, C. Saunders, 2010, Parametrisation of thunderstorm including the cloud saturation effect, Atmospheric Research, 96, 356-365, ([doi:10.1016/j.atmosres.2009.11.010](https://doi.org/10.1016/j.atmosres.2009.11.010))

[a8.](#) B. Tsenova, R. Mitzeva, 2011, Comparative modelling study of the effect of parameterizations based on rime accretion rate and on effective water content on simulated charge density in thunderstorms, IDOJARAS, Vol.115, N 4, October-December, 2011, pp. 247-263

[a9.](#) A. Brandiyska, R. Mitzeva, B. Tsenova, J. Latham, Numerical study of the impact of changes in the tropospheric temperature profile on the microphysics, dynamics and precipitation of mid-latitude summer continental convective clouds, submitted to IDOJARAS

б) Статии в български списания (общо 5 броя)

- статии, представени за придобиване на академичната и научна степен “доктор” (3 броя)

б1. B. Tsenova, R. Mitzeva, 2002, The impact of in-cloud characteristics and graupel surface properties on

graupel surface temperature in dry growth regime, Bulgarian Geophysical Journal, V28, 1-4

62. B. Tsenova and R. Mitzeva, 2003, The impact of in-cloud characteristics and graupel surface properties on graupel surface state in connection with non-inductive charge transfer, Meeting in Physics, V4, 954-580-138-7

63. B. Tsenova, 2004, A modeling study of the impact of ice particles sizes on non-inductive charge transfer, Annual of University of Sofia, Faculty of Physics, vol.97

- статии, след придобиване на академичната и научна степен “доктор” (2 броя)

64. A. Brandiyska, R. Mitzeva, B. Tsenova, 2011, A new non-inductive thunderstorm electrification scheme in RAMS atmospheric model, Bulgarian Geophysical Journal, In Press

65. B. Tsenova, R. Mitzeva, A. Brandiyska, 2012, Effect of CCN and temperature profile changes on convective cloud microphysics and dynamics – numerical simulations with 1.5 D cloud model, submitted to BJMH

в) Публикации в сборници трудове от международни конференции (общо 14 броя)

- публикации, представени за придобиване на академичната и научна степен “доктор” (4 броя)

v1. R Mitzeva, B Tsenova, C Saunders, 2003, A modeling study of the effect of cloud supersaturation on non-inductive charge transfer, Proceedings of 12th international Conference on Atmospheric Electricity, V1, 235-239

v2. C P R Saunders, H Bax – Norman, R P Mitzeva, B Tsenova, E E Avila and N E Castellano, 2003, The effect of cloud conditions on charge transfer in thunderstorm electrification, Proceedings of the International Conference of Lightning and Static Electricity

v3. A. Kirilova, R. Mitzeva, B. Tsenova, 2004, Parameterisation of non-inductive charge transfer based on discriminant and regression analyses of laboratory data, *Proceedings of 14th International Conference of Clouds and Precipitation*, p 1911

v4. R. Mitzeva, C. Saunders, B. Tsenova, 2004, Parameterisation of non-inductive charging in thunderstorm regions free of cloud droplets, *Proceedings of 14th International Conference of Clouds and Precipitation*, p1537

- публикации, след придобиване на академичната и научна степен “доктор” (10 броя)

в5. B. Tsenova, R. Mitzeva, C. Saunders, 2007, A modelling study of the impact of ice particle sizes and relative velocity on non-inductive charge transfer, 13 International Conference on Atmospheric Electricity, 13-17 August, Beijing, Session 3

в6. Rumjana Mitzeva, Boryana Tsenova, Rachel Albrecht and Walt Petersen, 2007, The study of charge structure sensitivity in simulated thunderstorms, 13 International Conference on Atmospheric Electricity, 13-17 August, Beijing, Session 3

в7. S. Kolev, B. Tsenova, 2008, Climate altitude variations of the relative humidity over Sofia, Global Environmental Change: Challenges to Science and Society Southeastern Europe, Proceedings of the International Conference, Sofia 19-21 May

- [B8.](#) B. Tsenova, R. Mitzeva, C. Saunders, 2008, Parameterization of thunderstorm charging including the cloud saturation effect, 15th International Conference of Clouds and Precipitation, Cancun-Mexico, July 7-13
- [B9.](#) B. Tsenova, S. Kolev, 2008, Climatological study of the relationships between thunderstorms lightning activity and the environmental conditions over western Bulgaria, 15th International Conference of Clouds and Precipitation, Cancun-Mexico, July 7-13
- [B10.](#) R. Mitzeva, B. Tsenova, A. Todorova and J. Latham, 2008, Comparative modeling study of the impact of aerosols and climate changes on microphysics and dynamics of mixed-phase convective clouds, 15th International Conference of Clouds and Precipitation, Cancun-Mexico, July 7-13
- [B11.](#) B. Tsenova, C. Barthe, R. Mitzeva, J.-P. Pinty, 2011, Numerical Simulations of a Thunderstorm with MésoNH using Different Non-Inductive Electrification Schemes, Proceedings of XIV International Conference on Atmospheric Electricity, August 08-12, Rio de Janeiro, Brazil
- [B12.](#) A. Todorova, B. Tsenova, R. Mitzeva, 2011, Hybrid numerical scheme for non-inductive thunderstorm charging, Proceedings of XIV International Conference on Atmospheric Electricity, August 08-12, Rio de Janeiro, Brazil
- [B13.](#) B. Tsenova, A. Bogatchev, 2012, Evaluation of instability indices computed using ALADIN-BG output and their relation with thunderstorm activity over Bulgaria, 16th International Conference of Clouds and Precipitation, August, Leipzig, Germany
- [B14.](#) B. Tsenova, J.-P. Pinty, R. Mitzeva, C. Barthe, 2012, Do anomalous zones of non-inductive charging influence the electrical state of thunderstorms: numerical experiments with MésoNH, 16th International Conference of Clouds and Precipitation, August, Leipzig, Germany

г) кратки доклади публикувани след придобиване на академичната и научна степен “доктор” в сборници трудове от международни конференции (общо 8 броя)

- [г1.](#) Staytcho Kolev, Boryana Tsenova, The dew point data analysis for the upper troposphere and stratosphere, COST 723 Final Workshop Abstracts, 17-19 May, 2006, Sofia
- [г2.](#) Staytcho Kolev, Boryana Tsenova, Tanya Marinova, The temperature data analysis for the upper troposphere and stratosphere over the Bulgarian region, COST 723 Final Workshop Abstracts, 17-19 May, 2006, Sofia
- [г3.](#) Boryana Tsenova and Rumjana Mitzeva, The impact of non-inductive manner of charging on the early stage electrical structure in thunderstorms, Geophysical research Abstracts, Vol. 8, 00223, 2006
- [г4.](#) S. Kolev, R. Petrov, B. Tsenova, Regional peculiarities of the relationships between tropopause, upper atmosphere characteristics and thunderstorms, 36th COSPAR Scientific Assembly, 16-23 July, 2006, Beijing

[r5.](#) S. Petrova, B. Tsenova, R. Mitzeva, Impact of parameterization scheme of ice crystals formation on cloud microphysics and dynamics, IUGG XXIV General Assembly, July 2-13, Perugia, Italy

[r6.](#) R. Mitzeva, B. Tsenova, S. Petrova, Numerical study of aerosols on microphysics and dynamics of mixed-phase convective clouds, IUGG XXIV General Assembly, July 2-13, Perugia, Italy

[r7.](#) A. Todorova, R. Mitzeva, B. Tsenova, Impact of global warming on precipitation from midlatitude mixed-phase convective clouds – numerical simulations, Meeting in Physics, 2009, Sofia, Bulgaria.

[r8.](#) A. Todorova, R. Mitzeva, B. Tsenova, Combined impact of global warming and CCN number on precipitation from mid-latitude convective clouds, Goldsmidt Conference, 21-26 June, 2009, Davos, Switzerland

Участия в научни форуми:

а) Устни доклади на международни форуми (общо 3 броя)

1. CAL mid-term project and science meeting, Elounda, Crete, 20-24 June, 2005

2. Global Environmental Change: Challenges to Science and Society Southeastern Europe, Sofia 19-21 May, 2008

3. 2nd Annual CLAVIER Meeting, Bucarest, Romania, 25-28 June 2008

б) Постерни изложения на международни форуми (общо 10 броя)

1. COST 723 Final Workshop, Sofia, Bulgaria, 17-19 May, 2006 - 2 постера:

[1a.](#) The dew point data analysis for upper troposphere and stratosphere over the Bulgarian region, S. Kolev, B. Tsenova

[1b.](#) The temperature data analysis for the upper troposphere and stratosphere over the Bulgarian region, S. Kolev, B. Tsenova, T. Marinova

[2.](#) ISROSES, Varna, Bulgaria, 17-22 September, 2006 – 1 постер:

- Impact of environmental conditions on thunderstorm charging, B. Tsenova, R. Mitzeva, A. Savtchenko

3. IUGG General Assembly in Perugia, Italy, 2-13 July 2007 – 2 постера:

[3a.](#) Impact of parameterization scheme of ice crystals formation on cloud microphysics and dynamics, S. Petrova, B. Tsenova, R. Mitzeva

[3b.](#) Numerical study of the impact aerosols on microphysics and dynamics of mixed-phase convective clouds, R. Mitzeva, B. Tsenova, S. Petrova

4. 13 International Conference on Atmospheric Electricity, Beijing, China, 13-17 August, 2007, – 2 постера:

[4a.](#) The study of charge structure sensitivity in simulated thunderstorms, R. Mitzeva, B. Tsenova, R. Albrecht, W. Petersen, *постерно изложение съответстващо на **

[4b.](#) A modelling study of the impact of ice particle sizes and relative velocity on non-inductive charge transfer, B. Tsenova, R. Mitzeva, C. Saunders, *постерно изложение съответстващо на **

5. 15th International Conference of Clouds and Precipitation, Cancun, Mexico, July 7-13, 2008, - 2 постера

[5a.](#) Parameterization of thunderstorm charging including the cloud saturation effect, B. Tsenova, R. Mitzeva, C. Saunders, *постерно изложение съответстващо на **

[5b.](#) Comparative modeling study of the impact of aerosols and global warming on microphysics and dynamics of convective clouds, R. Mitzeva, B. Tsenova, A. Todorova, J. Latham, *постерно изложение съответстващо на **

[6.](#) Climate variability and climate change, Visegrad, Hungary, June, 2009, - 1 постер
- Study of the tropopause thermodynamical conditions over Sofia during the warm half year and their relation with precipitation, B. Tsenova, S. Kolev

Участие в проекти

1. COST Action 723: Data Exploitation and Modeling for the Upper Troposphere and Lower Stratosphere – финансиран от COST и European Science Foundation – ръководител от страна на НИМХ – доц. д-р Стайчо Колев, 2006 г.

2. EU FP6 project CLAVIER (CLimate ChAnge and Variability: Impact on Central and Eastern Europe), ръководител от страна на НИМХ – доц. д-р Стайчо Колев, 2006 – 2009 г.

3. “Пространствено разпределение на озона, азотни окиси и ултра финни частички над области в Италия и България” – партньор Институт по атмосферни замърсявания - Италия
Сътрудничество по ЕБР-БАН-CNR / Безвалутен еквивалентен обмен между БАН и The National Research Council (CNR) – ръководител от страна на НИМХ – доц. д-р Стайчо Колев, 2007 – 2008 г.

4. ALADIN : High Resolution Numerical Weather Prediction Project, с ръководител от българска страна проф. д-р Валери Спиридонов

5. „Визуализация и оценка на продукцията на Европейския център за средносрочна прогноза на времето. Използване на резултатите от модела за оперативната дейност в департамент Метеорологични прогнози”, с ръководител гл.ас. д-р Боряна Ценова, 2011 – 2013 г.

6. EU FP7 “Increasing Resilience through Earth Observation – IncrEO”, с ръководител от българска страна доц. д-р Анна Корчева, 2012 – 2014 г.

7. „Разработка на методика за прогноза на неспецифични метеорологични полета на база на изхода от модела ALADIN” с ръководител доц. д-р Андрей Богачев, 2012 – 2014 г.

8. „Адаптация на прогнозите на достъпни в НИМХ числени атмосферни модели за целите на задачи за икономическо оптимизиране” с ръководител доц. д-р Илиян Господинов, 2012 – 2014 г.

9. AO INSU 2011, Section "Ocean-Atmosphere": Développement et validation d'un modèle explicite d'activité électrique" с ръководител Dr Christelle Barthe, 2012-214 г.

Подпис: