

# ИНСТИТУТ ТЕХНИЧКИХ НАУКА САНУ

Кнеза Михаила 35/IV

Београд

Научном већу

## МОЛБА

### за покретање поступка за избор у звање научни саветник

У складу са одредбама Закона о науци и истраживањима, („Службени гласник Републике Србије“, број 49/2019) као и Правилнику о стицању научних и истраживачких звања („Службени гласник Републике Србије“, број 159/2020 и 14/2023) молим да покренете поступак за мој избор у звање научни саветник.

За чланове комисије за припрему извештаја предлажем:

- др Лидија Матија, редовни професор Машинског факултета Универзитета у Београду и научни саветник
- др Милош Томић, научни саветник, Институт техничких наука САНУ
- др Магдалена Стевановић, научни саветник, Институт техничких наука САНУ
- др Илија Стефановић, научни саветник, Институт техничких наука САНУ

Уз молбу достављам:

1. Стручну биографију
2. Библиографију
3. Копију дипломе о стеченом звању доктора наука
4. Копију одлуке о стицању звања виши научни сарадник
5. Доказе о испуњавању квалитативних услова
6. Извештај о цитираности

Београд, 28.05.2025.

Подносилац молбе,

др Лана Поповић Манески  
виши научни сарадник  
Институт техничких наука САНУ

## ПРИЛОГ 1 – СТРУЧНА БИОГРАФИЈА

Др Лана Поповић-Манески је рођена 21.04.1983. године у Београду. Основну школу и гимназију је завршила у Београду. Дипломирала на Електротехничком факултету Универзитета у Београду 2007. године из области аутоматике, а 2011. године је одбранила докторску дисертацију из области биомедицинског инжењерства на истом факултету. Од 2008. до 2013. године се бавила истраживачким радом у домену развоја асистивних система након можданог удара и ампутације руке на бази електричне стимулације нерава и мишића у предузећу *Tecnalia Serbia*, које је део фондације *Tecnalia Research & Innovation* из Сан Себастиана, Шпанија. Почетком 2012. године је изабрана у звање доцента за област рачунарства и електротехнике на Државном Универзитету у Новом Пазару. Од 2013.-2016. године је ангажована и у настави на Машинском факултету Универзитета у Београду, на модулу за биомедицинско инжењерство. Од 2015. је научни сарадник у ИТН-САНУ у Београду. Од 2017. је власник предузећа *3F-Fit Fabricando Faber* које се бави развојем неуро-мишићних стимулатора. У току 2018. је била позвани професор над Универзитету *ENS Lyon* и *Lionu* у Француској. Од 2020 је ко-оснивач *startup* предузећа *Kurage* у Француској које развија уређаје за рехабилитацију хода након болести или повреде централног нервног система применом функционалне електричне стимулације. Од 2021 је виши научни сарадник у ИТН-САНУ у Београду. Учествовала је на неколико међународних пројеката (*FP7*, *Tempus*, *COST*, *HORIZON2020*, Павле Савић, *DIH*) и пројектима Министарства за просвету, науку и технолошки развој од 2008 до данас. Рецензент је 5 часописа на СЦИ листи, ко-едитор часописа *Neuroprosthetics – specialty session of Frontiers in Neurology and Frontiers in Neuroscience*, евалуатор европске комисије са *FET-OPEN* пројекте и аутор/коаутор на више од 35 радова који су цитирани 786 пута (630 хетероцитата) х-индексом=14 према базама података *Scopus* и *Web of Science* на дан 23.5.2025. У организационом је одбору конференције *BiomedVetMechTech* која се одржава од 2022 године у Загребу. Аутор и коаутор је 4 уџбеника за мастер програм „Мехатроника у рехабилитацији“ Универзитета у Београду, члан комисије за одбрану 2 мастер рада у Србији, једног мастер рада у Бразилу и једног у Италији, као и 4 докторске дисертације (од тога 2 одбрањене) у Србији, ко-ментор једне одбрањене докторске дисертације у Француској и једне одбрањене докторске дисертације у Србији. Има један регистрован патент и један мали патент у Србији, 3 објављена патента у Србији, 4 објављена инострана патента и један прихваћен европски патент. Уже области интересовања су примене функционалне електричне стимулације и роботских система у неурорехабилитацији и обрада медицинских сигнала. Осим српског, говори још четири језика (енглески, француски, португалски и немачки).



## ПРИЛОГ 2 - НАУЧНА БИБЛИОГРАФИЈА

### **- научно-истраживачки резултати ПРЕ избора у звање виши научни сарадник-**

**M14** Монографска студија/поглавље у књизи **M12** или рад у тематској области међународног значаја

1. **L. Popović-Maneski** and A. Žunjić, "Safety and Ergonomic Design Issues of Certain Types of Robots" (chapter 6, pp. 105-122) in A. Žunjić, *Ergonomic Design and Assessment of Products and Systems*, 2017, Nova Science Publishers, ISBN: 978-1-53611-784-4 <https://dais.sanu.ac.rs/handle/123456789/889>
2. **Popović-Maneski, Lana**, and Ivan Topalović. "EMG Map for Designing the Electrode Shape for Functional Electrical Therapy of Upper Extremities." *Biosystems & Biorobotics*, Springer International Publishing, 2019, Vol.21, pp.1003-1007, [https://doi.org/10.1007/978-3-030-01845-0\\_201](https://doi.org/10.1007/978-3-030-01845-0_201) (4 autocitata M20)

**Укупно  $\Sigma M14 = 2 \times 4 = 8$**

**M21a** Рад у међународном часопису изузетних вредности

1. **Popović-Maneski L**, Aleksić A., Metani A., Bergeron V, Čobeljić R., Popović D.B. "Assessment of spasticity by a pendulum test in SCI patients who exercise FES cycling or receive only conventional therapy". *TNSRE*, 2017, Vol. 26(1), pp. 181-187, <https://doi.org/10.1109/TNSRE.2017.2771466>

**Укупно  $\Sigma M21a = 1 \times 10 = 10$**

**M21** Рад у врхунском међународном часопису:

1. **Popović-Maneski L**, Kostić M, Bijelić G, Keller T, Mitrović S, Konstantinović Lj, Popović DB. Multi-pad electrode for effective grasping: design. *IEEE Trans Neur Syst & Rehab Eng*, Vol 21(4), pp. 648-654, 2013, <https://doi.org/10.1109/TNSRE.2013.2239662>
2. Malesevic N, **Popovic-Maneski L**, Ilic V, Jorgovanovic N, Bijelic G, Keller T, Popovic DB. A Multi-Pad Electrode based Functional Electrical Stimulation System for Restoration of Grasp. *J Neuroeng & Rehab*, Vol 9(66), 2012, <https://doi.org/10.1186/1743-0003-9-66>

**Укупно  $\Sigma M21 = 2 \times 8 = 16$**

**M22** Рад у истакнутом међународном часопису

1. Cobeljic, R. D., Ribaric-Jankes, K., Aleksic, A., **Popovic-Maneski, L. Z.**, Schwirtlich, L. B., & Popovic, D. B. (2018). Does galvanic vestibular stimulation decrease spasticity in clinically complete spinal cord injury?. *International Journal of Rehabilitation Research*, 41(3), 251-257 <https://doi.org/10.1097/MRR.0000000000000297>

2. E. Krueger, **L. Popovic-Maneski**, and P. Nohama, "Mechanomyography based wearable monitor of quasi-isometric muscle fatigue for motor neural prostheses", *Artificial Organs*, 2017, Vol. 42(2), pp. 208-218, <https://doi.org/10.1111/aor.12973>
3. **L. Popović Maneski**, I. Topalović, N. Jovičić, S. Dedijer, Lj. Konstantinović, D.B. Popović, "Stimulation map for control of functional grasp based on multi-channel EMG recordings", *Medical Engineering & Physics*, 2016, Vol. 38(11), pp. 1251-1259, <http://dx.doi.org/10.1016/j.medengphy.2016.06.004>
4. **L. Popović Maneski**, N. Jorgovanović, V. Ilić, S. Došen, T. Keller, M.B. Popović, D.B. Popović, Electrical stimulation for the suppression of pathological tremor, *Medical and Biological Engineering and Computing*, Vol. 49, pp. 1187-1193, 2011, ISSN: 0140-0118, DOI: 10.1007/s11517-011-0803-6 <https://pubmed.ncbi.nlm.nih.gov/21755318/>
5. J.L. Dideriksen, F. Gianfelici, **L. Popovic**, D. Farina, EMG-based characterization of pathological tremor using the Iterated Hilbert Transform, *IEEE Transactions on Biomedical Engineering*, Vol. 58(10), pp. 2911-2921, 2011, DOI: 10.1109/TBME.2011.2163069 <https://ieeexplore.ieee.org/document/5962352>
6. **L. Popović**, T. Šekara, I. MB. Popović, Adaptive band-pass filter (ABPF) for tremor extraction from inertial sensor data, *Computer Methods and Programs in Biomedicine*, Vol. 99 (3), pp. 298-305, 2010, DOI: 10.1016/j.cmpb.2010.03.018. <https://pubmed.ncbi.nlm.nih.gov/20430466/>

Укупно  $\Sigma M22 = 6 \times 5 = 30$

#### M23 Рад у међународном часопису:

1. Krueger E, Magri LMS, Botelho AS, Bach FS, Rebellato CLK, Fracaro L, Fragoso FYI, Villanova JA, Brofman PRS, **Popovic-maneski L**, Effects of Low-intensity electrical stimulation and adipose derived stem cells transplantation on the time-domain analysis-based electromyographic signals in dogs with SCI, *Neuroscience Letters* (2018), <https://doi.org/10.1016/j.neulet.2018.12.004> (након нормирања **1.875**)
2. **Popović-Maneski L**, Malešević N, Savić A, Keller T, Popović DB. Surface distributed low-frequency asynchronous stimulation (sDLFAS) delays fatigue of stimulated muscles. *Muscle & nerve*, Vol 48(6), pp.930-937, 2013, <https://doi.org/10.1002/mus.23840>
3. N. Malešević, **L. Popović**, L. Schwirtlich and D.B. Popović, Distributed low-frequency functional electrical stimulation delays muscle fatigue compared to conventional stimulation, *Muscle and Nerve*, pp. 42(4): 556-562, 2010, <https://doi.org/10.1002/mus.21736>
4. M. Manto, G. Grimaldi, T. Lorivel, D. Farina, **L. Popović**, S. Conforte, T. D'alessio, J. Belda-Lois, E. Rocon, Bioinformatic Approaches Used In Modeling Human Tremor, *Current Bioinformatics*, Vol. 4, No.2, pp. 154-172, 2009, DOI: 10.2174/157489309788184747. <https://beta.benthamscience.com/article/29346>

Укупно  $\Sigma M23 = 4 \times 3 = 12$  (10.875 нормирано)

#### M33 Саопштење са међународног скупа штампано у целини:

1. **Lana Popović-Maneski**, „MAGNETRODE: magnetic multi-pad electrode for FET”, *Proc of IFESS*, Toronto, Canada, 2019. <https://dais.sanu.ac.rs/123456789/7039>

2. Aleksandar Lazović, **Lana Popović-Maneski** and Ljupčo Hadžievski, „Multi sensor acquisition device for noninvasive detection of heart failure“, *Proc of IcETRAN*, Srebrno jezero, Serbia, 2019 <https://rimsi.imsi.bg.ac.rs/bitstream/id/5976/IcEtranEtran2019.pdf>
3. **L. Popović-Maneski**, A. Metani, F. Le Jeune and V. Bergeron, „A systematic method to determine customised FES cycling patterns and assess their efficiency“, *Proc of IcETRAN 2017*, BTI2.3. ISBN 978-86-7466-692-0  
[https://www.etrans.rs/common/pages/proceedings/IcETRAN2017/BTI/IcETRAN2017\\_paper\\_BTI2\\_3.pdf](https://www.etrans.rs/common/pages/proceedings/IcETRAN2017/BTI/IcETRAN2017_paper_BTI2_3.pdf)
4. **L Popovic-Maneski**, Surface array electrodes for interfacing motor systems: A review and new solutions, *Proc. IcETRAN*, June 12-16, 2016, Zlatibor, Serbia, MEI1.4  
[http://etrans.etf.rs/etrans2016/Program\\_IcETRAN\\_2016.pdf](http://etrans.etf.rs/etrans2016/Program_IcETRAN_2016.pdf)
5. A Sedmak, D Popović, A Veg, **L Popović Maneski**, S Kirin, Lj Konstantinović, V Simeunović “Mechatronics in rehabilitation – new master program developed through tempus project huton“, ME4 Catalogue, 2015, Slavonski brod, Croatia (након нормирања 0.56)
6. N. Arandelović, **L. Popović-Maneski**, "Text messaging fot the visually impaired", *Proceedings of IcETRAN*, June 2015, Srebrno jezero, Serbia, ME1.3, [https://machinery.mas.bg.ac.rs/bitstream/handle/123456789/4640/bitstream\\_11177.pdf?sequence=1](https://machinery.mas.bg.ac.rs/bitstream/handle/123456789/4640/bitstream_11177.pdf?sequence=1)
7. D. Popović, **L Popovic-Maneski**, Robotics for rehabilitation: exoskeletons and prostheses for upper limbs. *Proc. 15th IT*, Feb 23-28 2015, Žabljak, Montenegro; pp. 1-6 (invited paper), ISBN: 978-86-85775-16-1
8. Marija Stevanović, Minja Perović, Tijana Jevtić, Ilija Jovanov, Goran Bijelić, Strahinja Došen, Dario Farina, **Lana Popović Maneski**, Dejan Popović, "Electrical stimulation of the forearm: a method for transmitting sensory signals from the artificial hand to the brain", *IFESS conference*, pp.195-198, San Sebastian, Spain, 6-8 June 2013, <https://doiserbia.nb.rs/img/doi/1450-9903/2013/1450-99031301013P.pdf>
9. **Lana Popović-Maneski**, Marija Janković, Tijana Jevtić, Nebojša Malešević, Milovan Radulović, Miloš Kostić, Goran Bijelić, Thierry Keller, Nikola Jorgovanović, Vojin Ilić, Dejan B. Popović, "Functional electrical stimulation (FES) for augmenting of the reaching and grasping", *IFESS conference*, pp.131-134, San Sebastian, Spain, 6-8 June 2013
10. **L. Popović Maneski**, M.B. Popović, “Real time tracking of tremor EMG envelopes”, *5th European Conference of the International Federation for Medical and Biological Engineering, IFMBE Proceedings*, pp. 781-783, 2012 Budapest, Hungary, ISBN: 978-3-642-23507-8. [https://www.researchgate.net/profile/Lana-Maneski/publication/286586011\\_Real\\_Time\\_Tracking\\_of\\_Tremor\\_EMG\\_Envelopes/links/56ed17a408aea35d5b98b71d/Real-Time-Tracking-of-Tremor-EMG-Envelopes.pdf](https://www.researchgate.net/profile/Lana-Maneski/publication/286586011_Real_Time_Tracking_of_Tremor_EMG_Envelopes/links/56ed17a408aea35d5b98b71d/Real-Time-Tracking-of-Tremor-EMG-Envelopes.pdf)
11. Velik R, Malesevic N, **Popovic L**, Hoffmann U, Keller T. “INTFES: A multi-pad electrode system for selective transcutaneous electrical muscle stimulation”. *16th Annual Conference of the International Functional Electrical Stimulation Society*, Sao Paulo, Brazil, 2011, URL: [http://ifess.org/proceedings/IFESS2011/IFESS2011\\_004\\_Velik.pdf](http://ifess.org/proceedings/IFESS2011/IFESS2011_004_Velik.pdf)
12. J.L. Dideriksen, F. Gianfelici, **L.Z. Popovic-Maneski**, D. Farina, “EMG-based demodulation of pathological tremor using the Iterated Hilbert Transform”. *Proc of 5th International IEEE/EMBS Conference on Neural Engineering*, Cancun, Mexico, 2011, pp. 116-119, DOI: 10.1109/NER.2011.5910502

13. E. Rocon, J.A. Gallego, L. Barrios, A.R. Victoria, J. Ibáñez, D. Farina, F. Negro, J. L. Dideriksen, S. Conforto, T. D'Alessio, G. Severini, J.M. Belda-Lois, **L. Z. Popović**, G. Grimaldi, M. Manto, J.L. Pons, "Multimodal BCI-mediated FES suppression of pathological tremor". *Proc of 32<sup>nd</sup> Ann Int Conf of the IEEE, EMBC'10*, art. no. 5627914, pp. 3337-3340, <https://pubmed.ncbi.nlm.nih.gov/21097230/>
14. N. Malešević, **L. Popović**, G. Bijelić, G. Kvašček, Classification of muscle twitch response using ANN: Application in multi-pad electrode optimization, *Proc of 10<sup>th</sup> NEUREL*, Belgrade, Serbia, 2010, pp.11-13. [https://www.researchgate.net/publication/224197920\\_Classification\\_of\\_muscle\\_twitch\\_response\\_using\\_ANN\\_Application\\_in\\_multi-pad\\_electrode\\_optimization](https://www.researchgate.net/publication/224197920_Classification_of_muscle_twitch_response_using_ANN_Application_in_multi-pad_electrode_optimization)
15. **L. Popovic**, N. Malešević, Muscle Fatigue of Quadriceps in Paraplegics: Comparison between Single vs. Multi-pad Electrode Surface Stimulation, *Proc of IEEE EMBC*, Minneapolis, MN, Sept 2-6, 2009, pp.6785-6788. <https://ieeexplore.ieee.org/document/5333983>
16. **L Popović**, N Malešević, MB Popović, Optimization of Multi-pad Surface Electrode: Selective Stimulation of Wrist, *Proc of IEEE EuroCON*, St. Petersburg, Russia, May 18-23, 2009, pp.142-145. <https://ieeexplore.ieee.org/document/5167619>
17. **L. Popović**, MB. Popović, Extraction of Tremor for Control of Neural Prostheses: Comparison of Discrete Wavelet Transform and Butterworth Filter, *Proc of 9<sup>th</sup> NEUREL 2008*, Editors: Reljin B, Stankovic S, Belgrade, Sept 25-27, 2008. ISBN: 978-1-4244-2903-5, IEEE Catalog Number: CFP08481-PRT, pp. 137-140. <https://ieeexplore.ieee.org/document/4685591>

Укупно  $\Sigma M33 = 17 \times 1 = 17$  (16.56 нормирано)

#### M34 Саопштење са међународног скупа штампано у изводу:

1. **Lana Popovic-Maneski** and Amine Metani, "FES Cycling in Persons with Paralyzed Legs- Force Feedback for Setup and Control", 13<sup>th</sup> Vienna FES workshop, September 23rd-25th, 2019, abstract. <https://dais.sanu.ac.rs/handle/123456789/7038>
2. **Lana Popović-Maneski**, Maxime Blot, Amine Metani, Gaelle Deley „Increasing fitness with FES rowing”, *Proc of IFESS*, Toronto, Canada, 2019. <https://dais.sanu.ac.rs/handle/123456789/7040>
3. **Popović-Maneski, Lana**. "Functional electrical stimulation for pedaling: the impact of chronic external activation of paralyzed muscles after a spinal cord lesion." *Medicinski vjesnik* 50.Suppl. 1) (2018): 64-65. ISSN: 0350-6487
4. **L. Popovic-Maneski**, A. Metani, V. Bergeron, D. Popovic, "Assessing different muscle contributions during FES cycling", *Proc of IFESS*, July 18-22, 2017, pp.28. URL: <https://www.forskningsdatabasen.dk/en/catalog/2392922058>
5. M Miletić, Marija D. Ivanović, **L Popović-Maneski**, B Bojović. Ejection fraction calculation using multiparametric cardiac measurement system, Tenth Photonics Workshop, March 2017, Kopaonik, Serbia, Book of Abstracts, pp. 31
6. M Miletić, M D Ivanović, **L. Popović Maneski**, B Bojović, Application of multiparametric cardiac measurement system in ejection fraction calculation, PHOTONICA 2017, VI International School and Conference on Photonics, Book of Abstracts, p. 112, Belgrade, Serbia, 2017. ISBN 978-86-82441-46-5

7. M Miletić, B Bojović, **L Popović-Maneski**, Multiparametric biomedical measurements for applications in cardiac disease diagnostic, Ninth Photonics Workshop March 2016, Kopaonik, Serbia, Book of Abstracts, pp.25, ISBN: 868244144-1
8. **L. Popović**, N. Malešević, I. Petrović, MB. Popović, Closed-loop tremor attenuation with Functional Electrical Stimulation, *Abstract on ISEK Conference*, Aalborg, Denmark, June 16-19, 2010, ISBN: 978-87-7094-047-4.
9. **L. Popović**, N. Malešević, I. Petrović, MB. Popović, Semi-closed loop tremor attenuation with FES, *Artificial Organs* Vol. 34(8), A31, 2010.

**Укупно  $\Sigma M34 = 9 \times 0.5 = 4.5$**

**M51 Рад у врхунском националном научном часопису:**

1. Aleksić, S. Graovac, **L. Popovic-Maneski**, and D.B. Popovic. "The assessment of spasticity: Pendulum test based smart phone movie of passive markers." *Serbian Journal of Electrical Engineering* 15, no. 1 (2018): 29-39. DOI: <https://doi.org/10.2298/SJEE1801029A>

**Укупно  $\Sigma M51 = 1 \times 2 = 2$**

**M53 Рад у националном научном часопису:**

1. **Popović-Maneski, Lana**, et al. "A new method and instrumentation for analyzing spasticity." *Ieti Transactions on Ergonomics and Safety* 1.1, 2017, pp.12-27. <https://dais.sanu.ac.rs/handle/123456789/2360>
2. A. Metani, **L. Popović-Maneski**, S. Mateo, V. Bergeron, "FES cycling strategies tested during preparation for Cybathlon 2016 - a practical report of team ENS Lyon" *European Journal of Translational Myology*, 2017, 27 (4): pp.279-288. <https://pmc.ncbi.nlm.nih.gov/articles/PMC5745378/>
3. M. Perović, M. Stevanović, T. Jevtić, M. Štrbac, G. Bijelić, Č. Vučetić, **L. Popović Maneski** and D.B. Popović, Electrical stimulation of the forearm: a method for transmitting sensory signals from the artificial hand to the brain, *Journal of Automatic Control*, Vol. 21(1), pp.13-18, 2013, <https://doi.org/10.2298/JAC1301013P>
4. N. Malešević, **L. Popović**, G. Bijelić and G. Kvaščev, Muscle twitch responses for shaping the multi-pad electrode for functional electrical stimulation, *Journal of Automatic Control*, Vol. 20(1), pp.53-58, 2010, <https://doi.org/10.2298/JAC1001053M>

**Укупно  $\Sigma M53 = 4 \times 1.5 = 6$**

**M62 Предавање по позиву са скупа националног значаја штампано у изводу:**

1. **L Popovic-Maneski**, V Bergeron, A Metani and S Mateo, Fes cycling after spinal cord injury., Mini-symposium "Biomechanics and Modelling of Biological Systems", Project ON 174001 in Mathematical Institute of SANU, Belgrade, Serbia, December 7, 2016, Invited lecture, Book of abstracts, pp.28

**Укупно  $\Sigma M62 = 1 \times 1 = 1$**

**М63 Саопштење са скупа националног значаја штампано у целини:**

1. **L Popovic-Maneski**, T Jevtic, Assessment of hand function with flex sensors. Proc. 56th ETRAN 2012, June 11-14, 2012, Zlatibor, Serbia; ME1.3.
2. **L. Popović**, J. Robertson, Estimation of forearm rotation with a “Virtual Stick”, *Proc 53<sup>rd</sup> ETRAN*, 15-18 June 2009, Vrnjacka Banja, Serbia, ME1.2-1.4.
3. N. Malešević, **L. Popovic**, PRORACUN ELEKTRICNOG POLJA TKIVA PRI STIMULACIJI MATRICNOM ELEKTRODOM, *Proc of 52<sup>nd</sup> ETRAN*, June 2008, Palić, Serbia, ME1.3.

**Укупно  $\Sigma M63 = 3 \times 0.5 = 1.5$**

**М70 Докторска теза:**

1. **Лана Поповић Манески**, „Систем за супресију тремора у реалном времену помоћу површинске функционалне електричне стимулације“, докторска теза, Универзитет у Београду Електротехнички факултет, 2011. <http://bmit.etf.bg.ac.rs/wp-content/uploads/radovi/doktorati/Doktorat-Lana-Popovic.pdf>

**Укупно  $\Sigma M70 = 1 \times 6 = 6$**

**М92 Регистрован патент на националном нивоу:**

1. RS20120291A1 MEASURING DEVICE FOR A GRIP FORCE SPATIAL DISTRIBUTION. „Уређај за селективно мерење силе и момента силе при хвату“, RS 54035 B1 (П-2012/0291). Проналазачи: Небојша Малешевић, Дејан Поповић и Лана Поповић Манески. Објављен у гласнику интелектуалне својине 2014-1, ИСЧН 2217-9143 (online), стр.8. <https://worldwide.espacenet.com/patent/search/family/050350178/publication/RS20120291A1?q=MEASURING%20DEVICE%20FOR%20A%20GRIP%20FORCE%20SPATIAL%20DISTRIBUTION>

**Укупно  $\Sigma M92 = 1 \times 12 = 12$**

**М94 Објављен патент на националном нивоу:**

1. RS20150589A1 A DEVICE FOR FUNCTIONAL ELECTRICAL THERAPY, проналазачи: Дејан Поповић и Лана Поповић Манески.
2. RS20140436A1 MAGNETIC ELECTRODE FOR SELECTIVE TRANSCUTANEOUS ELECTRICAL STIMULATION, проналазачи: Лана Поповић Манески и Дејан Поповић.

**Укупно  $\Sigma M94 = 2 \times 7 = 14$**

**Врста и квантификација научно-истраживачких резултата који су настали пре  
избора у звање виши научни сарадник**

| Категорија    | Број | Вредност индикатора | Укупна вредност       |
|---------------|------|---------------------|-----------------------|
| <b>M14</b>    | 2    | 4                   | 8                     |
| <b>M21a</b>   | 1    | 10                  | 10                    |
| <b>M21</b>    | 2    | 8                   | 16                    |
| <b>M22</b>    | 6    | 5                   | 30                    |
| <b>M23</b>    | 4    | 3                   | 12 (10.875*)          |
| <b>M33</b>    | 17   | 1                   | 17 (16.56*)           |
| <b>M34</b>    | 9    | 0.5                 | 4.5                   |
| <b>M51</b>    | 1    | 2                   | 2                     |
| <b>M53</b>    | 4    | 1.5                 | 6                     |
| <b>M62</b>    | 1    | 1                   | 1                     |
| <b>M63</b>    | 3    | 0.5                 | 1.5                   |
| <b>M70</b>    | 1    | 6                   | 6                     |
| <b>M92</b>    | 1    | 12                  | 12                    |
| <b>M94</b>    | 2    | 7                   | 14                    |
| <b>Укупно</b> |      |                     | <b>140 (138.935*)</b> |

\*број бодова након нормирања

**- научно-истраживачки резултати НАКОН избора у звање виши научни сарадник-**

**M14 Монографска студија/поглавље у књизи M12 или рад у тематској области међународног значаја**

1. Popović, D.B. and **Popović-Maneski, L.**, 2022. Neuroprosthesis and Functional Electrical Stimulation (Peripheral). In *Handbook of Neuroengineering* (pp. 1-40). Singapore: Springer Singapore. [https://doi.org/10.1007/978-981-15-2848-4\\_51-1](https://doi.org/10.1007/978-981-15-2848-4_51-1)

**Укупно  $\Sigma M14 = 1 \times 4 = 4$**

**M21a Рад у међународном часопису изузетних вредности**

1. Jafari E, Kajganic P, Bergeron V, Di Marco J, Metani A, **Popovic-Maneski L.** Efficacy of high-versus moderate-intensity spatially distributed sequential stimulation in subjects with spinal cord injury: an isometric study. *Journal of NeuroEngineering and Rehabilitation*. 2025 Mar 24;22(1):65. <https://doi.org/10.1186/s12984-025-01567-2>

**Укупно  $\Sigma M21a = 1 \times 10 = 10$**

**M21 Рад у врхунском међународном часопису:**

1. Jafari E, Descollonges M, Deley G, Di Marco J, **Popovic-Maneski L**, Metani A. Comfort, consistency, and efficiency of garments with textile electrodes versus hydrogel electrodes for neuromuscular electrical stimulation in a randomized crossover trial. *Scientific Reports*. 2025 Feb 26;15(1):6869. <https://doi.org/10.1038/s41598-025-91452-8>

**Укупно  $\Sigma M21 = 1 \times 8 = 8$**

**M22 Рад у истакнутом међународном часопису**

1. Atanasoski, V., Petrović, J., **Maneski, L.P.**, Miletić, M., Babić, M., Nikolić, A., Panescu, D. and Ivanović, M.D., 2024. A morphology-preserving algorithm for denoising of EMG-contaminated ECG signals. *IEEE Open Journal of Engineering in Medicine and Biology*. March 2024, Vol.5, pp.296-305, DOI: 10.1109/OJEMB.2024.3380352  
<https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10479179> (Q3 у JRC)
2. Atanasoski V, Petrovic J, **Maneski LP**, Miletic M, Babić M, Nikolić A, Panescu D, Ivanović MD. A database of simultaneously recorded ECG signals with and without EMG noise. *IEEE Open Journal of Engineering in Medicine and Biology*. 2023 Nov 7. Vol 4, pp.222-225, DOI: 10.1109/OJEMB.2023.3330295. <https://pubmed.ncbi.nlm.nih.gov/38059067/> (Q3 у JRC)

**Укупно  $\Sigma M22 = 2 \times 5 = 10^*$  (нормирано  $2 \times 4.166 = 8.33$ )**



### M23 Рад у међународном часопису:

1. **Popović-Maneski, L.**, Mateo, S. MotiMove: Multi-purpose transcutaneous functional electrical stimulator. *Artif Organs*. 2022; 00: 1– 10. <https://doi.org/10.1111/aor.14379>
2. **Popović-Maneski, L.**, Ivanović, M.D., Atanasoski, V., Miletić, M., Zdolšek, S., Bojović, B. and Hadžievski, L., Properties of different types of dry electrodes for wearable smart monitoring devices. *Biomedical Engineering/Biomedizinische Technik*, 2020, Vol.65(4), pp.405-xx, <https://www.degruyterbrill.com/document/doi/10.1515/bmt-2019-0167/html>

Укупно  $\Sigma M23 = 2 \times 3 = 6$

### M31 Предавање по позиву са међународног скупа штампано у целини:

1. **Popović-Maneski, L.** Non-invasive Functional Electrical Stimulation in Rehabilitation Engineering. In: Bonačić Bartolin, P., Magjarević, R., Allen, M., Sutcliffe, M. (eds) *Advances in Biomedical and Veterinary Engineering. BioMedVetMech 2022*. IFMBE Proceedings, vol 90. Springer, Cham. [https://doi.org/10.1007/978-3-031-42243-0\\_4](https://doi.org/10.1007/978-3-031-42243-0_4)

Укупно  $\Sigma M31 = 1 \times 3.5 = 3.5$

### M33 Саопштење са међународног скупа штампано у целини:

1. Atanasoski, V., Miletić, M., **Maneski, L.P.**, Babic, M., Nikolić, A., Ivanović, M.D. and Petrovic, J., SimEMG database as a tool for testing the preservation of diagnostic ECG-signal features upon the electromyographic noise removal. *Proc of: ETRAN & IcETRAN 2024*. (BTI1.3). Nis, Serbia, 3-6 June 2024. [https://www.etrans.rs/2024/E\\_ZBORNIK\\_IcETRAN\\_2024/007\\_BTI1.3.pdf](https://www.etrans.rs/2024/E_ZBORNIK_IcETRAN_2024/007_BTI1.3.pdf)
2. Jafari, E., Aksoez, E. A., Kajganić, P., Metani, A., **Popovic-Maneski, L.**, & Bergeron, V. (2022, July). Optimization of Seating Position and Stimulation Pattern in Functional Electrical Stimulation Cycling: Simulation Study. In *2022 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)* (pp. 725-731). IEEE. <https://pubmed.ncbi.nlm.nih.gov/36085773/>
3. Kajganić, P., Anil Aksöz, E., **Popović Maneski, L.**, Metani, A., Bergeron, V. "Stimulation of paralyzed quadriceps muscles with variable-frequency trains during motor-assisted functional electrical stimulation cycling", *Proc of IFESS*, Rovinj, Croatia, 2021. <https://pubmed.ncbi.nlm.nih.gov/30616683/>
4. Nikola Babic, Radoje Cobeljic, Sladjana Kostic-Smith, **Lana Popović-Maneski**, "Multiple measurements by a pendulum test improve the spasticity assessment in sci subjects" *Proc of: ETRAN & IcETRAN 2021*. Academic Mind, University of Belgrade, School of Electrical Engineering, 2021. BTI 1.4 [https://www.etrans.rs/2021/zbornik/Papers/026\\_BTI\\_1.4.pdf](https://www.etrans.rs/2021/zbornik/Papers/026_BTI_1.4.pdf)
5. Naa'im A., Dumas, R., **Popović Maneski, L.**, Popović D., "Evaluation of an instrumented insole for the assessment and monitoring of walking performance", *Proc of 16<sup>th</sup> 3D-AHM*, Iowa State University (virtual conference), May 25-28, 2021, pp.174-177. <https://dais.sanu.ac.rs/123456789/12399>
6. Marjan Miletić, Vladimir Atanasoski, Jelena Kršić, Aleksandar Lazović and **Lana Popović-Maneski**, "Validation of the new wearable instrument for the pendulum test based on inertial sensors" *Proc of: ETRAN & IcETRAN 2020*. Academic Mind, University of Belgrade,

School of Electrical Engineering, 2020. BTI 1.5.1-4 227-230.  
[https://www.etrans.rs/2020/ZBORNIK\\_RADOVA/Radovi\\_prikazani\\_na\\_konferenciji/045\\_BTII.5.pdf](https://www.etrans.rs/2020/ZBORNIK_RADOVA/Radovi_prikazani_na_konferenciji/045_BTII.5.pdf)

7. Eleonora Vendrame, Dejan B. Popović, Emilia Ambrosini and **Lana Popović-Maneski**, “A Rule-Based Control System for Assisting the Gait by Multichannel Functional Electrical Stimulation: Design and Proof of Concept.” *Proc of: ETRAN & IcETRAN 2020*. Academic Mind, University of Belgrade, School of Electrical Engineering, 2020. BTI 1.1.1-4.  
[https://www.etrans.rs/2020/ZBORNIK\\_RADOVA/Radovi\\_prikazani\\_na\\_konferenciji/041\\_BTII.1.pdf](https://www.etrans.rs/2020/ZBORNIK_RADOVA/Radovi_prikazani_na_konferenciji/041_BTII.1.pdf)

Укупно ΣM33= 7x1=7

#### M34 Саопштење са међународног скупа штампано у изводу:

1. Shvilkin, A., Zlatic, N., Atanasoski, V., Grujovic-Zdolsek, S., **Popovic-Maneski, L.**, Miletic, M. and Vukcevic, V., 2024. A Personal Risk Assessment Device in Patients with Chest Pain. *Circulation*, 150(Suppl\_1), pp.A4120657-A4120657.  
<https://dais.sanu.ac.rs/123456789/17295>
2. **Lana Popović-Maneski**, Amine Metani. Neuroskin: AI-powered FES for gait rehabilitation after stroke. *BioMedVetMech*, Oct 18-19 2024, Zagreb, Croatia. [https://biomedvetmech.com/wp-content/uploads/2024/10/BioMedVetMech\\_2024\\_schedule.pdf](https://biomedvetmech.com/wp-content/uploads/2024/10/BioMedVetMech_2024_schedule.pdf)
3. Petar Kajganić, Ehsan Jafari, **Lana Popović-Maneski**, Vance Bergeron, Amine Metani. Muscle's Force Profile-Based Stimulation for Motorized FES-Cycling. *IFESS 2024*, Sept 1-3, Bath, UK.  
<https://dais.sanu.ac.rs/123456789/17303>
4. E. Jafari, A. Metani, B. Moreau, R. Nollot, N. Feppon, L. Vergnes-Blanquer, J. Di Marco, **L. Popović-Maneski**. AI-Powered FES-Walking for Gait Rehabilitation After Stroke. *IFESS 2024*, Sept 1-3, Bath, UK. <https://dais.sanu.ac.rs/bitstream/id/69019/IFESS-2024-01.pdf>
5. Ehsan Jafari, Petar Kajganić, **Lana Popović-Maneski**, Vance Bergeron, Amine Metani. Comfort of dry electrodes for FES. *Rehabweek (IFESS) 2023*, Sept 24-28, Singapore  
<https://dais.sanu.ac.rs/bitstream/handle/123456789/17887/art-org-2024.pdf?sequence=1&isAllowed=y>
6. Petar Kajganić, Ehsan Jafari, **Lana Popović-Maneski**, Vance Bergeron, Amine Metani. Spatially Distributed Sequential Stimulation of Paralyzed Quadriceps Muscles in Functional Electrical Stimulation Cycling. *Rehabweek (IFESS) 2023*, Sept 24-28, Singapore.  
<https://dais.sanu.ac.rs/handle/123456789/17893>
7. Ehsan Jafari, Petar Kajganić, Amine Metani, Vance Bergeron, **Lana Popović-Maneski**. Comparing the efficiency of high and low-intensity sdss in subjects with spinal cord injury. *IFESS 2023*, Sept 24-28, Singapore. <https://dais.sanu.ac.rs/handle/123456789/17892>
8. Amine Metani, Baptiste Moreau, Romaric Nollot, Maël Descollonges, Julie Di Marco, **Lana Popović-Maneski**. NEUROSKIN: An AI-powered neuroprosthesis for gait rehabilitation after stroke. *IFESS 2023*, Sept 24-28, Singapore  
[https://dais.sanu.ac.rs/bitstream/handle/123456789/17891/bitstream\\_71541.pdf?sequence=1&isAllowed=y](https://dais.sanu.ac.rs/bitstream/handle/123456789/17891/bitstream_71541.pdf?sequence=1&isAllowed=y)
9. Nikola Babic, Marija Trajkov, **Lana Popović-Maneski**, Neuromuscular electrical stimulation in astronautics, *6<sup>th</sup> World Physical Theory and Rehabilitation Medicine*, October 4-5 2023, Rome, Italy <https://dais.sanu.ac.rs/handle/123456789/16164>

10. Mael Descollonges, **Lana Popovic-Maneski**, Amine Metani, Ana Radić, Julie Di Marco, Gaëlle Deley, Feasibility and effectiveness of FES-Cycling on post-stroke patients: preliminary results, *ECNR*, Lyon, France, 30 Aug-2 Sept 2023. <https://programme.conventus.de/en/ecnr-2023/program/program-points/be5a941f-c03e-4ccf-ac34-02ad84ce1f40>

Укупно  $\Sigma M34 = 10 \times 0.5 = 5$

#### **M53 Рад у иностраном часопису који није на СЦИ листи:**

1. Krueger E, **Popović-Maneski L**, Neto GN, Scheeren EM, Fiusa JM, Nohama P. Neuromuscular fatigue detection by mechanomyography in people with complete spinal cord injury. *Research on Biomedical Engineering*, 2020, Vol. 36, pp.203–212, DOI: <https://doi.org/10.1007/s42600-020-00061-z>

Укупно  $\Sigma M53 = 1 \times 1.5 = 1.5$

#### **M91 Регистрован патент на међународном нивоу:**

1. EP4151271B1: “Method and system to determine a personalized profile of stimulation charge rate for a subject using an ergometer”, Inventor: **Popovic-Maneski, Lana** <https://patentimages.storage.googleapis.com/0f/d0/e9/b82969bb162f7d/EP4151271B1.pdf>

Укупно  $\Sigma M91 = 1 \times 16 = 16$

#### **M92 Регистрован патент на националном нивоу:**

1. **RS1733U1**: “Matrix electrode for selective electro-stimulation of nerves and muscles”, inventor: **Lana Popović Maneski**, 2021-11-30. <https://worldwide.espacenet.com/patent/search/family/078818915/publication/RS1733U1?q=maneski>

Укупно  $\Sigma M92 = 1 \times 12 = 12$

#### **M93 Објављен патент на међународном нивоу:**

1. WO2024126854A1: „Device and method for stimulating at least one of a nerve and a muscle of a patient having a pathological gait“, Inventors: Moreau Baptiste, **Popovic Maneski Lana**; Nollot Romaric, <https://worldwide.espacenet.com/patent/search/family/084887194/publication/WO2024126854A1?q=maneski>
2. EP4052766A1: “System to determine a personalized profile of stimulation charge rate for a subject using an ergometer”, inventors: **Lana Popović Maneski**, Amine Metahni, 2022-09-07, <https://worldwide.espacenet.com/patent/search/family/075173213/publication/EP4052766A1?q=E P4052766A1>
3. EP4052766A1: “Method and system to determine a personalized electrical muscle stimulation pattern for a subject using an ergometer”, Inventors: **Popovic-Maneski Lana**; Metahni Amine, <https://worldwide.espacenet.com/patent/search/family/075173213/publication/EP4052766A1?q=maneski>

4. WO2021096378A1: “Conditioning, quality assessment, and change detection of ecg signals”, inventors: Boljevic Darko, Belicev Petar, Vukajlovic Dejan, Vlaskalic Srdjan, **Lana Popović Maneski**, Rajkovic Bojan, 2021-05-20  
<https://worldwide.espacenet.com/patent/search/family/068988282/publication/WO2021096378A1?q=maneski>

Укупно  $\Sigma M93 = 4 \times 9 = 36$

**M94 Објављен патент на националном нивоу:**

1. RS20230821A: “Wearable device for active walking assistance in free space”, Inventor: Lana Popovic Maneski,  
[https://patents.google.com/patent/RS20230821A1/en?q=\(maneski\)&oq=maneski](https://patents.google.com/patent/RS20230821A1/en?q=(maneski)&oq=maneski)

Укупно  $\Sigma M94 = 1 \times 7 = 7$

**Врста и квантификација научно-истраживачких резултата који су настали након избора у звање виши научни сарадник**

| Категорија | Број | Вредност индикатора | Укупна вредност |
|------------|------|---------------------|-----------------|
| M14        | 1    | 4                   | 4               |
| M21a       | 1    | 10                  | 10              |
| M21        | 1    | 8                   | 8               |
| M22        | 2    | 5                   | 10 (8.33*)      |
| M23        | 2    | 3                   | 6               |
| M31        | 1    | 3.5                 | 3.5             |
| M33        | 7    | 1                   | 7               |
| M34        | 10   | 0.5                 | 5               |
| M53        | 1    | 1.5                 | 1.5             |
| M91        | 1    | 16                  | 16              |
| M92        | 1    | 12                  | 12              |
| M93        | 4    | 9                   | 36              |
| M94        | 1    | 7                   | 7               |
| Укупно     |      |                     | 126 (124.33*)   |

\* нормирани радови са бројем аутора преко 7 по формули  $k/(1+0,2(n-7))$

Испуњење квантитативних захтева за стицање звања научни саветник:

| <b>Потребан услов за техничко-технолошке и биотехничке науке</b> | <b>Остварено</b> |
|------------------------------------------------------------------|------------------|
| Укупно:70                                                        | <b>124.33</b>    |
| $M10+M20+M31+M32+M33+M41+M42+M51+M80+M90+M100 \geq 54$           | <b>117.83</b>    |
| $M21+M22+M23+M81-83+M90-96+M101-103+M108 \geq 30$                | <b>105.33</b>    |
| $M21+M22+M23 \geq 15$                                            | <b>32.33</b>     |
| $M81-85+M90-96+M101-103+M108 \geq 5$                             | <b>71</b>        |



Република Србија

УУБ

Универзитет у Београду  
Електротехнички факултет, Београд



Оснивач: Република Србија

Дозволу за рад број 612-00-02666/2010-04 од 10. децембра 2010.  
године је издало Министарство просвете и науке Републике Србије

*Диплома*

Лана, Зоран, Појовић Манески

рођена 21. априла 1983. године у Београду, Савски венац, Република Србија, уписана  
школске 2007/2008. године, а дана 3. октобра 2011. године завршила је докторске академске  
студије, при чему је стечена, на студијском програму Електротехника и рачунарство,  
обима 180 (сто осамдесет) бодова ЕСПБ са просечном оценом 10,00 (десет и 0/100).

Наслов докторске дисертације је: „Систем за сујесију шемора руке у  
реалном времену помоћу површинске функционалне електричне стимулације“.

На основу тога издаје јој се ова диплома о стеченом научном називу  
доктор наука - електротехника и рачунарство

Број: 240700

У Београду, 12. марта 2012. године

Декан  
проф. др Миодраг Појовић

Ректор  
проф. др Бранко Ковачевић



Република Србија  
МИНИСТАРСТВО ПРОСВЕТЕ,  
НАУКЕ И ТЕХНОЛОШКОГ РАЗВОЈА  
Комисија за стицање научних звања

Број: 660-01-00001/1660  
26.01.2021. године  
Београд

На основу члана 24. став 2. и члана 76. став 6. Закона о науци и истраживањима ("Службени гласник Републике Србије", број 49/19), члана 3. ст. 1. и 3. и члана 40. Правилника о поступку, начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача ("Службени гласник Републике Србије", број 24/16, 21/17 и 38/17) и захтева који је поднео

**Институт техничких наука САНУ у Београду**

Комисија за стицање научних звања на седници одржаној 26.01.2021. године, донела је

**ОДЛУКУ  
О СТИЦАЊУ НАУЧНОГ ЗВАЊА**

**Др Лана Поповић Манески**

стиче научно звање

**Виши научни сарадник**

у области техничко-технолошких наука - електроника, телекомуникације и  
информационе технологије

О Б Р А З Л О Ж Е Њ Е

**Институт техничких наука САНУ у Београду**

утврдио је предлог број 165/2 од 24.06.2020. године на седници Научног већа Института и  
поднео захтев Комисији за стицање научних звања број 169/1 од 29.06.2020. године за  
доношење одлуке о испуњености услова за стицање научног звања **Виши научни сарадник**.

Комисија за стицање научних звања је по претходно прибављеном позитивном  
мишљењу Матичног научног одбора за електронику, телекомуникације и информационе  
технологије на седници одржаној 26.01.2021. године разматрала захтев и утврдила да  
именована испуњава услове из члана 76. став 6. Закона о науци и истраживањима  
("Службени гласник Републике Србије", број 49/19), члана 3. ст. 1. и 3. и члана 40.  
Правилника о поступку, начину вредновања и квантитативном исказивању  
научноистраживачких резултата истраживача ("Службени гласник Републике Србије", број  
24/16, 21/17 и 38/17) за стицање научног звања **Виши научни сарадник**, па је одлучила као у  
изреци ове одлуке.

Доношењем ове одлуке именована стиче сва права која јој на основу ње по закону  
припадају.

Одлуку доставити подносиоцу захтева, именованој и архиви Министарства  
просвете, науке и технолошког развоја у Београду.

ПРЕДСЕДНИК КОМИСИЈЕ

*Ђурђица Јововић*  
Др Ђурђица Јововић,  
научни саветник



### Докази о испуњености квалитативних услова

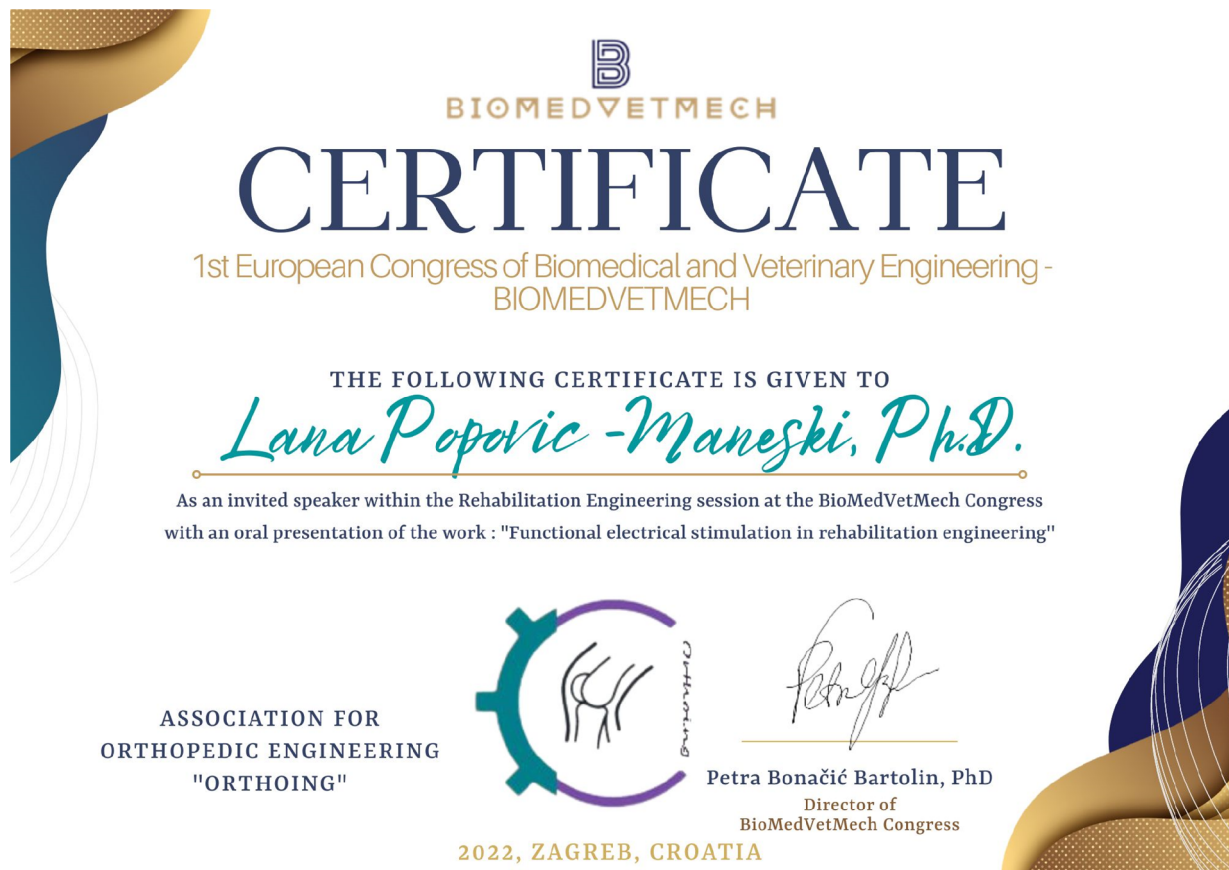
1. Потврда о одржаним предавањима по позиву на конференцијама
2. Потврда о менторском раду - мастер
3. Потврда о менторском раду – докторске тезе
4. Потврда о учешћу у комисијама за одбрану докторских теза
5. Чланство у организационим комитетима међународних конференција
6. Потврде о рецензирању радова за међународне часописе
7. Доказ о улози експерта Европске Комисије за рецензирање пројеката - H2020-FETOPEN-2018-2019-2020-01
8. Доказ у рецензирању пројеката “*Cofund*” и оквиру програма “*Marie SKLODOWSKA – CURIE*”
9. Потврда о руковођењу међународног иновационог пројекта.
10. Потврда о вођењу домаћег иновационог пројекта.
11. Извештај о цитираности



## 1. Позвано предавање



## Позвано предавање



2. МАСТЕР ТЕЗА, ко-ментор, *Politecnico di Milano*, Италија

<https://www.politesi.polimi.it/handle/10589/165053>

POLITECNICO DI MILANO

School of Industrial and Information Engineering

Department of Electronics, Information and Bioengineering

Master of Science in Biomedical Engineering



**POLITECNICO**  
MILANO 1863

## **A Multi-Channel Rule-Based Control System for Gait Assisted by Functional Electrical Stimulation**

|                     |                           |
|---------------------|---------------------------|
| Supervisor:         | Prof. Emilia AMBROSINI    |
| Foreign Supervisor: | Prof. Dejan POPOVIĆ       |
| Academic Tutor:     | PhD. Lana POPOVIĆ-MANESKI |

Master Thesis of:

**Eleonora VENDRAME** Matr. 900151

Anno Accademico 2018-2019

3. ДОКТОРСКА ТЕЗА, ко-ментор, *ENS Lyon*, Француска

<https://theses.hal.science/tel-04680555v1>



Thesis supervision certificate.

Lyon, 8th April 2024

I Dany Davesne, director of the PHAST Doctoral School, certify that Mrs. Lana Popovic MANESKI participated to the extent of 40% in the supervision of Ehsan Jafari's, as a co-mentor.

Dany Davesne, director of the PHAST Doctoral School

A handwritten signature in black ink, consisting of a stylized 'D' followed by a series of connected loops and a final upward stroke.

## ДОКТОРСКА ТЕЗА, ментор



### УНИВЕРЗИТЕТ У БЕОГРАДУ

Адреса: Студентски трг 1, 11000 Београд, Република Србија  
Тел.: 011 3207400; Факс: 011 2638818; E-mail: kabinet@rect.bg.ac.rs

Београд, 16. маја 2024. године  
06 Број: 06-51/II/526/4-24  
JKJ/

На основу члана 50. ст. 4. тач. 2 Статута Универзитета у Београду Статута Универзитета у Београду („Гласник Универзитета у Београду“, број 201/2018, 207/2019, 213/2020, 214/2020, 217/2020, 230/21, 232/22, 233/22, 236/22, 241/22, 243/22, 244/23 и 245/23), а на предлог Веће за студије при Универзитету од 15. априла 2024. године, Веће за интердисциплинарске, мултидисциплинарске и трансдисциплинарске студије на седници одржаној 16. маја 2024. године, донело је

### ОДЛУКУ

1. ОДОБРАВА СЕ израда докторске дисертације под насловом: **Развој методе за реконструкцију стандардног електрокардиограма из троканалног мобилног електрокардиограма и примена за детекцију инфаркта миокарда**, кандидата **Марјана Милетића** (докторске студије: Биомедицинско инжењерство и технологије)

2. За менторе се именују:

1. др Лана Поповић Манески, виши научни сардник, Институт техничких наука САНУ (електротехника)
2. проф. др Владан Вукчевић, Медицински факултет (интерна медицина-кардиологија)

ПРЕДСЕДНИК  
ВЕЋА ЗА ИМТ СТУДИЈЕ  
  
Проф. др Дејан Филиповић

#### 4. ДОКТОРСКА ТЕЗА, члан комисије



Број 04-03-8/99  
05.09.2022. године  
Београд

УНИВЕРЗИТЕТ У БЕОГРАДУ  
Студентски трг 1  
11000 Београд

Кандидат **Предраг (Драган) Величковић** одбранио је докторску дисертацију под насловом: **"Модел интеракције човека и рачунара као основа за умањење негативних ефеката апликација са виртуелном реалношћу на психофизичке карактеристике корисника"**, дана 05.11.2021. године пред комисијом у саставу:

1. др Милош Миловановић, ванредни професор, Универзитет у Београду, Факултет организационих наука – ментор;
2. др Маријана Деспотовић-Зракић, редовни професор, Универзитет у Београду, Факултет организационих наука – председник Комисије;
3. др Мирослав Миновић, редовни професор, Универзитет у Београду, Факултет организационих наука;
4. др Ивана Ковачевић, ванредни професор, Универзитет у Београду, Факултет организационих наука;
5. др Лана Поповић Манески, виши научни сарадник Института техничких наука САНУ.

На основу изложеног моли се Ректор Универзитета да у смислу члана 70. Закона о Универзитету изврши промоцију кандидата Предрага Величковића за доктора наука - организационе науке.

У прилогу Вам достављамо:

- Записник са јавне одбране докторске дисертације,
- Биографију кандидата,
- Превод наслова докторске дисертације
- Кратак садржај докторске дисертације и
- Један примерак докторске дисертације.

С поштовањем,



Декан Факултета

Проф. др Милан Мартић

Јове Илића 154, 11000 Београд, Србија, Тел.: (011) 3950-800, Факс: (011) 2461-221  
ПИБ: 100383934, Матични број: 07004044, Текући рачун: 840-1344666-69  
Е пошта: dekanat@fon.bg.ac.rs; Посетите: www.fon.bg.ac.rs



## ДОКТОРСКА ТЕЗА, члан комисије



Број 04-03-8/24  
13.03.2024. године  
Београд

УНИВЕРЗИТЕТ У БЕОГРАДУ  
Студентски трг 1  
11000 Београд

Кандидат Жељко (Савко) Гаврић одбранио је докторску дисертацију под насловом "Модел интеракције човјека и рачунара заснован на праћењу покрета ока", дана 01.03.2024. године пред комисијом у саставу:

1. др Мирослав Миновић, редовни професор, Универзитет у Београду - Факултет организационих наука
2. др Милош Миловановић, редовни професор, Универзитет у Београду - Факултет организационих наука
3. др Лана Поповић-Манески, виши научни сарадник, Институт техничких наука САНУ

На основу изложеног моли се Ректор Универзитета да у смислу члана 70. Закона о Универзитету изврши промоцију кандидата Жељка Гаврића за доктора наука – организационе науке.

У прилогу Вам достављамо:  
Записник са јавне одбране докторске дисертације,  
Биографију кандидата,  
Превод наслова докторске дисертације  
Кратак садржај докторске дисертације и  
Један примерак докторске дисертације.

С поштовањем,

Декан Факултета  
  
проф. др Милан Мартић

Јове Илића 154, 11000 Београд, Србија, Тел.: (011) 3950-800, Факс: (011) 2461-221

ПИБ: 100383354, Матични број: 07004044, Текући рачун: 840-1344666-69

E-poшта: dekanat@fon.bg.ac.rs; Интернет: www.fon.bg.ac.rs

## 5. Организациони одбор конгреса *BioMedVetMech* у Загребу, 21-22. Октобар 2022



**BIOMEDVETMECH**

Dear Colleagues,

On behalf of the **Croatian Society for Orthopedic Engineering ORTHOING**, we are pleased to announce the **1st European Congress of Biomedical and Veterinary Engineering - BIOMEDVETMECH** which will be held on **20, 21 and 22 October 2022**, in Zagreb, Croatia. The theme of the congress is "**Biomedical Engineering in the Service of Humankind and Animals**". The Congress is multidisciplinary, and international and covers a wide range of scientific branches from biomedical and veterinary engineering.

The name **BioMedVetMech** is a combination of **biology + medicine + veterinary + mechanics**, in other words, it connects **scientists, doctors, and engineers** in order to develop innovations and expand the latest knowledge for the benefit of humans and animals. The main sessions are **surgery engineering, diagnostics engineering, disease prevention engineering, pharmaceutical engineering, rehabilitation engineering, medical specialization engineering, patient care engineering, medical robotics, and veterinary engineering**. Topics of the sessions include the development of medical and veterinary technology, product innovation, the application of innovative treatment methods, technologically advanced and focused health care, clinical research, knowledge transfer, future of biomedical engineering, and cutting-edge research in biomedical and veterinary engineering.

The Congress program will feature specialized seminars and training aimed at increasing the skills and competencies of Congress participants, in addition to important presentations of scientific and professional papers in the field of biomedical and veterinary engineering. Furthermore, an industrial corner is planned to bring together industry and scientists in order to finance and develop innovative goods and services for the benefit of humans and animals. Special panels for students, young professionals, and leaders in biomedical engineering, group work with specialist experts, and exhibitions of suppliers and manufacturers are also available during the Congress.

We believe that this Congress will serve as a hub for information exchange, a link between engineering, human and veterinary medicine, a place to learn new skills and competencies, network with professionals from around the world, and meet new colleagues and friends.

Abstracts are available until June 15, 2022 on the BioMedVetMech website.

Decisions will be sent on June 20, 2022. **Full paper submission is open from June 15** through The International Federation of Medical and Biological Engineering IFMBE.

Full papers will be published in Proceedings of **BIOMEDVETMECH in the IFMBE Proceedings Series**. Authors of the best papers will be invited to publish an extended version of the paper in the **Medical & Biological Engineering & Computing** journal or **Health and Technology**.

We look forward to meeting you,

Organizing Committee

**Petra Bonačić Bartolin, PhD**, University of Zagreb  
Executive Director of Congress/President of ORTHOING

**Prof Matthew J Allen, PhD, MD**, University of Cambridge

**Prof Michael Sutcliffe, PhD**, University of Cambridge

**Prof Ratko Magjarević, PhD**, University of Zagreb

**Prof Bojan Jerbić, PhD**, University of Zagreb

**Prof Toma Udiljak, PhD**, University of Zagreb

**Prof Vida Demarin, PhD**, Croatian Academy of Sciences and Arts

**Lana Popović - Maneski, PhD**, Institute of Technical Sciences SASA

[www.biomedvetmech.com](http://www.biomedvetmech.com), Zagreb, Hotel Westin, October 20, 21 and 22, 2022



Организациони одбор samita *Robomed* у Ровињу, 22-24. Септембар 2021



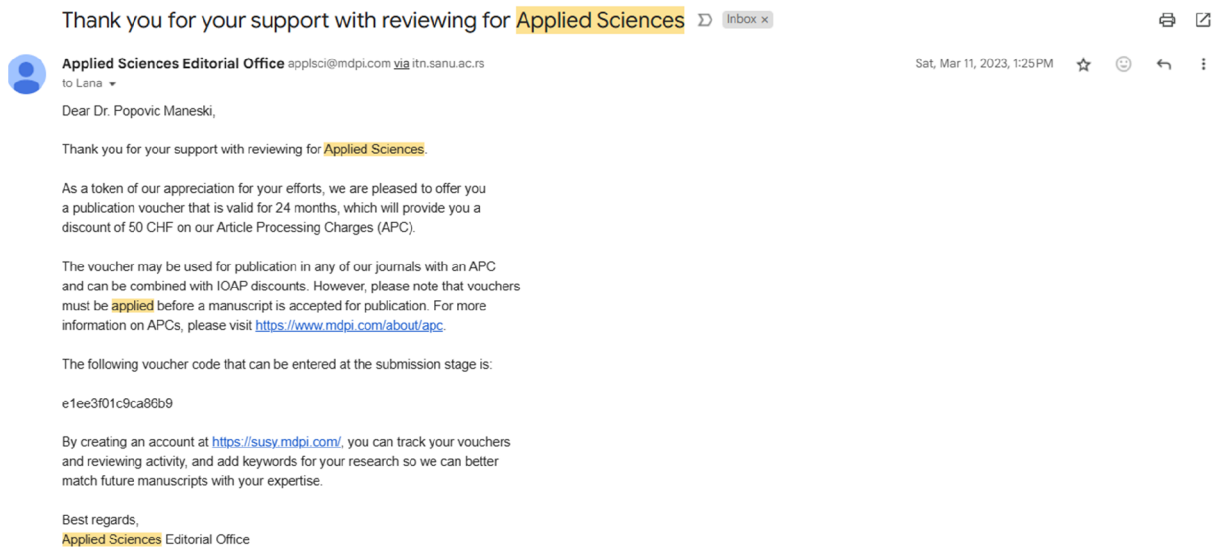
#### POTVRDA

kojom se **dr. Lani Popović-Maneski** potvrđuje članstvo u Organizacijskom odboru Medical Robotic Summit-a (ROBOMED), održanog u Rovinju-Rovigno, Republika Hrvatska od 22. do 24. rujna 2021. godine.

Samit je održan u hibridnom formatu, a na istome su sudjelovali eminentni akademici, profesori, znanstvenici, ravnatelji, liječnici, predstojnici i praktičari različitih medicinskih specijalnosti iz 24 zemalja Svijeta.

 Ravnateljica  
Specijalna klinika za ortopediju i rehabilitaciju  
"Martin Horvat", Rovinj-Rovigno, Hrvatska  
Barbara Peruško, univ.mag.iur.

## 6. Потврде о рецензирању за међународне часописе



7. Доказ о улози експерта Европске Комисије за рецензирање пројеката - H2020-FETOPEN-2018-2019-2020-01

 Associated with document Ref. Ares(2019)6351810 - 14/10/2019



European Commission  
Research Executive Agency  
REA/C/04

**EXPERT CONTRACT**  
**CONTRACT NUMBER - CT-EX2015D263819-101**

This contract ('the **Contract**') is **between** the following parties:

**on the one part,**

the **Research Executive Agency** (REA) ('the Agency'), under the power delegated by the European Commission ('the Commission'), represented for the purposes of signing the Contract by Anya ORAM, HEAD OF UNIT, REA/C/04

**and**

**on the other part,**

'the expert':

**POPOVIC-MANESKI**

**Lana**

EX2015D263819

Djordja Ognjanovica 4

11000

Belgrade

Serbia

lanapm13@gmail.com

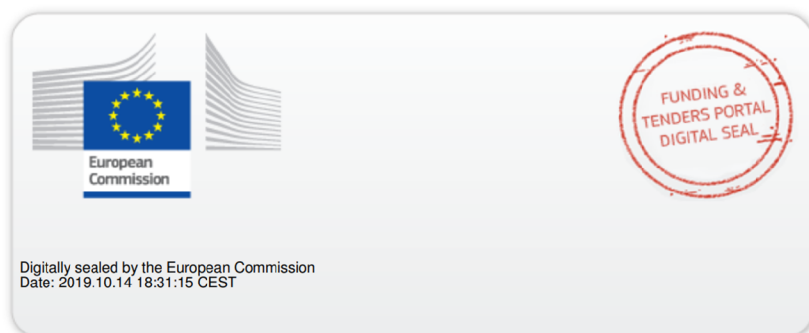
The parties referred to above have agreed to enter into the Contract under the terms and conditions below.

By signing the Contract, the expert confirms that s/he has read, understood and accepted the Contract and all the obligations and conditions it sets out (including in particular the code of conduct set out in Annex 1).

The Contract is composed of:

Terms and conditions

Annex 1 - Code of conduct ('the **Code of Conduct**')



8. Доказ у рецензирању пројеката “Cofund” у оквиру програма “Marie SKLODOWSKA – CURIE”



**PROGRAMME « COFUND »**

**Projet « BIENVENÛE »**

**“COFUND” PROGRAMME**

**“BIENVENÛE” project**

**CONTRAT D’EXPERTISE / EXPERTISE CONTRACT**

*(Contrat de vacation)  
(Temporary work contract)*

**Entre / between :**

La Région Bretagne, collectivité territoriale, dont le siège social est sis 283 avenue Général George S. Patton CS 21101 35711 RENNES Cedex 7, représentée par son Président, M. Loïc CHESNAIS-GIRARD, agissant en cette qualité en vertu de la délibération n°21\_0311\_03 de la Commission permanente du 22 mars 2021;

*The Région Bretagne, territorial authority, domiciled 283 avenue Général George S. Patton CS 21101 35711 RENNES Cedex 7, represented by its President, Mr Loïc CHESNAIS-GIRARD, acting in that capacity owing to deliberation n°21\_0311\_03 of Permanent commission of 22<sup>nd</sup> March 2021 ;*

Désignée ci-après par « la Région Bretagne » / *Herein referred to « the Région Bretagne »*

*D’une part / Firstly,*

**Et / and :**

Mme POPOVIC-MANESKI Lana, PhD – Cheffe d’entreprise 3F – Fit Fabricando Faber,  
*Mrs POPOVIC-MANESKI Lana, PhD – CEO of 3F – Fit Fabricando Faber,*

Domiciliée à / *domiciled at* Veljka Petrovica 41, 11000 Belgrade, Serbia

pour les besoins du présent contrat / *for the purposes of the present contract ;*

Désignée ci-après par « l’Experte » / *Herein referred to « the Expert »*

*D’autre part / On the other hand,*

Désignés collectivement ci-après par « les Parties » / *Herein collectively referred to « the Parties »*



#### **PREAMBULE**

Le programme « COFUND » est l'une des actions du programme « Marie SKLODOWSKA - CURIE (MSCA) » qui visent à soutenir le développement de carrière et la formation des chercheurs - avec un accent sur les compétences en matière d'innovation - dans toutes les disciplines de la recherche grâce à la mobilité internationale et intersectorielle.

Le « projet BIENVENÛE », déposé par la Région Bretagne dans le cadre de l'appel à projets MSCA-COFUND 2019, a été retenu par la Commission européenne. Il permettra à 8 établissements supérieurs de recherche bretons d'accueillir au total 75 post-doctorants internationaux (25 bourses de post-doctorat à pourvoir en 2021, 50 autres entre 2022 et 2023) et de renforcer les domaines d'innovation stratégiques de la Bretagne grâce à 5,5 millions d'euros de la commission européenne.

#### **OBJET / ENGAGEMENTS**

L'Expert(e) doit assister la Région Bretagne dans l'évaluation du projet de recherche ci-annexé (cf. annexe 1) soumis en réponse à « l'appel à projets régional BIENVENÛE 2021 ».

Cela implique la réalisation des tâches suivantes :

- La lecture et l'analyse des informations contextuelles (en particulier le projet de recherche et le guide pour les évaluateurs) ;
- La préparation et la soumission d'un rapport d'évaluation pour le projet de recherche annexé en suivant le modèle fourni (cf. annexe 2 - « Rapport d'évaluation individuelle »).

Le rapport d'évaluation sera élaboré et renvoyé par mail à l'adresse dédiée ([msca-](#)

#### **PREAMBLE**

The "COFUND" programme is one of the actions of the "Marie SKLODOWSKA - CURIE (MSCA)" programme which aims at sustaining career development and training of researchers – with a focus on innovation skills – in all research disciplines through international and intersectoral mobility.

The "BIENVENÛE project", submitted by the Regional Council of Brittany in the framework of the MSCA-COFUND 2019 call for projects, has been selected by the European Commission. It will enable 8 Breton higher education research institutions to host 75 international post-doctoral students in total (25 post-doctoral scholarships to be filled in 2021, 50 others between 2022 and 2023) and to strengthen Brittany's strategic areas of innovation thanks to €5.5 million from the European Commission.

#### **PURPOSE / COMMITMENTS**

The Expert must assist the Regional Council of Brittany in the evaluation of the attached research project (see appendix 1) submitted in response to the "2021 BIENVENÛE regional call for projects".

This involves the following tasks:

- Reading and analysing the background information provided (particularly the research project and the guide for evaluators);
- Drafting and submitting the evaluation report for the attached research project following the template provided (see appendix 2 "Individual Evaluation Report").

The evaluation report will be drawn up and sent by email to the dedicated address ([msca-](#)





- Accepte d'informer immédiatement la Région Bretagne s'il (si elle) prend connaissance d'un conflit d'intérêt pendant l'évaluation et d'arrêter celle-ci jusqu'à réception d'instructions complémentaires ;
- Accepte la communication du rapport d'évaluation individuelle en version anonymisée au candidat évalué après publication des résultats ;
- Accepte d'être contacté(e) pour une tâche similaire au titre des prochains appels à projets organisés par la Région Bretagne si l'expertise détenue est pertinente pour l'examen de futures candidatures.

**By signing this contract, the Expert:**

- Confirms that he/she has no conflict of interest with the research project concerned;
- Agrees to inform the Regional Council of Brittany immediately if he/she becomes aware of a conflict of interest during the evaluation and to stop the evaluation until further clarification is provided;
- Agrees to release the anonymised version of the individual assessment report to the assessed applicant after the results have been released;
- Agrees to be contacted for a similar task under future calls for projects organised by the Regional Council of Brittany if the expertise held is relevant for the examination of future applications.

Pour la Région Bretagne,  
Le Président du Conseil régional  
Monsieur Loïc CHESNAIS-GIRARD  
Par délégation,  
Le Chef de service de l'enseignement supérieur et  
de la recherche,  
Ludovic LHOMME  
For the Regional Council of Brittany (Région  
Bretagne)  
The Chairman of the Regional Council of Brittany  
Mr. Loïc CHESNAIS-GIRARD  
By delegation,  
The Head of the Department of Higher Education  
and Research,  
Ludovic LHOMME

L'Experte,  
Mme Lana Popovic-Maneski

The Expert,  
Mrs Lana Popovic-Maneski

Signé par : LUDOVIC LHOMME  
DateA : 02/06/2021  
QualitéA : DIRECO - SDENSU

**9. Потврда о руковођењу међународним пројектом – потписник пројекта на иновационом пројекту између компаније из Србије и Европске Уније**



**Digital Innovation Hubs in Healthcare Robotics**

**Partner Agreement template for  
Technology Demonstrator Projects  
funded within the FSTP framework of the DIH-HERO  
Innovation Action**

This template is based on DESCA - Horizon 2020 Model Consortium Agreement ([www.DESCA-2020.eu](http://www.DESCA-2020.eu)), Version 1.2, March 2016 and is meant to serve as a suggestion, the TD project consortia are free to use the original DESCA H2020 template or other templates to make collaboration agreements according to their individual needs.

This model consortium/ partner agreement is provided as draft without bearing any warranty or responsibility. The use of the text in total or in part takes place on the users own risk and does not release users legal examination to cover their interests and protect their rights.





## PARTNER AGREEMENT

THIS PARTNER AGREEMENT is based upon  
REGULATION (EU) No 1290/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
of 11 December 2013 laying down the rules for the participation and dissemination in "Horizon  
2020 – the Framework Programme for Research and Innovation (2014-2020)" (hereinafter referred  
to as "Rules for Participation"), and the European Commission Multi-beneficiary General Model  
Grant Agreement and its Annexes, and is made on <01/12/2021>, hereinafter referred to as the  
Effective Date

### BETWEEN:

**[KURAGE SAS]**, the lead SME/ Slightly larger company

and

**[3F FIT FABRICANDO FABER]**,

hereinafter, jointly or individually, referred to as "Parties" or "Party"

relating to the Action entitled

**Hybrid Walking System**

in short

**HWS**

hereinafter referred to as "Project"

### WHEREAS:

The Parties, having considerable experience in the field concerned, have submitted a proposal for  
the Project to the Funding Authority as part of the Horizon 2020 – the Framework Programme for  
Research and Innovation (2014-2020)

The Parties wish to specify or supplement binding commitments among themselves in addition to  
the provisions of the specific Funding Agreement to be signed by the Lead Party and the Funding  
Authority (hereinafter "Funding Agreement").

The Parties are aware that this Partner Agreement is based upon the DESCA model consortium  
agreement.

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:



This project has received funding from the European Union's Horizon 2020 research and innovation programme under  
grant agreement No 825003. This report reflects only the author's view. The European Commission is not responsible for  
any use that may be made of the information it contains. This template is based on DESCA - Horizon 2020 Model  
Consortium Agreement (www.DESCA-2020.eu), Version 1.2, March 2016



Attachment 2: Accession document

## ACCESSION

### of a new Party to

[HWS] Partner Agreement, version [1, 2021-12-21],

hereby consents to become a Party to the Partner Agreement identified above and accepts all the rights and obligations of a Party starting [date].

[OFFICIAL NAME OF THE LEAD SME/ SLIGHTLY LARGER COMPANY AS IDENTIFIED IN THE Funding Agreement]

hereby certifies that the consortium has accepted in the meeting held on (25/11/2021) the accession of [Hybrid Walking System] to the consortium starting [01/12/2012].

This Accession document has been done in 2 originals to be duly signed by the undersigned authorised representatives.

[21/12/2021]

#### 3F FIT FABRICANDO FABER

Signature(s)

Name(s) Lana Popovic Maneski

Title(s) CEO 3F

Date 21/12/2021

A handwritten signature in black ink, appearing to read 'Lana Popovic Maneski'.

[21/12/2021]

#### [KURAGE]

Signature(s)

Name(s) Rudi GOMBAULD

Title(s) CEO

A handwritten signature in black ink, appearing to read 'Rudi Gombauld'.



## 10. Потврда о вођењу пројекта – *StarTech* грант 2022

### UGOVOR O GRANTU

ST02-2022/ST113

u daljem tekstu: Ugovor  
između:

3F-Fit Fabricando Faber d.o.o. Beograd-  
Čukarica

Sedište: Veljka Petrovića 41, Beograd,  
Čukarica

Matični broj: 21312673

PIB: 110183260

Koga zastupa: Lana Popović Maneski

u daljem tekstu - Korisnik granta

NALED -Nacionalna alijansa za lokalni  
ekonomski razvoj

Sedište:  
Makedonska 30/ VII, Beograd

Matični broj: 17646877

PIB: 104478656

Koga zastupa:  
Violeta Jovanović, izvršna direktorka

u daljem tekstu - NALED

i

Project code: ST02-2022/ST113

### U OKVIRU PROJEKTA

“STARTECH” (u daljem tekstu: Projekat) koji sprovodi NALED uz podršku kompanije Philip Morris Operations a.d.

Ovaj ugovor o davanju bespovratnih sredstava (u daljem tekstu „Ugovor“) sklopljen je između Nacionalne alijanse za lokalni ekonomski razvoj (u daljem tekstu „NALED“) i Korisnika granta, gde Korisnik granta razume i slaže se da je opšti cilj ovog ugovora doprinos stvaranju rezultata i postizanju ishoda utvrđenih Aneksom A ugovora koji se odnosi na projektne indikatore.

Imajući u vidu napred navedeno NALED i Korisnik granta saglasno konstatuju sledeće:

#### Član 1.

##### Predmet Ugovora

Predmet ovog Ugovora je obezbeđenje granta za započinjanje ili razvoj poslovne aktivnosti čiji je predlog podnet NALED-u od strane Korisnika granta putem aplikacije za grant, a koja je prihvaćena od strane NALED-a. Ovaj grant biće dodeljen isključivo u vidu finansijske pomoći tražene od strane Korisnika granta u svrhu započinjanja ili razvoja predložene poslovne aktivnosti, opisane u predlogu projekta Korisnika granta dostavljenog NALED-u u toku procedure selekcije u okviru ovog Projekta.

Ukupna vrednost projekta definisana je u Aneksu B ugovora i iznosi 7,361,887.50 dinara od čega je vrednost granta 5,889,510.00 dinara, a vrednost sopstvenog učešća Korisnika granta 1,472,377.50 dinara.

#### Član 2.

##### Ugovorne obaveze Korisnika granta

Korisnik granta se obavezuje da otvori namenski bankovni račun koji će koristiti isključivo za potrebe realizacije ovog Ugovora, u roku od 5 dana od dana potpisivanja ovog ugovora, te da dostavi NALED-u informaciju o broju tako otvorenog računa. NALED će sve uplate finansijskih sredstava po ovom Ugovoru vršiti na pomenuti namenski bankovni račun.

## 11. Извештај о цитираности радова кандидата

на основу база података *Web of Science* и *Scopus*, 23. Мај 2025.

Укупно цитата: 786

Хетероцитата: 630

*H*-индекс = 14

### 1.1 Преглед цитираности по радовима

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