

НАСТАВНО-НАУЧНОМ ВЕЋУ ЕЛЕКТРОТЕХНИЧКОГ ФАКУЛТЕТА УНИВЕРЗИТЕТА У БЕОГРАДУ

Изборно веће Електротехничког факултета Универзитета у Београду на својој 837. седници одржаној 12.3.2019. године, именовало нас је за чланове Комисије за избор др Горана Машановића, редовног професора Универзитета у Саутхемптону, Велика Британија (Optoelectronics Research Centre, Faculty of Engineering and Physical Sciences, University of Southampton, UK) у звање гостујућег професора за ужу научну област Физичка електроника. Након прегледа поднесеног материјала имамо част да Изборном већу поднесемо следећи

ИЗВЕШТАЈ

А. Биографски подаци

Др Горан Машановић је рођен 4. априла 1969. године у Лозници, Република Србија. Одрастао је у Ваљеву, где је завршио и основну и средњу школу. Студије на Електротехничком факултету у Београду уписује 1988. године, а студије започиње 1989. године после одслуженог војног рока. Дипломирао је 1995. са просеком 9,52 и добио Универзитетску награду као најбољи студент на ЕТФ-у 1995. године. Магистарску тезу предаје 1998. а брани је 1999. на Електротехничком факултету у Београду. Докторирао је 2005. године на Универзитету Сари, Гилфорд, УК.

Од завршених основних студија до 2000. године, ради на Електротехничком факултету као асистент при Катедри за микроелектронику и техничку физику. У септембру 2000. године одлази у Уједињено Краљевство на Универзитет Сари у Гилфорду где ради на пројекту развоја спрежњака између оптичког влакна и силицијумског таласовода. Истовремено ради на докторској тези коју успешно брани априла 2005. (Thesis: "Dual Grating-Assisted Directional Coupler in Silicon-on-Insulator"; Supervisor: Prof. Graham T. Reed). 2008. године добија најпрестижнији истраживачки фелоушип, the Royal Society Research Fellowship. Од 180 пријава из целог света, пројекат Горана Машановића је био рангиран као број 1.

2010. године постаје доцент (Lecturer), а 2011. ванредни професор (Senior Lecturer) на Универзитету Сари. У априлу 2012. године, заједно са целом групом за Силицијумску фотонику, прелази на Универзитет у Саутхемптону, у звању Reader (по рангу између ванредног и редовног професора). 2016. постаје редовни професор.

Професионална каријера

2012 –	Optoelectronics Research Centre, University of Southampton, UK
2016	Професор у Group IV Photonics
2012	Reader (Ванредни професор) / Royal Society Research Fellow
2000 – 2012	Advanced Technology Institute, University of Surrey, Guildford, UK
2011	Senior Lecturer / Royal Society Research Fellow
2010	Lecturer / Royal Society Research Fellow
2008	Royal Society Research Fellow
2006	Silicon Photonics Group Manager
2000	Research Fellow
1995 – 2000	Асистент, Универзитет у Београду, Србија

Б. Образовање

- Дипломирани инжењер техничке физике, Универзитет у Београду, 1995 (просечна оцена 9.52/10)
- Мастер из оптоелектронике, Универзитет у Београду, 1999
- Докторат из силицијумске фотонице, University of Surrey, 2005 (Thesis: "Dual Grating-Assisted Directional Coupler in Silicon-on-Insulator"; Supervisor: Prof. Graham T. Reed)

- Мастер из Иновативног предавања, University of Surrey, 2009 (награда за најбољу дисертацију)

В. Наставне активности

Предавања из предмета:

Прва година	Solid State Devices (module leader, Southampton) Engineering Design and Professional Studies (module leader, Surrey) Analogue Electronics (Surrey) Физика (Београд)
Друга година	Photonics I (module leader, Southampton) Electronics (module leader, Surrey) Linear Systems Analysis (Surrey) Физика материјала (Београд)
Трећа година	Photonics II (Southampton) Завршни радови (Belgrade, Surrey, Southampton)
Мастер студије	Пројектовање и карактеризација фотонских интегрисаних кола (ЕТФ) Silicon Photonics (module leader, Southampton) Оптоелектроника (Београд) Мастер радови (Southampton, Београд)

Г. Професионална сарадња и стручно ангажовање

- Co-chair of IEEE GFP conference sub-committee on Novel Materials, Nanophotonics and Processing, 23-25 August 2017, Berlin, Germany.
- Co-chair of “Silicon photonics for sensing” workshop at the EOSAM 2016, Berlin, Germany.
- Co-chair of the special industrial session at GFP 2015, August 2015, Vancouver, Canada
- Co-chair of a topical session on Silicon Nanophotonics and Integration at PIERS 2016 Conference, Shanghai, China, August 8-11, 2016.
- Technical programme committee member: Photonica 2017 (28 Aug – 1 Sep, Belgrade, Serbia)
- Technical program steering committee member: IEEE Summer Topical, IEEE Photonics Conference
- Review Editor of Frontiers in Optics and Materials (2014-present)
- Member of the Royal Society’s Commonwealth Science Conference Grants Committee (2016-2019)
- Newton International Fellowship panel member (2013-present)
- EPSRC college member
- ERC H2020 reviewer
- RAEng fellowship reviewer
- Co-editor of a special issue on Silicon Photonics, Semiconductor Science and Technology, 2008
- Member of the SPIE Silicon Photonics Conference Programme Committee (annually), San Francisco
- Member of Technical programme committee for SPIE 2015 Optics and Optoelectronic Symposium, Prague, April 2015
- Member of Technical committee for the OSA Advanced Photonics congress, Barcelona July 2014
- Member of a technical program committee, IEEE Summer Topical series, Montreal, Canada, July 2014
- Member of IEEE Group IV Photonics Conference Programme Committee 2011-2012
- Member of the IPRM 2013 & ISCS 2013 Technical Program Committee, Kobe, Japan
- Member of the Photonics North 2013 & 2014 Technical Programme Committee
- Member of Information Photonics Conference Programme Committee, Ottawa, 2011
- Member of Silicon Photonics Summer School Organising Committee, St Andrews, 2011

- Reviewer for EPSRC and several international research councils (Germany, Singapore, Hong Kong, Austria, Serbia, China, Cyprus, Canada, Israel)
- Reviewer for: Nature, Optica, Scientific Reports, Laser and Photonics Reviews, Optics Express, Optics Letters, IEEE Photonics Journal, Applied Physics Letters, IEEE Photonic Technology Letters, Journal of Lightwave Technology, IEEE Journal of Selected Topics in Quantum Electronics, Semiconductor Science and Technology, Journal of Optics A, Optical Engineering, Advances in Optical Technologies, Journal of Nanoscience and Nanotechnology, IEEE Transactions on Nanotechnology etc.
- Истраживачки грантови

Title	Funding body	Value	Dates	PI/CI
Prosperity partnership with Rockley Photonics (EP/R003076/1)	EPSRC	£4.5m	2017-2022	CI (20%)
High Value Photonic Manufacturing (EP/N00762X/1)	EPSRC	£10m	2015-2022	CI (10%)
Silicon Photonics for Future Systems (EP/L00044X/1)	EPSRC	£6.0m	2013-2020	CI (10%)
CORNERSTONE (EP/L021129/1)	EPSRC	£3.2m	2014-2019	CI (5%)
Electronic-Photonic Convergence: A Platform Grant (EP/N013247/1)	EPSRC	£1.5m	2016-2021	CI (8%)
Defect engineered photodetectors	Rockley Photonics	£45k	2018	PI (10%)
Graphene on germanium photonics	Photonics Hub innovation fund	£50k	2018-2019	CI
Catalyst Funding A (teaching grant)	HEFCE	£100k	2016-2018	CI
MIGRATION (EP/L01162X/1)	EPSRC	£660k	2014-2017	PI
Silicon based Photonic MEMS structures	ZI stimulus fund	£20k	2017	CI
Parallel Micro-assembly of Quantum Cascade Lasers on Germanium	Photonic Hub innovation fund	£55k	2017-2018	CI
Royal Society Research Fellowship (UF120053)	Royal Society	£850k	2008-2016	PI
Development of optical modulators in Si	Rockley photonics	£300k	2014-2017	CI
A cutting-edge silicon based Mid-IR photonics platform for emerging communication and sensing applications	NRF Singapore	£4.7m	2014-2019	CI
KTS	EPSRC	£50k	2014-2015	PI
Near infrared single photon detection using Ge-on-Si heterostructures	EPSRC	£250k	2010-2014	CI
UK Silicon Photonics	EPSRC	£2.1m	2008-2013	CI
Mid-infrared couplers and filters	Royal Society	£50k	2010-2012	PI
Novel functional components for high-speed energy-efficient photonic interconnects	Royal Society/ RAEng	£100k	2011-2013	CI
Ion implanted Bragg gratings in silicon	Intel/IeMRC	£130k	2007-2011	CI
Efficient couplers for silicon nanophotonics	EPSRC	£60k	2006-2008	CI
International Joint Research Grant	Royal Society	£12k	2006-2008	PI

Д. Награде и признања

- Royal Society Research Fellowship, 2008 (No 1 in Engineering ranking list, 180 applicants)
- Royal Society Research Fellowship renewal (2013-2016)
- Royal Academy of Engineering/EPSRC Research Fellowship, 2008 (offered)
- Learning and Teaching Award for introducing innovative teaching methods, University of Surrey, 2010
- Higher Education Academy Fellow, 2009
- Best Postgraduate Certificate in Academic Practice portfolio award, University of Surrey, 2009
- Proof of Concept Award to develop novel silicon photonics coupler, University of Surrey, 2005
- Bonus payment for outstanding research and teaching, 2009, 2008 and 2005, University of Surrey
- Best scientific photography award from the Royal Society (2013)
- EPSRC photography award (2016)

Б. Научно-стручни радови

Објављена поглавља у међународним монографијама

- [1] **G. Z. Mashanovich** and M. M. Milosevic, "Long wavelength silicon photonics," in *Handbook of Silicon Photonics* (Eds. Pavesi, Vivien), CRC Press, Taylor & Francis Group, ISBN 1439836108, 2013.
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Радови у међународним научним часописима

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- [3] D. E. Hagan, M. Nedeljkovic, W. Cao, D. J. Thomson, **G. Z. Mashanovich**, and A. P. Knights, "Experimental quantification of the electro-optic effect in silicon waveguides at extended wavelengths," *Optics Express*, Vol. 27, pp. 166-174, 2019. [ISSN: 1094-4087 IF(2017) 3.356]
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Одзив на радове

Према Google Schoolar евиденцији, радови др Горана Машановића су цитирани 5781 пута. Параметри цитираности према Google Scholar су h-index: 35 и 10-index: 81

Е. Оцена испуњености услова

Др Горан Машановић има докторат наука из области силицијумске фотонице, публиковао је 7 поглавља у међународним монографијама и више од 100 радова објављених у међународним часописима, има 228 излагања на међународним научним скуповима објављених у целости од којих је 111 предавања по позиву. Горан Машановић је показао завидне резултате у настави на матичном факултету као и научну препознатљивост из области Силицијумске фотонице на светском нивоу. Успоставио је значајну сарадњу са Катедром за

Микроелектронику и техничку физику Електротехничког факултета кроз успешно одржавање мастер курса Пројектовање и карактеризација пасивних фотонских интегрисаних кола (2015-2019). Учесник је актуелног пројекта „Фотонске компоненте и системи“ Министарства просвете и науке Републике Србије и сарађивао је на пројектима билатералне сарадње са члановима Катедре за Микроелектронику и техничку физику.

Ж. Закључак и предлог

Из изложеног се види да кандидат, др Горан Машановић, редовни професор Универзитета у Саутхемптону, Велика Британија (Optoelectronics Research Centre, Faculty of Engineering and Physical Sciences, University of Southampton, UK), испуњава све законске предуслове дефинисане законским и подзаконским актима за избор у звање гостујући професор.

Полазећи од анализе целокупне наставне и научноистраживачке активности др Горана Машановића, обима и квалитета његовог рада, а посебно стручног рада, те његовог досадашњег ангажовања и жеље да их пренесе студентима и колегама у Србији, предлажемо Изборном већу Електротехничког факултета, Универзитета у Београду, да га изабере у звање гостујући професор.

У Београду, 29.03.2019.

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