

**СПРАВКА ЗА ИЗПЪЛНЕНИЕ НА МИНИМАЛНИТЕ ИЗИСКВАНИЯ ЗА
ЗАЕМАНЕ НА АКАДЕМИЧНАТА ДЛЪЖНОСТ “ДОЦЕНТ”,
ДЕФИНИРАНИ В ПРАВИЛНИКА ЗА УСЛОВИЯТА И РЕДА ЗА
ПРИДОБИВАНЕ НА НАУЧНИ СТЕПЕНИ И ЗА ЗАЕМАНЕ НА
АКАДЕМИЧНИ ДЛЪЖНОСТИ В БАН, СЪОТВЕТНО НА
ИЗИСКВАНИЯТА ПО ЧЛ. 1а, АЛ. 2**

на гл. ас., д-р Владимир Петров Иванов

за участие в конкурс за академична длъжност „доцент“, обявена в Държавен вестник бр. 46
от 26.05.2023 г.

Група А

Показател 1 - Дисертационен труд за присъждане на образователна и научна степен „доктор“ на тема „Числена обработка и анализ на редици от метеорологични данни“ по специалност 01.04.01 „Физически науки” – **50 т.**

Група В – Показатели 3 или 4 - 137.6 т.

Показател 4 - Не по-малко от **10** научни публикации в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация Scopus, Web of Science, ERIH+

B.4.1. Chervenkov, H., Gadzhev, G., Ivanov, V., Ganev, K. (2021). Assessment of the Joint Quantiles of Temperature and Precipitation in CMIP5 Future Climate Projections over Europe, Studies in Systems, Decision and Control, 361, 31-42.
https://link.springer.com/chapter/10.1007/978-3-030-70190-1_3 - **15 т.**

B.4.2. Chervenkov, H., Gadzhev, G., Ivanov, V., Ganev, K. (2021). Degree-Days and Agro-meteorological Indices in CMIP5 RCP8.5 Future Climate—Results for Central and Southeast Europe, Studies in Systems, Decision and Control, 361, 19-30.
https://doi.org/10.1007/978-3-030-70190-1_2 - **15 т.**

B.4.3. Gadzhev, G., Ivanov, V., Valcheva, R., Ganev, K., Chervenkov, H. (2021). HPC Simulations of the Present and Projected Future Climate of the Balkan Region, Studies in Computational Intelligence, 902 SCI, 234-248. https://doi.org/10.1007/978-3-030-55347-0_20 - **12 т.**

- B.4.4. Chervenkov, H., Gadzhev, G., Ivanov, V., Ganev, K. (2020). Trend analysis of CMIP5 ensemble of climate indices over southeast Europe with focus on agricultural impacts, *Cybernetics and Information Technologies*, 20 (6), 155-165. <https://doi.org/10.2478/cait-2020-0069> - **15 Т.**
- B.4.5. Chervenkov, H., Ivanov, V., Gadzhev, G., Ganev, K., Melas, D. (2020). Degree-day climatology over central and southeast Europe for the period 1961-2018 - Evaluation in high resolution, *Cybernetics and Information Technologies*, 20 (6), 166-174. <https://doi.org/10.2478/cait-2020-0070> - **12 Т.**
- B.4.6. Ivanov, V., Chervenkov, H., Gadzhev, G., Ganev, K. DEGREE-DAYS AND AGRO-METEOROLOGICAL INDICES IN PROJECTED FUTURE CLIMATE OVER SOUTHEAST EUROPE. (2020) International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management (SGEM), 2020-August (4.1), 373-380. <https://doi.org/10.5593/sgem2020/4.1/s19.047> - **15 Т.**
- B.4.7. Ivanov, V., Gadzhev, G., Ganev, K., Chervenkov, H. (2020). Sensitivity of the Simulated Heat Risk in Southeastern Europe to the RegCM Model Configuration—Preliminary Results, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 11958 LNCS, 340-347. https://doi.org/10.1007/978-3-030-41032-2_39 - **15 Т.**
- B.4.8. Gadzhev, G., Georgieva, I., Ganev, K., Ivanov, V., Miloshev, N., Chervenkov, H., Syrakov, D. (2018). Climate applications in a virtual research environment platform, *Scalable Computing*, 19 (2), 107-118. <https://doi.org/10.12694/scpe.v19i2.1347> - **8.6 Т.**
- B.4.9. Gadzhev, G., Ivanov, V., Ganev, K., Chervenkov, H. (2018). TVRegCM numerical simulations - preliminary results, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 10665 LNCS, 266-274. https://doi.org/10.1007/978-3-319-73441-5_28 - **15 Т.**
- B.4.10. Chervenkov, H., Ivanov, V., Gadzhev, G., Ganev, K. (2017). Sensitivity study of different RegCM4.4 Model set-ups - Recent results from the TVRegCM experiment, *Cybernetics and Information Technologies*, 17 (5), 17-26. <https://doi.org/10.1515/cait-2017-0051> - **15 Т.**

Група Г - Сума от показателите от 5 до 9 – 226.6 т.

Показател 7 - Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация

- Г.7.1. Georgieva, I., Gadzhev, G., Ganev, K., Ivanov, V. (2023). Evaluation of the Effects of the National Emission Reduction Strategies for Years 2020–2029 and After 2030 on the Sulphur and Nitrogen Wet and Dry Depositions on the Territory of Bulgaria, Lecture Notes in Networks and Systems, 638 LNNS, 249-259. https://doi.org/10.1007/978-3-031-26754-3_22 - **10 т.**
- Г.7.2. Ivanov, V., Gadzhev, G., Ganev, K., Georgieva, I. (2023). Estimation of the Historical and Future Renewable Energy Potential with RegCM4 over the Region of Southeastern Europe, Lecture Notes in Networks and Systems, 638 LNNS, 160-169. https://doi.org/10.1007/978-3-031-26754-3_14 - **10 т.**
- Г.7.3. Georgieva, I., Gadzhev, G., Ganev, K., Ivanov, V. (2022). EVALUATION OF THE EFFECTS OF THE NATIONAL EMISSION REDUCTION STRATEGIES FOR YEARS 2020-2029 AND AFTER 2030 ON THE SULPHUR AND NITROGEN SURFACE CONCENTRATIONS ON THE TERRITORY OF BULGARIA. Proceedings of the 21st International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, HARMO 2022 - **10 т.**
- Г.7.4. Gadzhev, G., Ganev, K., Georgieva, I., Ivanov, V. (2022). Evaluation of the Impact of the Projected Future Emissions from Energy on the Air Quality in Bulgaria. Proceedings of the 21st International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, HARMO 2022 - **10 т.**
- Г.7.5. Ivanov, V., Gadzhev, G. (2022). Behavior and Scalability of the Regional Climate Model RegCM4 on High Performance Computing Platforms, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 13127 LNCS, 124-131. https://doi.org/10.1007/978-3-030-97549-4_14 - **20 т.**
- Г.7.6. Ivanov, V., Georgieva, I. (2021). Basic facts about numerical simulations of atmospheric composition in the city of Sofia, Atmosphere, 12 (11), art. no. 1450. <https://doi.org/10.3390/atmos12111450> - **20 т.**
- Г.7.7. Gadzhev, G., Ivanov, V. (2021). Modelling of the Seasonal Sulphur and Nitrogen Depositions over the Balkan Peninsula by CMAQ and EMEP-MSC-W, Studies in Systems, Decision and Control, 361, 171-183. https://doi.org/10.1007/978-3-030-70190-1_12 - **20 т.**

- Г.7.8. Ivanov, V., Dimitrova, R. (2021). Study of the Extreme Thermal Conditions for the Sofia Region—Preliminary Results, Studies in Systems, Decision and Control, 361, 123-137. https://doi.org/10.1007/978-3-030-70190-1_9 - **20 т.**
- Г.7.9. Ivanov, V., Chervenkov, (2021). H. Modelling Human Biometeorological Conditions Using Meteorological Data from Reanalysis and Objective Analysis—Preliminary Results, Studies in Computational Intelligence, 961 SCI, 170-181. https://doi.org/10.1007/978-3-030-71616-5_16 - **20 т.**
- Г.7.10. Ivanov, V.P., Gadzhev, G.K., Ganey, K. (2020). Modelling of dry and wet deposition processes for the sulphur and nitrogen compounds over Bulgaria, Proceedings of the 20th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, HARMO 2020 – **13.3 т.**
- Г.7.11. Chervenkov, H., Slavov, K., Ivanov, V. (2019). STARDEX and ETCCDI climate indices based on E-OBS and CARPATCLIM: Part one: General description, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 11189 LNCS, 360-367. https://doi.org/10.1007/978-3-030-10692-8_40 - **13.3 т.**
- Г.7.12. Georgieva, I., Ivanov, V. (2018). Computer simulations of the impact of air pollution on the quality of life and health risks in Bulgaria, International Journal of Environment and Pollution, 64 (1-3), 35-46. <https://doi.org/10.1504/IJEP.2018.099145> - **20 т.**
- Г.7.13. Ivanov, V., Georgieva, I. (2017). Air quality index evaluations for Sofia city, Proceedings of the 17th IEEE International Conference on Smart Technologies, EUROCON 2017, art. no. 8011246, 920-925. <https://doi.org/10.1109/EUROCON.2017.8011246> - **20 т.**
- Г.7.14. Georgieva, I., Ivanov, V. (2017). Impact of the air pollution on the quality of life and health risks in Bulgaria, Proceedings of the 18th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, HARMO 2017, 647-651 - **20 т.**

Група Д - Сума от показателите от 10 до 12 – 65 т.

Критерий 10 - Цитирания или рецензии в научни издания, реферирани и индексирани в световноизвестни бази данни (Scopus, Web of Science, ERIH+) с научна информация или в монографии и колективни томове.

1. Evtimov S., Ivanov V. (2008). Correspondence analysis of the atmospheric phenomena in Bulgaria. *Comptes Rendus de L'Academie Bulgare des Sciences*, 61(4), 443-450. ISSN: 13101331

Цитирана 1 път в:

1. Gadzhev, G. The Seasonal Recurrence of Air Quality Index for the Period 2008–2019 Over the Territory of Sofia City. *Studies in Systems, Decision and Control*, vol. 361, 161-170. https://doi.org/10.1007/978-3-030-70190-1_11 - **5 т.**
2. Ivanov, V., Evtimov, S. (2014). WIND CHILL HAZARD IN BULGARIA DURING 2003-2012 PERIOD. *Comptes rendus de l'Acade'mie bulgare des Sciences*, 67(11), ISSN:1310–1331

Цитирана 2 пъти в:

1. Georgi Gadzhev, (2021). The Seasonal Recurrence of Air Quality Index for the Period 2008-2019 Over the Territory of Sofia City, Dobrinkova and G. Gadzhev (eds.), *Environmental Protection and Disaster Risks, Studies in Systems, Decision and Control*, 361, 161–170. https://doi.org/10.1007/978-3-030-70190-1_11 - **5 т.**
2. Gadzhev, G.; Ganev, K. (2021). Computer Simulations of Air Quality and Bio-Climatic Indices for the City of Sofia. *Atmosphere*, 12, 1078. <https://doi.org/10.3390/atmos12081078> - **5 т.**
3. Ivanov V., Evtimov S. (2014). Heat risks in Bulgaria during 2003-2012 period, 40, *Bulgarian Geophysical Journal*, ISSN 2683-1317

Цитирана 3 пъти в:

1. Sarafova E. (2022). Data quality assessment of Copernicus Climate Change Service health domain data for the development of disaster risk reduction plans, *Journal of the Bulgarian Geographical Society*, 46, 2022, 3-23. <https://doi.org/10.3897/jbgs.e85567> - **5 т.**

2. Dunjić, J. (2019). OUTDOOR THERMAL COMFORT RESEARCH IN URBAN AREAS OF CENTRAL AND SOUTHEAST EUROPE: A REVIEW". *GEOGRAPHICA PANNONICA*, 23(4), <https://doi.org/10.5937/gp23-24458> - **5 т.**
3. Gadzhev, G.; Ganev, K. (2021). Computer Simulations of Air Quality and Bio-Climatic Indices for the City of Sofia. *Atmosphere*, 12, 1078. <https://doi.org/10.3390/atmos12081078> - **5 т.**
4. Ivanov, V., Georgieva, I. (2017). Air quality index evaluations for Sofia city, Proceedings of the 17th IEEE International Conference on Smart Technologies, EUROCON 2017, art. no. 8011246, 920-925. <https://doi.org/10.1109/EUROCON.2017.8011246>.

Цитирана **1 път** в:

1. Sharma, A., Mitra, A., Sharma, S., Roy, S. (2018). Estimation of Air Quality Index from Seasonal Trends using Deep Neural Network, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 11141 LNCS, https://doi.org/10.1007/978-3-030-01424-7_50 - **5 т.**
5. Gadzhev, G., Ivanov, V., Ganev, K., Chervenkov, H. (2018). TVRegCM numerical simulations - preliminary results, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 10665 LNCS, 266-274. https://doi.org/10.1007/978-3-319-73441-5_28

Цитирана **1 път** в:

1. Cheng, Q.; Li, F. (2021). Performance of RegCM4.5 in Simulating the Regional Climate of Western Tianshan Mountains in Xinjiang, China. *Atmosphere*, 12, 1544. <https://doi.org/10.3390/atmos12121544> - **5 т.**
6. Gadzhev, G., Georgieva, I., Ganev, K., Ivanov, V., Miloshev, N., Chervenkov, H., Syrakov, D. (2018). Climate applications in a virtual research environment platform, *Scalable Computing*, 19 (2), 107-118. <https://doi.org/10.12694/scpe.v19i2.1347>

Цитирана **1 път** в:

1. Knapen, R., Lokers, R. and Janssen, S. (2023). Evaluating the D4Science virtual research environment platform for agro-climatic research, *Agricultural Systems*, 210. <https://doi.org/10.1016/j.agsy.2023.103706> - **5 т.**

Критерий 12 - Цитирания или рецензии в нереферирани списания с научно рецензиране

1. Chervenkov, H., Ivanov, V., Gadzhev, G., Ganev, K. (2017). Sensitivity study of Different RegCM4.4 model set-ups – recent results from the TVRegCM experiment. *CYBERNETICS AND INFORMATION TECHNOLOGIES*, 17(5) , 17-26. SJR:0.203

Цитирана 1 път в:

1. Valcheva, R., Spiridonov, V. (2021). Climate change projections of infrastructure-hazardous phenomena (heavy rainfall and wind) in Bulgaria, *Bul. J. Meteo & Hydro* 25(2) - **2 т.**
2. Gadzhev, G., Ivanov, V., Ganev, K., Chervenkov, H. (2018). TVRegCM Numerical Simulations - Preliminary Results. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, LNCS 10665, Springer, 266-274. SJR (Scopus):0.283

Цитирана 1 път в:

1. Valcheva, R., Spiridonov, V. (2021). Climate change projections of infrastructure-hazardous phenomena (heavy rainfall and wind) in Bulgaria, *Bul. J. Meteo & Hydro* 25(2) - **2 т.**
3. Gadzhev, G., Ivanov, V. (2020). MODELLING OF THE SULPHUR AND NITROGEN DEPOSITIONS OVER THE BALKAN PENINSULA BY CMAQ AND EMEP-MSC-W – PRELIMINARY RESULTS. *Proceeding of 1st International conference on ENVIRONMENTAL protection and disaster RISKS*, 1, <https://doi.org/10.48365/envr-2020.1.8>, 90-100

Цитирана 2 пъти в:

1. Георгиева, И. (2021). Сезонна и годишна повтораемост на индексите за качеството на атмосферния въздух за района на град София, *Bulgarian Geophysical Journal*, 44, 23 – 32 - **2 т.**
2. Георгиева, И., Милошев, Н. (2021). ЗАМЪРСЯВАНЕ НА АТМОСФЕРНИЯ ВЪЗДУХ С ФИНИ ПРАХОВИ ЧАСТИЦИ (ФПЧ) – АНАЛИЗ НА РЕЗУЛТАТИТЕ ОТ КОМПЮТЪРНИ СИМУЛАЦИИ ЗА БЪЛГАРИЯ И СОФИЯ ГРАД, *Българско Геофизично списание*, *Bulgarian Geophysical Journal*, 2021, (44), 3 – 22 - **2 т.**

4. Gadzhev, G., Ivanov, V.. Modelling of the Seasonal Sulphur and Nitrogen Depositions over the Balkan Peninsula by CMAQ and EMEP-MSC-W. *Studies in Systems, Decision and Control (SSDC)*, 361, SPRINGER, 2021, ISBN: 978-3-030-70189-5, ISSN:2198-4182, https://doi.org/10.1007/978-3-030-70190-1_12, 171-183

Цитирана **2 пъти** в:

1. Георгиева, И., (2021). Сезонна и годишна повторяемост на индексите за качеството на атмосферния въздух за района на град София, *Bulgarian Geophysical Journal*, 44, 23 – 32. - **2 т.**
2. Георгиева, И., Милошев, Н. (2021). ЗАМЪРСЯВАНЕ НА АТМОСФЕРНИЯ ВЪЗДУХ С ФИНИ ПРАХОВИ ЧАСТИЦИ (ФПЧ) – АНАЛИЗ НА РЕЗУЛТАТИТЕ ОТ КОМПЮТЪРНИ СИМУЛАЦИИ ЗА БЪЛГАРИЯ И СОФИЯ ГРАД, *Българско Геофизично списание*, Bulgarian Geophysical Journal, 44, 3 – 22 - **2 т.**
5. Gadzhev, G., Ivanov, V., Ganev, K.. Modelling of dry and wet deposition processes for the Sulphur and Nitrogen compounds over Bulgaria. *Proceeding of 20th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes*, Harmo 2021

Цитирана **2 пъти** в:

1. Георгиева, И. (2021). Сезонна и годишна повторяемост на индексите за качеството на атмосферния въздух за района на град София, *Bulgarian Geophysical Journal*, 44, 23 – 32 - **2 т.**
2. Георгиева, И., Милошев, Н., (2021). ЗАМЪРСЯВАНЕ НА АТМОСФЕРНИЯ ВЪЗДУХ С ФИНИ ПРАХОВИ ЧАСТИЦИ (ФПЧ) – АНАЛИЗ НА РЕЗУЛТАТИТЕ ОТ КОМПЮТЪРНИ СИМУЛАЦИИ ЗА БЪЛГАРИЯ И СОФИЯ ГРАД, *Българско Геофизично списание*, Bulgarian Geophysical Journal, 44, 3 – 22 - **2 т.**
6. Ivanov, V., Evtimov, S. (2014). WIND CHILL HAZARD IN BULGARIA DURING 2003-2012 PERIOD. *Comptes rendus de l'Acade'mie bulgare des Sciences*, 67(11), ISSN:1310–1331

Цитирана **1 път** в:

1. Gadzhev, G. (2020). PRELIMINARY RESULTS FOR THE RECURRENCE OF AIR QUALITY INDEX FOR THE CITY OF SOFIA FROM 2008 TO 2019, *Proceeding of 1st International conference on ENVIROnmental protection and disaster RISKS*, 29-30 September 2020, Sofia, Bulgaria, 53 – 64. <https://doi.org/10.48365/envr-2020.1.5> - **2 т.**

7. Evtimov S., Ivanov, V. (2008). Correspondence analysis of the atmospheric phenomena in Bulgaria. *Comptes Rendus de L'Academie Bulgare des Sciences*, 61(4), 443-450. ISSN: 13101331

Цитирана **1 път** в:

1. Gadzhev, G. (2020). PRELIMINARY RESULTS FOR THE RECURRENCE OF AIR QUALITY INDEX FOR THE CITY OF SOFIA FROM 2008 TO 2019, *Proceeding of 1st International conference on ENVIRONMENTAL protection and disaster RISKS*, 29-30 September 2020, Sofia, Bulgaria, 53 – 64, <https://doi.org/10.48365/envr-2020.1.5> - **2 т.**

Група Е - Сума от показателите от 13 до 23 – 30 т.

15 - Участие в национален научен или образователен Проект

1. 2938/27.11.2014 - Сервизно обслужване на сървъра на Системата за прогнозиране нивата на тропосферен озон в атмосферния въздух – **10 т.**

16 - Участие в международен научен или образователен Проект

2. PIRSES-GA-2013-61267 REQUA - Regional climate-air quality interactions – **20 т.**

София, 20.07.2023г.

С уважение:



/гл. ас. д-р Владимир Иванов/