

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 за участие в конкурс за академична длъжност „доцент” в професионално направление 4.4. Науки за Земята по научна специалност 01.04.08 „Физика на океана, атмосферата и околоземното пространство”
от гл. ас. д-р Мария Стефанова Стойчева-Шамати

A	Дисертационен труд за присъждане на образователна и научна степен „доктор“		50т.
1	Вариабилности на магнитното поле на Земята в ULF диапазон. Идентифициране източните на смущения.		50
Общо показател А			50т.
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B	4. Хабилитационен труд – научни публикации (не по- малко от 10) в издания, които са реферирали и индексирани в световноизвестни бази данни с научна информация Scopus, Web of Science, ERIH+	Брой n	60/n за всяка публикация
1	Chamati, M., Oynakov, E., Solakov, D., Aleksandrova, I., (2020). Effects of synchronization between ultralow frequency geomagnetic components variations and seismic noise. International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 2020, pp. 535–542, DOI:10.5593/sgem2020/1.2/s05.068 SJR 0.232	4	15
2	Teodosiev, D., P. Nenovski, M. Chamati , D. Borisova and T. Nikolova (2019). Indexing of ULF/ELF electromagnetic emissions as a health and life quality factor. Proceedings of the 10th Congress of the Balkan Geophysical Society, 18-22 September 2019, Albena, Bulgaria, EAGE, DOI 10.3997/2214-4609.201902637. SJR 0.11	5	12
3	H.Chamati, M.S. Stoycheva and G.A. Evangelakis (2004). Immersed nano-sized Al dispersoids in an Al matrix: effects on the structural and mechanical properties by molecular dynamics simulations, J.Phys.: Condens. Matter Vol.16, 28, 5031-5042.	3	20
4	Oynakov, E., Solakov, D., Aleksandrova, I., Chamati, M. (2020). Synchronization of micro-seismic noise and its statistical parameters before ridgecrest earthquake M7.1 on 6th of July 2019. International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 2020, pp. 639–646, DOI 10.5593/sgem2020/1.2/s05.081, SJR 0.232	4	15

	Borislav Andonov, Maria Chamati (2021). Local spectral characteristics of ultra-low frequency geomagnetic variations with moderate geomagnetic activity conditions at mid latitudes. 21th International Multidisciplinary Scientific GeoConference SGEM 2021, 21, ISBN: 978-619-7603-20-0, ISSN: 1314-2704, DOI:10.5593/sgem2021/1.1/s05.094, 779-786. SJR 0.232.	2	30
6	Maria Chamati , Borislav Andonov (2021). Ultra-low frequency geomagnetic pulsations observed at mid latitudes in Panagjurishte, Bulgaria. 21th International Multidisciplinary Scientific GeoConference SGEM 2021, 21, ISBN: 978-619-7603-20-0, ISSN: 1314-2704, DOI:10.5593/sgem2021/1.1/s05.104, 855-862. SJR 0.232	2	30
7	Nenovski, P., Chamati, M. , Villante, M., De Lauretis, M. and P. Francia (2013). Scaling characteristics of SEGMA magnetic field data around the Mw6.3 Aquila earthquake. Acta Geophysica, Vol. 61(2), pp.311-337, ISSN18957455, DOI10.2478/s11600-012-0081-1, IF 1.3	5	12
8	Petya Trifonova, Liliya Dimitrova, Metodi Metodiev, Maria Chamati , Plamena Raykova (2021). Earthquake effects recorded on magnetogram - where, when and why. 21th International Multidisciplinary Scientific GeoConference SGEM 2021, 21, 1.1, ISBN: 978-619-7603-20-0, ISSN: 1314-2704,	5	12
9	M. Chamati and B. Andonov (2021). Effects of a Strong Thunderstorm on the ULF Geomagnetic Field Variations, Conference Proceedings, 11th Congress of the Balkan Geophysical Society, 10-15 Oct 2021, Volume 2021, Bucharest, Romania, EAGE, DOI: https://doi.org/10.3997/2214-4609.202149BGS5 SJR 0.11	2	30
10	Maria Chamati , Borislav Andonov (2022). Pc5 pulsations observed during the geomagnetic storm on 12 May 2021. International Scientific GeoConference SGEM XXIIInd International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management – SGEM 2022, 22, 2022, ISBN:978-619-7603-38-5, ISSN:1314-2704, DOI:10.5593/sgem2022/1.1/s05.063,541-548SJR 0.232	2	30
	Общо показател В: 206т.		

Г	7. Научни публикации в издания, които са реферирали и индексирани в световноизвестни бази данни с научна информация	n	40/n
1	Maria Chamati. Characteristics of Pc5 pulsations activity at mid latitudes during December 2019. International Scientific GeoConference SGEM XXIIInd International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management – SGEM 2022, 22, 2022, ISBN:978-619-7603-38-5, ISSN:1314-2704, DOI:10.5593/sgem2022/1.1/s05.059, 509-516., SJR0.232	1	40
2	Chamati, M. and E. Botev (2019). Nonlinear Analysis of Geomagnetic Variations Data from Panagyuriste Geomagnetic Observatory, Bulgaria. Proceedings of the 10th Congress of the Balkan Geophysical Society, 18-22 September 2019, Albena, Bulgaria, EAGE, DOI 10.3997/2214-4609.201902631. (приложен протокол за личен принос на авторите)	2	36 (прото- кол)
Общо Г7 : 76			

Г	8. Научна публикация в нереферирали списания с научно рецензиране или в редактирани колективни томове	n	20/n
1	Бойчев Б., П. Неновски, М. Стойчева-Шамати , В. Бойчев (2005). Електротелурични измервания в ULF диапазона за изследване на краткосрочни предвестници на земетресения. Proceedings of Scientific Conference “SPACE, ECOLOGY, SAFETY” with International Participation - SES‘2005, 10–13 June 2005, Varna, Bulgaria, Book 2, pp. 302-309. ISBN 9544384855, 9789544384852	4	5
2	Boytchev B., P. Nenovski, S. Dimitrova, K. Donkova, V. Boytchev, M. Chamati , E. Spassov (2006). Seismicity and measurements of electromagnetic forerunners in the Kresna’s earthquake zone. “SPACE, ECOLOGY, SAFETY” 2006, 14-16 June 2006, Varna, Bulgaria. ISSN 1314-8702 http://space.bas.bg/SES/archive/SENS%202006_DOKLADI/CD/Papers.html	7	2.86
3	Chamati, M. , Nenovski, P., Vellante, M., Villante, U., Schwingenschuh, K., Boudjada, M., Wesztergom, V., (2011). Application of DFA method to magnetic field data. (Complex research of earthquake’s forecasting possibilities, seismicity and climate change correlations), 13-16 September 2011, Tbilisi, Georgia, Volume 2, ISSN 2233-3681, pp. 72-79.	7	2.86
4	Nenovski,P., M.Chamati and P.Muhtarov (2011). What we can learn from the 2009 Mw6.3 L’Aquila earthquake. Complex research of earthquake’s forecasting possibilities, seismicity and climate change correlations, 2-5 May 2011, Ohrid, Republic of Macedonia, Volume 1, ISBN 978-9989-631-04-7, pp.243-255.	3	6.67

5	Nenovski,P., M. Chamati , U. Villante, M. De Lauretis, M. Vellante, P. Francia, V. Wesztergom, K. Schwingenschuh, M. Boudjada, G. Prattes (2011). DFA analysis of SEGMA magnetic field data around the M6.3 Aquila EQ, Proceedings of the 2-nd workshop of EU FP7 project BlackSeaHazNet (Complex research of earthquake's forecasting possibilities, seismicity and climate change correlations), 13-16 September 2011, Tbilisi, Georgia, Volume 2, ISSN 2233-3681, pp. 157-163	10	2
6	Chamati, Maria. (2018). Geomagnetic disturbances observed at Panagyuriste (PAG) station, Bulgaria on 7-8th of September 2017 during the geomagnetic storm. (2018). Proceedings of the IX National Geophysical Conference, Nov 30, 2018, Sofia, Bulgaria, ISSN-1314-2518, pp.10-16	1	20
7	Chamati, M. (2020). ULF geomagnetic observation at Panagjuriste, Bulgaria as a tool for investigation of the magnetosphere-ionosphere-lithosphere system. Bulgarian Geophysical Journal, 43, 2021, ISSN: 2683-1317, DOI:10.34975/bgj-2020.43.8, 89-97.	1	20
8	Chamati, M. (2021). ULF geomagnetic disturbances due to moderate geomagnetic storm at Panagjuriste, Bulgaria. Bulgarian Geophysical Journal, 44, ISSN: 2683-1317, DOI: 10.34975/bgj-2021.44.5, 53-59.	1	20
9	Chamati, M. (2021). Spectral characteristics in ULF range of geomagnetic storm observed at Panagjuriste, Bulgaria on 27-28 September 2017. Bulgarian Geophysical Journal, 44, ISSN: 2683-1317, DOI:10.34975/bgj-2021.44.9, 109 - 116.	1	20
10	Chamati, M. (2022). Investigation of the ULF geomagnetic noise recorded on MAY 1, 2020 at Panagjurishte geomagnetic observatory. Bulgarian Geophysical Journal, 45, ISSN: 2683-1317 (<i>приета за печат с приложен документ от списанието</i>)	1	20
11	Chamati, M. (2022). The geomagnetic storm on November 3-4, 2021: spectral characteristics in ULF range at mid latitudes. Bulgarian Geophysical Journal, 45, ISSN: 2683-1317 (<i>приета за печат с приложен документ от списанието</i>)	1	20
12	Maria Chamati (2023). Disturbances in the geomagnetic field recorded on February 6, 2023. Proceedings of the XI National Geophysical Conference, June 9, 2023, Sofia, Bulgaria, ISSN-1314-2518.	1	20
	Общо Г8: 159.39		
	Общо показател Г: 235.39 т.		

Д	10. Цитирания или рецензии в научни издания, реферирали и индексирани в световноизвестни бази данни (Scopus, Web of Science, ERIH+) с научна информация или в монографии и колективни томове		5т.
1	H. Chamati, M.S. Stoytcheva and G.A. Evangelakis. Immersed nano-sized Al dispersoids in an Al matrix; effects on the structural and mechanical properties by Molecular Dynamics simulations, J. Phys. Condens. Matter 16 (2004) 5031–5042.		
	<i>I.A. Ovid'ko and A.G. Sheinerman, Nanoparticles as dislocation sources in nanocomposites J. Phys.: Condens. Matter 18 (2006) L225–L232</i>		5
	<i>Z. Zhang and D.L. Chen. Contribution of Orowan strengthening effect in particulate-reinforced metal matrix nanocomposites, Mater. Sci. Eng. A, 483–484 (2008) 148–152</i>		5
2	Nenovski, P., Chamati, M., Villante, M., De Lauretis, M. and P. Francia (2013). Scaling characteristics of SEGMA magnetic field data around the Mw6.3 Aquila earthquake. Acta Geophysica, Vol. 61(2), pp.311-337.		
	<i>Elizabeth Dologlou (2013). Aspects on the origin of the precursory magnetic anomalies of the Mw 6.4 Aquila earthquake, Int J Earth Sci (Geol Rundsch), DOI 10.1007/s00531-013-0970-9</i>		5
	<i>Elizabeth Dologlou(2014)An alternative approach to reveal critical behaviour in the case of the Mw 6.3 Aquila earthquake, International Journal of Earth Sciences, Volume 103, Issue 6, pp 1725-1728</i>		5
3	Chamati, M. (2020). ULF geomagnetic observation at Panagjuriste, Bulgaria as a tool for investigation of the magnetosphere-ionosphere-lithosphere system. BGJ, Vol. 43, pp.89-97.		
	<i>Prof. DSc. Nikolay Miloshev, Assoc. Prof. Dr. Petya Trifonova, NATURAL RISK AND RESILIENCE – HOW THE NATIONAL GEO-INFORMATION CENTER IS ASSESSING AND COMMUNICATING THEM, SGEM2021, Vol.21, pp.271-278, ISSN1314-2704, ISBN978-619-7603-22-4, doi: 10.5593/sgem2021/2.1/s08.36</i>		5
	<i>Trifonova, P., Metodiev, M., Radev, I. (2023). Verification of 2020 Geomagnetic Models Over the Bulgarian Territory. In: Dobrinkova, N., Nikolov, O. (eds) Environmental Protection and Disaster Risks. EnviroRISKS 2022. Lecture Notes in Networks and Systems, vol 638. Springer, Cham. ISSN 2367-3370, pp 335–345 https://doi.org/10.1007/978-3-031-26754-3_29</i>		5
	Общо Д10: 30		

Д	11. Цитирания в монографии и колективни томове с научно рецензиране		3т
1	Nenovski, P., Chamati, M., Villante, M., De Lauretis, M. and P. Francia (2013). Scaling characteristics of SEGMA magnetic field data around the Mw6.3 Aquila earthquake. <i>Acta Geophysica</i> , Vol. 61(2), pp.311-337		
	Jivkov, V., Natarajan, V., Philipoff, Ph., Mandiev, P., Doneva, S., Tankovsky, Y., Paneva, A. (2018). MODERN SATELLITE SYSTEMS AND BUILDING STRUCTURES CONTROL, X Jubilee International Scientific Conference „Civil Engineering Design and Construction“ (Science and Practice), Sept. 20-22, 2018, Varna, Bulgaria, pp. 189-196		3
	Jivkov, Venelin et al. (2017). SATELLITE MONITORING OF LOCAL ANOMALIES OF THE TEMPERATURE, ELECTROMAGNETIC AND GAS EMISSIONS ON THE GROUND SURFACE, Proceedings of the 15th International Conference on New Trends in Statics and Dynamics of Buildings October 19-20, 2017 Bratislava, Slovakia Faculty of Civil Engineering STU Bratislava, pp.124-132 Slovak Society of Mechanics SAS Tecnológico de Monterrey, Campus Puebla, Mexico		3
2	Chamati, M., P. Nenovski, M. Villante, U. Villante, K. Schwingenschuh, M. Boudjada, V. Wesztergom (2009). Application of DFA method to magnetic field data from SEGMA array. <i>BGJ</i> , Vol. 35, pp.3-16.		
	P Sindirgi, N Sungurl (2020). Self-potential Monitoring and Detrended Fluctuation Analysis (DFA): A Case Study of Izmir-Urla Example. <i>Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi</i> , 22 (66), 781-792. DOI: 10.21205/deufmd.2020226613		3
	Общо Д11: 9		

Д	12. Цитирания или рецензии в нереферирани списания с научно рецензиране		2т.
1.	Chamati, M. (2020). ULF geomagnetic observation at Panagjuriste, Bulgaria as a tool for investigation of the magnetosphere-ionosphere-lithosphere system. <i>BGJ</i> , Vol. 43, pp.89-97.		
	M. Metodiev, P. Trifonova, (2021). ANNUAL REPORT OF THE OBSERVED GEOMAGNETIC ACTIVITY AT PANAGJURISHTE OBSERVATORY FOR 2016, <i>BGJ</i> , Vol.44, pp 75-91		2
	M. Metodiev, P. Trifonova, (2021). ANNUAL REPORT OF THE OBSERVED GEOMAGNETIC ACTIVITY AT PANAGJURISHTE OBSERVATORY FOR 2017, <i>BGJ</i> , Vol.44, pp.92-108		2

2.	M. Chamati and B. Andonov (2021). Effects of a Strong Thunderstorm on the ULF Geomagnetic Field Variations, Conference Proceedings, 11th Congress of the Balkan Geophysical Society, 10-15 Oct 2021, Volume 2021, Bucharest, Romania, EAGE, DOI: https://doi.org/10.3997/2214-4609.202149BGS5		
	<i>M. Metodiev, P. Trifonova, (2021). ANNUAL REPORT OF THE OBSERVED GEOMAGNETIC ACTIVITY AT PANAGJURISHTE OBSERVATORY FOR 2016, BGJ, Vol.44, pp 75-91</i>		2
	<i>M. Metodiev, P. Trifonova, (2021). ANNUAL REPORT OF THE OBSERVED GEOMAGNETIC ACTIVITY AT PANAGJURISHTE OBSERVATORY FOR 2017, BGJ, Vol.44, pp.92-108</i>		2
3.	Nenovski, P., Chamati, M., Villante, M., De Lauretis, M. and P. Francia (2013). Scaling characteristics of SEGMA magnetic field data around the Mw6.3 Aquila earthquake. Acta Geophysica, Vol. 61(2), pp.311-337		
	<i>Jivkov V, Natarajan V, Paneva A, Philipoff P., (2017). Forecasting of Strong Earthquakes M>6 According to Energy Approach. J Earth Sci Clim Change 8: 433. doi:10.4172/2157-7617.1000433</i>		2
	<i>E. Ойнаков, И. Александрова, М. Попова. Просстранствена и времева вариация на сеизмичността в България на основа Каталога на земетресенията (1981-2019). Problems of</i>		2
	<i>Radan Ivanov, Emil Oynakov, Irena Alksanova. Evaluation of the fundamental frequency and damping of a cast-in-situ reinforced-concrete building by ambient noise analysis. Problems of Geography, Vol 1–2, 2023.</i>		2
4.	Chamati, M. and E. Botev (2019). Nonlinear Analysis of Geomagnetic Variations Data from Panagyuriste Geomagnetic Observatory, Bulgaria. Proceedings of the 10th Congress of the Balkan Geophysical Society, 18-22 September 2019, Albena, Bulgaria, EAGE, DOI 10.3997/2214-4609.201902631		
	<i>E. Ойнаков, И. Александрова, М. Попова. Просстранствена и времева вариация на сеизмичността в България на основа Каталога на земетресенията (1981-2019). Problems of</i>		2
	<i>9.2. Radan Ivanov, Emil Oynakov, Irena Alksanova. Evaluation of the fundamental frequency and damping of a cast-in-situ reinforced-concrete building by ambient noise analysis. Problems of Geography, Vol 1–2, 2023.</i>		2

5.	Petya Trifonova, Liliya Dimitrova, Metodi Metodiev, Maria Chamati, Plamena Raykova (2021). EARTHQUAKE EFFECTS RECORDED ON MAGNETOGRAM - WHERE, WHEN AND WHY. 21th International Multidisciplinary Scientific GeoConference SGEM 2021, 21, 1.1, 2022, ISBN: 978-619-7603-20-0, ISSN: 1314-2704, DOI:10.5593/sgem2021/1.1/s05.084, 693-700.		
6.	E. Ойнаков, И. Александрова, М. Попова. Пространствена и времева вариация на сеизмичността в България на основа Каталога на земетресенията (1981-2019). Problems of Geography. Vol 1-2. 2023.	2	
6.	Chamati, M., P. Nenovski, M. Vellante, U.Villante, K. Schwingenschuh, M. Boudjada, V. Wesztergom (2009). Application of DFA method to magnetic field data from SEGMA array. BGJ, Vol. 35, ISSN: 2683-1317, pp.3-16.		
	<i>Radan Ivanov, Emil Oynakov, Irena Alksanova. Evaluation of the fundamental frequency and damping of a cast-in-situ reinforced-concrete building by ambient noise analysis. Problems of Geography. Vol 1-2. 2023.</i>		
	Общо Д12: 22		
	Общо показател Д: 61т.		

E	15. Участие в национален научен или образователен проект		10т.
	ФНИ/Н31402/04 Електромагнитен мониторинг на райони с повишена сеизмична активност.(2004-2007)		10
	ФНИ/ ДН 14-1/11.12.2017. Изследване на измененията в някои геофизични полета предхождащи появата на земетресения в района на Балканите (2018-2020)		10
	ДО1-161/28.08.2018 НАЦИОНАЛЕН ГЕОИНФОРМАЦИОНЕН ЦЕНТЪР		10
	Общо Е15: 30		
E	16. Участие в международен научен или образователен проект		20т
	BlackSeaHazNet- FP7 MCA Project PIRSES-GA-2009-246874 (2011-2013)		20
	Manufacture and characterisation of nanostructured Al alloys (Nano-Al), contract No HPRN-CT-2000-00038/EU: Improving Human Potential in Fifth Framework Programme (1999 - 2002).]		20

	<i>ЕБР-Австрия: Анализ на ULF електро и магнитотелурични наблюдения свързани със сеизмичната активност.</i>		20
	<i>ЕБР-Италия: Анализ на електромагнитни наблюдения от SEGMA, свързани с глобален мониторинг за околната среда и сигурност (GMES).</i>		20
Общо Е16: 80			
E	17. Ръководство на национален научен или образователен проект		20т.
	<i>ФНИ/МУ 1506/05 Изследване на ULF електротелуричен шум в честотния диапазон 0.001-2.5 Hz.</i>		20
	Общо Е17: 20		
	Общо показател Е: 130 т.		

Изпълнение на минималните изисквани точки по групи показатели за академична длъжност „доцент“ в Направление 4.4 Науки за Земята според представения списък:

Показател	Минимални национални изисквания	Минимални изисквания на НИГГГ	Постигнати точки
A	50	50	50
B	100	100	206
Г	200	220	235.39
Д	50	60	61
E	--	30	130
Сума от показателите	400	460	682.39