

Научном већу  
Института техничких наука САНУ  
Кнез Михаилова 35, 11000 Београд

## М о л б а

Молим Научно веће Института техничких наука САНУ да, у складу са Правилником о поступку и начину вредновања и квантитативном исказивању научно-истраживачких резултата, покрене поступак за избор др Александра Митрашиновића у звање виши научни сарадник.

За чланове комисије за припрему извештаја Научном већу предлажем:

1. Академика професора др Дејана Поповића, председника Управног Одбора ИТН САНУ
2. Академика професора др Зорана Ђурића, директора ИТН САНУ
3. Академика професора др Велимира Радмиловића, редовног професора Технолошко-металуршког факултета Универзитета у Београду

У прилогу достављам:

1. Стручну биографију
2. Библиографију
3. Листу цитата
4. Диплому о стеченом звању доктора наука

У Београду, 06.06.2016.

Подносилац захтева

др Александар Митрашиновић

## **Стручна биографија**

### **др Александар Митрашиновић**

Др Александар Митрашиновић је завршио Прву Београдску гимназију на смеру „Техничар за неорганску хемију“. Дипломирао је на Технолошко металуршком факултету Универзитета у Београду 1997. године са темом „Numerical modeling and computer simulation of the BOF process using mass and energy balance“ и стекао звање дипломирани металург. Магистрирао је на Факултету за машинство, материјале и аутоапликације Универзитета у Виндзору 2004. године, са темом „Development of thermal analysis and analytical techniques for the assessment of porosity and metallurgical characteristics in 3XX aluminum alloys“ и стекао звање магистар наука. Докторирао је на Факултету за науке о материјалима и инжењерство Универзитета у Торонту 2010. године, са темом „Characterization of the Copper-Silicon System and Utilization of Metallurgical Techniques in Silicon Refining for Solar Cell Applications“ и промовисан у доктора наука о материјалима.

Током студија (1995-1997) је био ангажован у Српском хемијском друштву и Катедри за металургију гвожђа и челика Универзитета у Београду, на пословима помоћи у организовању конференција и објављивању часописа Српског хемијског друштва. Од 1997. до 1999. године је био запослен у Ливници Вршац као руководилац производње. Током 1999-те је неколико месеци провео у Железари Смедерево на имплементацији свог дипломског рада у погону челичане. Затим је од 1999. до 2001. радио у ливници уметничког лива Симком из Београда, на организацији производње уметничког лива и продаје Morganite Thermal Ceramics ливачких лонаца. Од 2001. до 2004. је радио на задужењима Quality Control Engineer у FORD/Nemak Engineering Center у Виндзору, Канада. Од 2005. је запослен на Универзитету у Торонту, где је ангажован на припреми и реализацији пројекта финансирањих од стране Natural Sciences and Engineering Research Council of Canada (NSERC), Ontario Centre of Excellence (OCE), Mathematics of Information Technology and Complex Systems (MITACS) and the Southern Ontario Development Program (SODP), као и од независно финансирањих удружења. У периоду од 2010. до 2013. је био запослен на Универзитету Воторлу као координатор између два универзитета, на пројектима везаним за рециклирање отпада, производњу наночестица и добијању енергије из биомасе.

Мултидисциплинарна истраживачка делатност др Митрашиновића захвата области металуршких процеса, карактеризације материјала, математичког моделовања природних процеса, конверзије енергије и размене топлоте. У овом тренутку, највећа пажња је усмерена ка пројектима везаним за израду фотонапонских материјала, анализе одрживости конверзије биомасе у енергију и издвајање метала из електронског отпада. Такође, кандидат активно учествује у програмима за развој напредних размењивача топлоте, материјала и премаза високе чврстоће и други пројеката везаних за железнице и одбрамбене индустрије.

Др Митрашиновић је до сада као аутор или коаутор израдио преко 50 радова у научним часописима, конференцијским објавама, индустриским и консултантским извештајима. Четири рада су објављена у међународним часописима изузетних вредности, седам радова у врхунским међународним часописима и шест у истакнутим међународним часописима. Укупна М вредност износи 162.5.

## **Стечене дипломе и историја запослења**

**др Александар Митрашиновић**

### **Дипломе:**

University of Toronto, (2005-2010)

Ph.D. in Materials Science and Engineering received 2010.

Dissertation: Characterization of the Copper-Silicon System and Utilization of Metallurgical Techniques in Silicon Refining for Solar Cell Applications

University of Windsor, (2001-2004)

M.S. in Mechanical, Automotive and Materials Sci. Engineering received 2004.

Thesis: Development of thermal analysis and analytical techniques for the assessment of porosity and metallurgical characteristics in 3XX aluminum alloys

University of Belgrade, (1991-1997)

B.S with honors in Metallurgy and Materials Science received 1997.

Thesis: Numerical modeling and computer simulation of the BOF process using mass and energy balance

Прва београдска гимназија, 1989

Техничар за неорганску хемију

### **Историја запослења:**

Founding director and Chief Technology Officer, (2014-present)  
SuperSilicon Ltd

Materials Scientist at the University of Toronto, (2010-2014)  
Materials, Mechanical and Industrial Engineering

Research Fellow and Waste-to-Energy Program Coordinator at the University of Waterloo,  
(2010-2013)  
Mechanical and Mechatronics Engineering

PhD Candidate at the University of Toronto, (2005-2010)  
Applied Science & Engineering

Research Fellow and Quality Control Engineer  
FORD/Nemak Industrial Research Chair, University of Windsor, (2001-2004)  
Automotive, Mechanical and Materials Engineering

Production Manager and Area Sales Manager  
Simcom Co. & Morganite Thermal Ceramics Ltd, (1999-2001)

Production Engineer – BOF Specialist  
Sartid 1913, Steel Plant, (1999)

Plant Manager  
Hagetec-Vrsac Foundry, (1997-1999)

## Библиографија

др Александар Митрашиновић на дан 14. април 2016.

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### M21

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## M71

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1. A. Mitrasinovic, University of Toronto, Ph.D. in Materials Science and Engineering, 2010  
Dissertation: Characterization of the Copper-Silicon System and Utilization of Metallurgical  
Techniques in Silicon Refining for Solar Cell Applications.  
[https://tspace.library.utoronto.ca/bitstream/1807/26210/1/Mitrasinovic\\_Aleksandar\\_M\\_201011\\_PhD\\_thesis.pdf](https://tspace.library.utoronto.ca/bitstream/1807/26210/1/Mitrasinovic_Aleksandar_M_201011_PhD_thesis.pdf)

## M72

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2. A. Mitrašinović, M.S. in Mechanical, Automotive and Materials Sci. Engineering, 2004  
Thesis: Development of thermal analysis and analytical techniques for the assessment of porosity and  
metallurgical characteristics in 3XX aluminum alloys, University of Windsor.

**Списак цитираних радова**  
**др Александра Митрашиновића на дан 14. април 2016.**

Подаци прикупљени са Google Scholar и Researchgate цитатних база. Укупан број цитата је 168, од којих су 143 хетероцитати и 25 аутоцитати. Списак научних радова дат је редоследом према опадајућим вредностима цитата.

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Назив рада,

Часопис, број свеске, странице од-до

Година објављивања

Аутори

(Хетероцитати/Аутоцитати)

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Списак:

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4. Zhao Ding, Wenhui Ma, , Kuixian Wei, Jijun Wu, Yang Zhou, Keqiang Xie, Boron removal from metallurgical-grade silicon using lithium containing slag, Journal of Non-Crystalline Solids, Volume 358, Issues 18–19, 15 September 2012, Pages 2708–2712
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Табела: Збирне вредности цитираности радова.

Autori	Naslov	Casopis	Godina Objavljanja	Scholar	Scholar & Researchgate	Heterocitati	Autocitati
1 AM Miti Refining silicon for solar cell application by	Silicon 1 (1)	2009	53	<b>53</b>	<b>50</b>	3	
2 A Mitrašinović On-line prediction of the melt hydrogen an	Materials	2006	21	<b>21</b>	<b>18</b>	3	
3 AM Miti Impurity removal and overall rate constant	Journal of	2012	13	<b>15</b>	<b>12</b>	3	
4 AM Miti Copper removal from hypereutectic Cu-Si a	Metallurg	2012	12	<b>12</b>	<b>8</b>	4	
5 K Visnović Elimination of impurities from the surface c	Materials	2013	9	<b>9</b>	<b>9</b>	0	
6 M Li, A I Silicon rod heat generation and current dist	Journal of	2009	5	<b>8</b>	<b>8</b>	0	
7 A Mitrašinović Photo-catalytic properties of silicon and its	Renewabl	2011	7	<b>8</b>	<b>5</b>	3	
8 AM Mitrašinović Trace elements distribution in Cu-Si alloys	Chemical	2011	7	<b>8</b>	<b>3</b>	5	
9 A Mitrašinović Recovery of Cu and valuable metals from E-	JOM 63 (8)	2011	8	<b>7</b>	<b>7</b>	0	
10 AM Mitrašinović Determination of the growth restriction fac	Materials	2012	6	<b>7</b>	<b>7</b>	0	
11 MB Đurić Modeling of casting processes parameters f	Metalurgija	2003	4	<b>4</b>	<b>4</b>	0	
12 L Pershić Treatment of refractory powders by a novel	Journal of	2013	3	<b>4</b>	<b>4</b>	0	
13 ZT Wang Investigation on Electrostatical Breakup of f	Energies 5	2012	2	<b>3</b>	<b>3</b>	0	
14 A Mitrašinović Characterization of the Cu-Si System and Ut	University	2010	2	<b>3</b>	<b>2</b>	1	
15 AM Miti Effect of Reductants on Valuable Metals Se	High Temp	2014	1	<b>2</b>	<b>0</b>	2	
16 A Mitrašinović Development of thermal analysis and analy	Masters A	2004	1	<b>1</b>	<b>1</b>	0	
17 Alekšančić Electronic Waste Treatment by High Enthalpy	20th Inter	2011	0	<b>1</b>	<b>1</b>	0	
18 AM Mitrašinović Letter to the Editor:“The Promise of Silicon”	Silicon, 1-	2011	0	<b>1</b>	<b>1</b>	0	
19 AM Mitrašinović Modeling of High-Temperature Low-Pressure S	Mineral P	2011	0	<b>1</b>	<b>0</b>	1	
			154		<b>168</b>	<b>143</b>	25



UNIVERSITY OF  
TORONTO

This is to certify that

*Aleksandar Mitrasinovic*

has fulfilled the requirements of the University of Toronto and has been admitted  
under the authority of the Governing Council of the University of Toronto to the degree of

**Doctor of Philosophy**

In witness whereof we have hereto subscribed our names and affixed the academic seal of the University

November 9, 2010



*Conway*

President

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Secretary of the Governing Council

*Bruce C. Clark*

Dean of the School of Graduate Studies