

Appendix 4B

Ewa Krzemińska

List of scientific or artistic achievements which present a major contribution to the development of a specific discipline

I. INFORMATION ON SCIENTIFIC OR ARTISTIC ACHIEVEMENTS SET OUT IN ART. 219 PARA 1. POINT 2 OF THE ACT

1. Scientific monograph, pursuant to art. 219 para 1. point 2a of the Act;

2. Cycle of scientific articles related thematically, pursuant to art. 219 para 1. point 2b of the Act; or

3. List of completed original project, engineering and design, technological or artistic achievements, pursuant to art. 219 para 1. point 2c of the Act.

[A1] Krzemińska E., Johansson Å., Krzemiński L., Wiszniewska J., Williams I.S., Petecki Z., Salwa, S., 2021. Basement correlation across the southernmost Baltic Sea: Geochemical and geochronological evidence from onshore and offshore deep drill cores, northern Poland. *Precambrian Research*, **362**, 106300. DOI: 10.1016/j.precamres.2021.106300

IF(2021) = 4.142; 4YearIF = 4.927;

“A” List of the MEiN 2021 = 200 points.,

My contribution is: geochronological investigation, data processing and age results interpretation, the manuscript and figures preparation, except a part of chapter 2 (ÅJ), text of description of the methodology in the supplement (ISW, ÅJ) and figures 7-9 (LK);

[A2] Wiszniewska J., Krzemińska E., 2021. Advances in geochronology in the Suwałki anorthosite massif and subsequent granite veins, northeastern Poland. *Precambrian Research*, **361** (106265), 1–20. DOI: 10.1016/j.precamres.2021.106265

“A” List of the MEiN 2021 = 200 points

My contribution is: geochronological investigation, data processing and age results interpretation, writing a manuscript chapters from 4 to 8, and preparation of figures from 2 to 8.

[A3] Krzemińska E., Łukawska A., Bagiński B. 2019. U-Pb zircon geochronology of high-grade charnockites -exploration of pre-Mesoproterozoic crust in the Mazury Complex area. *Acta Geologica Polonica*, **69**, 489-511.

IF(2019) = 0.926; 4Year IF = 1.228;

“A” List of the MEiN 2021 = 70 points

My contribution is: performing a part of measurements and assisting in the remaining U-Pb analysis, data processing, an interpretation of merged data, writing the manuscript and figures preparation, except Text-fig. 4 and Text-fig. 7 (AŁ).

[A4] Krzemiński L., Krzemińska E., Wiszniewska J. 2019. Detrital zircon geochronology and provenance of the Proterozoic quartz-rich metasediments of the Mazowsze domain: Source areas and regional correlation. *Biuletyn Państwowego Instytutu Geologicznego*, **474**: 59-72. DOI: 10.5604/01.3001.0013.0840

“B” List of the MEiN 2019 = 20 points

My contribution is: geochronological investigation, data processing and age results interpretation, writing a text of chapters Analytical methods, Detrital zircon geochronology, Source Area and preparation of the figures from 5 to 7.

[A5] Poprawa P., Krzemińska E., Paczeńska J., Armstrong R., 2020. Geochronology of the Volyn volcanic complex at the western slope of the East European Craton – relevance to the Neoproterozoic rifting and the break-up of Rodinia/Pannotia. *Precambrian Research*, **346**, 105817. DOI: 10.1016/j.precamres.2020.105817

IF(2020) = 4.394; 4YearIF = 5.127;

“A” List of the MEiN 2021 = 200 points

My contribution is: carrying out a part of the U-Pb analyzes, geochronological data, processing, compiling the results of geochronological research and their interpretation, writing the text from chapters 3 to 5 and 7 and figures 7 to 10.

[A6] Krzemińska E., Poprawa P., Paczeńska J., Krzemiński L. 2022. From initiation to termination: The evolution of the Ediacaran Volyn large igneous province (SW East European Craton) constrained by comparative geochemistry of proximal tuffs versus lavas and zircon geochronology. *Precambrian Research*, **370** (4):106560. DOI: 10.1016/j.precamres. 2022. 106560

IF(2021) = 4.261; 4YearIF=4.927;

“A” List of the MEiN 2021 = 200 points

My participation is: carrying out of the U-Pb analyzes, data processing, and their interpretation, writing the manuscript, except for fragments of chapter 1 (PP) and figures Fig. 1-3 (PP), Fig. 4 (JP), Fig. 10-12 (LK).

[A7] Krzemińska E., Krzemiński L., Poprawa P., Paczeńska J., Nejbert K., 2021. First Evidence of the Post-Variscan Magmatic Pulse on the Western Edge of East European Craton: U-Pb Geochronology and Geochemistry of the Dolerite in the Lublin Podlasie Basin, Eastern Poland. *Minerals* **11**(12):1361. DOI: 10.3390/min1112136

IF(2021) = 2.742 ; 4YearIF=2.93;

“A” List of the MEiN 2021 = 100 points

My participation is: carrying out of the U-Pb analyzes, data processing, and their interpretation writing the manuscript, figures preparation except, Fig. 1 (P.P) i Fig. 3 (JP) i Fig.8-11 (LK).

IF data according to <https://www.scijournal.org/impact-factor>

II. INFORMATION ON SCIENTIFIC OR ARTISTIC ACTIVITY

1. List of published scientific monographs (including the monographs not mentioned in section I.1).

2. List of published chapters in scientific monographs.

Krzemińska E., Krzemiński L., Petecki Z., Wiszniewska J., Salwa S., Żaba J., Gaidzik K., Williams I.S., Rosowiecka O., Taran L., Johansson Å., Pécskay Z., Demaiffe D., Grabowski J., Zieliński G., 2017. Mapa geologiczna podłoża krystalicznego polskiej części platformy wschodnioeuropejskiej 1:1000 000, wraz z zeszytem objaśnień. Geological Map of Crystalline Basement in the Polish Part of the East European Platform 1:1000000. Państwowy Instytut Geologiczny, Warszawa, along with the book of explanations and English Abstract
[Geochronology]

3. Information about membership in editorial boards preparing scientific monographs for publication.- is lacking

4. List of articles published in scientific journals (including the articles not mentioned in section I.2).

Trela W., Krzemińska E., Jewuła K., Czupyt Z. 2022. Oxygen Isotopes from Apatite of Middle and Late Ordovician Conodonts in Peri-Baltica (The Holy Cross Mountains, Poland) and Their Climatic Implications. *Geosciences* 2022, **12**, 165.

<https://doi.org/10.3390/geosciences1204016>;

IF (2021) = 1.645; „A” list of the MEiN (2022) =70

Kowal-Linka M., Jastrzębski M., Krzemińska E., Czupyt Z., 2022. The importance of parameter selection in studies of detrital zircon provenance: An example from Mesozoic deposits of the Bohemian Massif foreland (Poland) 2022 *Palaeogeography*

Palaeoclimatology Palaeoecology, **599** (14):111035 DOI: 10.1016/j.palaeo.2022.111035

IF (2021) =3.462; „A” list of the MEiN (2022) =100

Johansson Å., Bingen B., Huhma H., Waight T., Vestergaard R., Soesoo A., Skridlaite G., Krzemińska E., Shumlyanskyy L., Holland M.E., Holm-Denoma Ch., Teixeira W., Faleiros F.M., Ribeiro B.V., Jacobs J., Wang Ch., Thomas R.J., Macey P.H., Kirkland Ch.L., Hartnady M.I.H., Eglington B.M., Puetz S.J., Condie K.C., 2022. A geochronological review of magmatism along the external margin of Columbia and in the Grenville-age orogens forming the core of Rodinia. *Precambrian Research*, **371** (2022) 106463

<https://doi.org/10.1016/j.precamres.2021.106463>

IF (2021) = 4.142; „A” list of the MEiN (2022) =200

Habryn R., Krzemińska E., Krzemiński L., Markowiak M., Zieliński G., 2020. Detrital zircon age data from the conglomerates in the Upper Silesian and Małopolska Blocks and their implications for the pre-Variscan tectonic evolution (S Poland). *Geological Quarterly*, **64** (2):321-341 DOI:10.7306/gq1539

IF (2020) =1.289; „A” list of the MNiSW (2020) =70

Wiszniewska J., Petecki Z., Krzemińska E., Grabarczyk A., Demaiffe D., 2020. The Tajno ultramafic-alkaline-carbonatite massif, NE Poland: a review. Geophysics, petrology, geochronology and isotopic signature. *Geological Quarterly*, **64**, 402–421, DOI:

<http://dx.doi.org/10.7306/gq.1535>

IF (2020) =1.289, list „A” MNiSW (2020) =70

Wiszniewska J., Grabarczyk A., Krzemińska E., Ahmad T. 2020. Contribution to the Mineral Chemistry of the Proterozoic Aravalli Mafic Meta-Volcanic Rocks from Rajasthan, NW India July 2020, *Minerals*, **10** (7):638 DOI: 10.3390/min10070638

IF (2020) =2.691; „A” list of the MNiSW (2020) =100

Uher P. Broska I., Krzemińska E., Ondrejka M., Mikus T., Vaculovic T. 2019. Titanite composition and SHRIMP U–Pb dating as indicators of post-magmatic tectono-thermal activity: Variscan I-type tonalites to granodiorites, the Western Carpathians. *Geologica Carpathica*, **70**, no. 6, s. 449–470.

IF (2019) = 1.606; „A” list of the MNiSW (2019) =70

Krzemińska E., Krzemiński L. 2019. Magmatic episodes in the Holy Cross Mts., Poland – a new contribution from multi-age zircon populations. *Biuletyn Państwowego Instytutu Geologicznego*, **474**:43-58. DOI:10.5604/01.3001.0013.0839
„B” List of the MNiSW (2019) =20

Kowal-Linka M., Krzemińska E., Czupyt Z. 2019. The youngest detrital zircons from the Upper Triassic Lipie Śląskie (Lisowice) continental deposits (Poland): Implications for the maximum depositional age of the Lisowice bone-bearing horizon. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **514**, 487-504
<https://doi.org/10.1016/j.palaeo.2018.11.012>
IF (2019) = 2.746; „A” list of the MNiSW (2019) =100

Change in the publication score of the MNiSW from 2019

Jastrzębski M., Machowiak K., Krzemińska E., Farmer L., N. Larionov A.N., Murtezi M., Majka J., Sergeev S., Ripley E.M., Whitehouse M. 2018. Geochronology, petrogenesis and geodynamic significance of the Visean igneous rocks in the Central Sudetes, northeastern Bohemian Massif. *Lithos*, **316-317**, 385-405. <https://doi.org/10.1016/j.lithos.2018.07.034>
IF (2018) = 4.058; „A” list of the MNiSW (2018) =45

Shumlyanskyy L., Krzemińska E., Kuzmienkova O., Nosova A. 2018. Geochemistry of picrites of the Ediacaran Volyn Continental Flood Basalt Province. Геологія і корисні копалини України. Збірник тез наукової конференції, присвяченої 100-річному ювілею Національної академії наук України та Державної служби геології та надр України, 2-4 жовтня 2018, Київ, Україна

Jakubauskas P., Bagiński B., Macdonald R., Krzemińska E. 2018. Multiphase magmatic activity in the Variscan Klodsko–Złoty Stok intrusion, Polish Sudetes: evidence from SHRIMP U–Pb zircon ages. *International Journal of Earth Sciences*, **107**, 1623–1639
IF (2018) = 2.177; list „A” MNiSW (2018) =30

Narkiewicz M., Narkiewicz K., Krzemińska E., Kruczek S., 2017. Oxygen isotopic composition of conodont apatite in the equatorial epeiric Belarussian Basin (Eifelian)- Relationship to fluctuating seawater salinity and temperature. *Palaaios*, **32** (7):439-447 DOI:10.2110/palo.2016.059
IF (2017) = 1.732; „A” list of the MNiSW (2017) =40

Krzemińska E., Sołtysiak A., Czupyt Z. 2017. Reconstructing seasonality using $\delta^{18}\text{O}$ in incremental layers of human enamel: a test of the analytical protocol developed for SHRIMP IIe/MC ion microprobe. *Geological Quarterly*, **61**(2):351-364 DOI:[10.7306/gq.1354](https://doi.org/10.7306/gq.1354)
IF (2017) = 1.185; „A” list the MNiSW (2017) =20

Żarski M., Winter H., Nadachowski A., Urbanowski M., Socha P., Kenig K., Marcinkowski B., Krzemińska E., Stefaniak K., Nowaczewska W., Marciszak A. 2017. Stratigraphy and palaeoenvironment of Stajnia Cave (southern Poland) with regard to habitation of the site by Neanderthals. *Geological Quarterly*, 2017, **61** (2): 350–369 DOI: [10.7306/gq.1355](https://doi.org/10.7306/gq.1355)
IF (2017) = 1.185; „A” list of the MNiSW (2017) =20

Demaiffe D., Wiszniewska J., Krzemińska E., Williams I.S., Stein H., Brassinnes S., Ohnenstetter D., Deloule E. 2013. A hidden alkaline and carbonatite province of Early

Carboniferous age in NE Poland: U-Pb zircon and Re-Os pyrrhotite geochronology. *The Journal of Geology*, **121**: 91–104

IF (2013) = 2.55; „A” List of the MNiSW (2010) =45

Krzemińska E., Krzemiński L., 2012. The Mława syenite alkaline intrusion- Perspective of rare earth elements occurrence, *Biuletyn Państwowego Instytutu Geologicznego*, **448** (2): 401 - 410.

„B” List of the MNiSW (2012) = 5

Krzemińska E., Wiszniewska J., Skridlaite G., Williams I.S. 2009. Late Svecofennian sedimentary basin in the crystalline basement of NE Poland and adjacent area of Lithuania: ages, major source of detritus and correlations. *Geological Quarterly*, **53**, 255-272.

IF (2009) = 0.62; List „A” MNiSW (2010) =27

Publication with elements of the PhD thesis accepted for printing after PhD defence:

Williams I.S., Krzemińska E., Wiszniewska J. 2009. An extension of the Svecofennian orogenic province into NE Poland: evidence from geochemistry and detrital zircon from Paleoproterozoic paragneisses. *Precambrian Research*, **17**, 234-254.

IF (2009) = 3.883; „A” List of the MNiSW (2010) =32

Publications before of the PhD defence:

Chapter within w monography

Wiszniewska J., Krzemińska E. 2008. Southern Fennoscandia I (NE Poland). pp-34-38.

w: T. McCann (red.) 2008. The Geology of Central Europe, Volume 1: Precambrian and Palaeozoic Linnemann (red);. xiii + 748 + xxxviii pp.;. London, Bath: Geological Society of London.

Wiszniewska J. Krzemińska E., Dörr W. 2007. Evidence of arc-related Svecofennian magmatic activity in the southwestern margin of the East European Craton in Poland. *Gondwana Research* **12**, , October 2007, Pages 268-278;

IF (2007/2008) =1.103/3.262; „A” List of the MNiSW- lack of data

Krzemińska E., Williams I.S, Wiszniewska J. 2005. A Late Paleoproterozoic (1.80Ga) subduction-related mafic igneous suite from Lomza, NE Poland. *Terra Nova*, **17**, 442-449.
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IF (2005) =1.928; „A” List of the MNiSW- lack of data

IF data according to <https://www.scijournal.org/impact-factor>

5. List of project, engineering and design as well as technological achievements (including the achievements not mentioned in section I.3). not applicable

6. List of public realizations of works of art (including the works not mentioned in section I.3). not applicable

7. Information on presentations given at national or international scientific or arts conferences, including a list of lectures delivered upon invitation and plenary lectures.

7.1 Oral presentations:

2019: ESIR Isotope Workshop XV, June 23-27, 2019, Lublin, Poland: Krzemińska et al., 2019. *Lublin region through Proterozoic time - an overview of U - Pb isotope zircon data.*

2019: XXVIth Meeting of the Petrology Group of the Mineralogical Society of Poland. Session: Versatile petrology in the Earth sciences research Chęciny, 24-27 October 2019: Krzemińska et al. *The age of youngest detrital grains of clastic sediments and their interpretation - the cases of active versus passive tectonic settings.*

2018: Kongres Surowcowy V Konferencja Złoża Kopaliny- aktualne problemy Prac Poszukiwawczych, badawczych i dokumentacyjnych, 20-20.11.2018 Ryto: Krzemińska E. Wiszniewska J. *Wiek suwalskiego złoża ilmenitowo- magnetytowego; rezultaty 20 lat badań geochronologicznych i izotopowych.*

2018: 33rd Nordic Geological Winter Meeting 2018 in Lyngby, Denmark. Krzemińska E. et al., *The analogous Late Paleoproterozoic basement in Pomerania (N Poland) and Blekinge (S Sweden)-the isotopic evidences.*

2016: VIII International SHRIMP Workshop, Granada, Spain, 6-10 September 2016 Krzemińska E., et al. . *Single spot profiles along human enamel/dentine junction – a sensitive and high spatial resolution $\delta^{18}\text{O}$ record of the past environmental variation provided by SHRIMP IIe/MC study.*

2016: VIII International SHRIMP Workshop, Granada, Spain, 6-10 September 2016 Krzemińska E., et al. *Using oxygen ($\delta^{18}\text{O}$) time-series SHRIMP IIe/MC analyses of the mammalian enamel from Stajnia Cave (southern Poland) to trace a Vistulian (Weichselian, Late Pleistocene) short time climate variability*

2016: VIII International SHRIMP Workshop, Granada, Spain, 6-10 September 2016 Krzemińska E., et al. *AMCG suite in NE Poland-subsequent datings of A-type granitoids on SHRIMP*

2014: 31st Nordic Geological Winter Meeting Lund, Sweden, January 8-10 2014 – Krzemińska E., et al. *A novel image of hidden crystalline basement in NE Poland at the junction of Fennoscandia and Sarmatia.*

2014: 7th International SHRIMP Workshop 27 September - 1 October, 2014 Tachikawa (Tokyo) & Kurobe (Toyama); Krzemińska et al. *SHRIMP zircon U-Pb contributions to the new geological reconstruction of the East European Craton: Evidence from the hidden basement of NE Poland.*

2013: International Meeting on Precambrian Evolution and Deep Exploration of the Continental Lithosphere -7-9 October, 2013, Beijing, China_ Krzemińska E., et al: *Timing of crust-forming processes in the hidden basement of the East European Craton margin (NE Poland) constrained by detrital zircon geochronology.*

2010: ALKALINE ROCKS: Petrology, Mineralogy, Geochemistry: Conference dedicated to the memory of J. A. Morozewicz. Kyiv, Ukraine., 19-21 September, 2010; Krzemińska E., et al., *Multiplicity of calc-alkaline and alkaline lamprophyres in NE Poland (EEC): Insights from geochemical and geochronological data.*

2010: International conference School “Geochemistry of Alkaline Rocks”, Kyiv Kijów Sept. 9-16, 2010, Krzemińska E., et al 2010. *Sr and Nd systematics of the Tajno alkaline-ultramafic complex, NE Poland: Identification of depleted and enriched components in the subcontinental lithospheric mantle.*

2009: Geological Society of London, Fermor Meeting 2009 Rodinia: Supercontinents, Superplumes and Scotland. Edinburgh, Scotland, September 5.-9. 2009, Krzemińska E., et al., *Neoproterozoic Flood Basalt Formation in Eastern Poland and Western Ukraine: The remnant of Rodinia rifting.*

7.2 Invited lectures

2017: VIII Polish Conference of Quaternary Paleobotany (June 6-9, 2017, Krakow) | Institute of Botany W. Szafer, Polish Academy of Sciences. *Presentation on the methodology of isotope investigations, during the field session in the Stajnia cave;*

2015: Faculty of Geophysics, University of Warsaw (invitation of Prof. Marek Grad) Seminar of Lithospheric Physics and Planetology (5 Pasteura Street, Warsaw); Extended seminar: *New map of the craton - geophysical and geochronological explanations;*

7.3 Chairing sessions at scientific conferences

2016: VIII International SHRIMP Workshop, Granada, Spain, 6-10 September 2016, two sessions

2014: 7th International SHRIMP Workshop 27 September - 1 October, 2014 Tachikawa (Tokyo) & Kurobe (Toyama) – one session;

2010: ALKALINE ROCKS: PETROLOGY, MINERALOGY,. GEOCHEMISTRY. Conference dedicated to the memory of. J. A. Morozewicz. Kyiv, Ukraine, 19-21 September, 2010;

8. Information on participation in organizational and scientific committees at national or international conferences, including the applicant's function.

2016: VIII International SHRIMP Workshop, Granada, Spain, 6-10 September 2016
Co-chairman of the organizing committee

9. Information on participation in the works of research teams realizing projects financed through national and international competitions, including the projects which have been completed and projects in progress, and information on the function performed in the team.

Project in progress:

NCN (UMO-2021/41/B/ ST10/03550) – consortium member - manager within the consortium subgroup

Projects completed:

grant NCN (#2015/17/B/ST10/03540) – project contractor

grant KBN 1157/B/P01/2008/35 –project leader

10. Membership in international or national organizations and scientific societies, including the functions performed by the applicant. – is lacking

11. Information on internships completed in scientific or artistic institutions, also abroad, including the place, time and duration of the internship and its character.

2015: oraz 2016 - Micro analytical CL detector, application training course, Horiba Jobin Co –1 tydzień i1 tydzień

2014: The SHRIMP ion micro probe technical operation course (Australia Scientific Instruments ASI, Fyshwick Canberra and the SHRIMP applications course at the RSES, ANU, Canberra, Australia - 4 weeks)

2009: Laser ablation (LA-ICP-MS) course 1 week, by specialist from Division of Geochemistry and Environmental Geology Geological Survey of Israel

2011: Training course Geoscience Australia, Canberra; Cnr Jerrabomberra Ave, ACT 2609– A sample preparation and young rocks geochronology, 2 weeks

2005, 2009, 2011.: Training courses and attendance of SHRIMP ion microprobe equipment at RSES ANU, Canberra, Australia –2 weeks, 2 weeks, 4 weeks

Before PhD defence

1996: Training course of the Microanalytical softwares and new methods (Oxford Instruments) – by Oxford Instruments specialists 1 week Nadarzyn, Polska

1994:-Training course and Certificate of the Microanalytical methods EDS (Oxford Instruments Microanalysis Group) -2 weeks, High Wycombe, Wielka Brytania.-

12. Membership in editorial committees and scientific boards of journals, including the functions performed by the applicant (e.g. editor-in-chief, chairman of scientific board etc.). is lacking

13. Information on scientific or artistic works reviewed, in particular those published in international journals.

2020: *Baltica* 33 (2), 128–145, a review of the manuscript written by Motuza G., Šliaupa S., Amelin Y., *Paleogene plutonic magmatism in Central Afghanistan, and its relation to the India-Eurasia collision.*

2019: *Baltica* 32 (1), 109–126, a review of the manuscript written by Skridlaitė G., Šiliauskas L., Prušinskienė S., Bagiński B., *Petrography and mineral chemistry of the Varena Iron Ore deposit, southeastern Lithuania: implications for the evolution of carbonate and silicate rocks and ore mineralization.*

2016: *Chemical Geology*, 440, 164–178, a review of the manuscript written by Sun Y., Wiedenbeck M., Joachimski M.M., Beier Ch., Kemner F., Weinzierl Ch. *Chemical and oxygen isotope composition of gem-quality apatites: Implications for oxygen isotope reference materials for secondary ion mass spectrometry (SIMS)*

2011: *Geological Quarterly*, 55, 63–70, a review of the text written by Motuza & Motuza. *Charnockitic rocks in the crystalline basement of Western Lithuania: implications on their origin and correlation with the Askersund suite in SE Sweden*

14. Information on participation in European or other international programmes.- is lacking

15. Information on participation in research teams realizing projects other than those defined in section II.9. .- is lacking

16. Information on membership in the teams assessing applications for financing of research projects, applications for scientific awards, applications in other competitions of scientific or didactic character. .- is lacking

III. INFORMATION ON COOPERATION WITH SOCIAL AND ECONOMIC ENVIRONMENT

is lacking

IV. SCIENTOMETRIC INFORMATION

1. Information on the Impact Factor (in the fields and disciplines in which this parameter is commonly used as a scientometric index).

Publications included in the scale of the discussed cycle as achievements, total (two-year) impact factor IF = 20.607 Other publications after the doctorate, total (two-year) impact factor IF = 34.617

2. Information on the number of citations of the applicant's publications, including a separate list of self-citations.

According to the Web of Science database (September 5, 2022), the number of citations is 189 (with self-citations), 160 without self-citations; According to the Scopus database (September 5, 2022), the number of citations is 303 (with self-citations), without self-citations 246

3. Information on *h*-index held.

According to the Web of Science database, the Hirsch index is 9

According to the Scopus database, the Hirsch index is 10

4. Information on the number of the points awarded by the Ministry of Education Science

The number of the points awarded by the Ministry of Education and Science (MEiN) for the cycle of scientific articles related thematically [A1-A7]
- is 990.

Scientific achievements	Before PhD	After PhD
The number of the MEiN points for the cycle of scientific articles [A1-A7]	-----	990
Sum of IF for the cycle of scientific articles [A1-A7]	-----	20.607
The number of the MEiN points for the remaining: after 2019		730
The number of the MEiN points for the remaining: before 2019	-----	264
The remaining: sum of IF	3.031	34.614
Total IF[A1-A7+remaining]	-----	55.221
Hirsch index after Web of Science	-----	9
Hirsch index after Scopus		10
Number of citation after Web of Science	-----	189/160
Number of citation after Scopus	-----	303/246
Number of contributions from JCR list	3	23

.....*Zoe Kheumich*.....
(Applicant's signature)