

## CURICULUM VITAE

**Alen Bjelopetrović, mag. chem.**

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### Personal information:

*Date of birth:* 2<sup>nd</sup> May 1991

*Place of birth:* Pula, Croatia

*Citizenship:* Croatian

### Languages

*Native language* Croatian

*Active* English

*Passive* Italian

### Interests

- polyoxometalates and coordinative compounds chemistry
- molecular magnets, thin films, chemical sensors,
- organometallic compounds, functionalization of organic compounds, catalysis
- mechanochemical synthesis, chemical kinetics, *in situ* and *ex situ* monitoring of mechanochemical reactions using Raman spectroscopy,
- products characterization by solid-state methods such as UV-Vis, Fluorescence, Raman and IR spectroscopy as well as PXRD and single-crystal X-ray diffraction
- education, popularization of science
- traveling, reading, writing popularization literature, blogging

### Education

2016-	<b>Doctoral study in chemistry</b> , Department of Chemistry, Faculty of Science, University in Zagreb Major field: Inorganic and structural chemistry
2016	<b>Master in chemistry</b> , master thesis: „ <i>Mononuclear Compounds of Molybdenum(VI): trans- effect of oxygen atoms</i> “
2014-2016	<b>Master studies in chemistry</b> , Department of Chemistry, Faculty of Science, University in Zagreb Major field: Inorganic and Organic chemistry (average grade 4,210)
2014	<b>Bachelor in Chemistry</b> , bachelor thesis: „ <i>Polyoxometalates and Heteropolyoxometalates</i> “
2010-2014	<b>Undergraduate Study in Chemistry</b> , Department of Chemistry, Faculty of

Science, University in Zagreb (average grade: 3,800)

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2006-2010 **High school Pula**, Pula, Croatia

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1998-2006 **Elementary school**, Pula, Croatia

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### Awards and scholarships

Dec 2019	<b>Annual reward by Institut Ruđer Bošković for the best paper published in 2018 by employee, for publication in <i>Chem. Eur. J.</i></b>
Oct 2014 – Jul 2016	<b>Istrian county scholarship</b>
21 <sup>st</sup> Oct 2014	<b>Chemistry Department's Award for student's scientific work</b>
13 <sup>th</sup> Jun 2013	<b>Special Chancellor's Award for project "6<sup>th</sup> Department of Chemistry Open Day"</b>
Oct 2013 -Aug 2014	<b>City of Pula scholarship</b>

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### Publications

A. Bjelopetrović, M. Robić, I. Halasz, D. Babić, M. Juribašić Kulcsár, M. Ćurić, *Organometallics*, **38** (2019), 22; 4479-4482.

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A. Bjelopetrović, S. Lukin, I. Halasz, K. Užarević, I. Đilović, D. Barišić, A. Budimir, M. Juribašić Kulcsár, M. Ćurić  
„Mechanism of Mechanochemical C–H Bond Activation in an Azobenene Substrate by Pd(II) Catalysts“, *Chem. Eu. J.* **24** (2018), 42; 10672-10682.

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M. Cindrić, A. Bjelopetrović, G. Pavlović, V. Damjanović, J. Lovrić, D. Matković-Čalogović, V. Vrdoljak  
„Copper(II) complexes with benzhydrazone-related ligands: synthesis, structural studies and cytotoxicity assay“, *New Journal of Chemistry*, **41** (2017), 2425-2435.

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### Expert meetings attendance (oral presentations)

Feb 2018	<b>12. Meeting of young chemical engineers, Zagreb, Croatia</b> “Activation of carbon-hydrogen bond by various palladium precursors in solid state”
Jun 2016	<b>26<sup>th</sup> Croatian-Slovenian Crystallographic Meeting, Poreč, Croatia</b> „X-Ray Analysis of Intermediates and Products Involved in Solid-State C–H Bond Activation by Pd(II) Chloride Precursors“
	<b>26<sup>th</sup> Croatian-Slovenian Crystallographic Meeting, Poreč, Croatia</b> „X-Ray Identification and Characterization of Azobenzene Palladacycles Obtained by Solid-State C–H Bond Activation“
Jun 2016	<b>25<sup>th</sup> Croatian Meeting of Chemical Engineers, Poreč, Croatia</b> „Beauty of Crystal Faces: The Story of Growing Single Crystals“

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Oct 2015

**1. Symposium of chemistry students, Zagreb, Croatia**

*„Mononuclear Complexes of Molybdenum(VI): trans – influence of oxygen atoms“*

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**Expert meetings attendance (poster presentations)**

May 2019	<b>Solid-State Science &amp; Research Meeting 27-29 June 2019, Zagreb</b> A. Bjelopetrović, S. Lukin, D. Barišić, M. Juribašić Kulcsár, M. Ćurić <i>„ Effect of Different Additives on the Rates of Mechanochemical C–H Bond Activation“</i>
May 2019	<b>Adriatic NMR Conference 2019, Ston</b> D. Barišić, A. Bjelopetrović, M. Juribašić Kulcsár, M. Ćurić <i>„Insight into the second cyclopalladation of monopalladated azobenzene by <sup>1</sup>H NMR spectroscopy“</i>
Apr 2019	<b>26<sup>th</sup> Croatian Meeting of Chemist &amp; Chemical Engineers</b> Z. Duvnjak, A. Bjelopetrović, M. Juribašić Kulcsár, M. Ćurić, A. Budimir <i>„Effect of Temperature on Dicyclopalladation of 4-dimethylaminoazobenzenes</i>
	<b>26<sup>th</sup> Croatian Meeting of Chemist &amp; Chemical Engineers</b> A. Bjelopetrović, D. Babić, M Robić, M. Juribašić Kulcsár, M. Ćurić <i>„One-Step Mechanochemistry of Organopalladium Compounds Via Anion Replacement,,</i>
Jul 2018	<b>XXVIII International Conference on Organometallic Chemistry, Florence, Italy</b> A. Bjelopetrović, S. Lukin, I. Halasz, K. Užarević, D. Barišić, M. Juribašić Kulcsár, M. Ćurić <i>„Mechanism of Solid-State C–H Bond Activation by Different Pd(II) Catalysts“</i>
Jul 2017	<b>XXII European Conference on Organometallic Chemistry, Amsterdam, The Netherlands</b> A. Bjelopetrović, S. Lukin, I. Halasz, K. Užarević, m. Juribašić Kulcsár, M. Ćurić <i>„Effect of Different Pd(II) precursors on Rates of Solid-State C–H bond Activation“</i>
Jun 2017	<b>Solid-State Science &amp; Research Meeting, Zagreb, Croatia</b> A. Bjelopetrović, D. Barišić, S. Lukin, I. Halasz, K. Užarević, M. Juribašić Kulcsár, M. Ćurić <i>„Mechanochemistry of 4,4'-Bis(N,N-Dimethylamino)-Azobenzene and its Dicyclopalladated Complex“</i>
Oct 2016	<b>3<sup>rd</sup> European Crystallographic School, 2016. Bol, Hrvatska</b>

	A. Bjelopetrović, K. Nakić, M. Rubčić, M. Cindrić <i>„Polymorphism of Novel Complex Salt  <math>[CoC_2O_4(NH_3)_4][Fe(C_2O_4)_2(OH_2)_2] \cdot 2H_2O</math>“</i>
Feb 2016	<b>11. Meeting of young chemical engineers, Zagreb, Croatia</b> M. Tuksar, A. Bjelopetrović, M. Juribašić Kulcsár, M. Lovković, E. Meštrović <i>“Preparation and characterization of novel pharmaceutically acceptable memantine salts”</i>
	<b>11. Meeting of young chemical engineers, Zagreb, Croatia</b> K. Nakić, A. Bjelopetrović, M. Rubčić, M. Cindrić <i>„Sinteza i karakterizacija kompleksnih soli <math>[Co(NH_3)_6][Fe(C_2O_4)_3]</math> i <math>[CoC_2O_4(NH_3)_4][Fe(C_2O_4)_2(OH_2)_2]</math>“</i>
Oct 2015	<b>29. European Crystallographers Meeting, Rovinj, Croatia</b> A. Bjelopetrović, M. Cindrić, V. Vrdoljak, G. Pavlović <i>„Novel complexes of copper(II) tridentate hydrazone ligands“</i>
Apr 2015	<b>24. Croatian Meeting of Chemist &amp; Chemical Engineers</b> E. Meštrović, A. Bjelopetrović, L. Papa, K. Meglič, T. Lež, Z. Matutinović, A. Višnjevac, K. Molčanov, V. Stilinović <i>„The Beauty of Crystal Faces“</i>
May 2014	<b>10. Meeting of young chemical engineers, Zagreb, Croatia</b> A. Bjelopetrović, V. Vrdoljak, G. Pavlović, M. Cindrić <i>“Mononuclear Complexes of Molybdenum(VI): trans – influence of oxygen atoms”</i>

## Work experience

Oct 2016 –	Assistant on science project at Ruđer Bošković Institute, Zagreb, Croatia
Jun 2013– Jul 2016	Volunteer in Laboratory for chemistry of inorganic complexes at Chemistry department, Faculty of Science, University of Zagreb, under supervision of prof. dr. sc. Marina Cindrić and prof. dr. sc. Višnja Vrdoljak.
Sept 2015 – Jul 2016	Physical characterization in Solid State Chemistry Laboratory, PLIVA d.o.o. R&D, Zagreb, Croatia

## Specializations

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<i>Nov 2018</i>	<b>Green Chemistry Train-The-Facilitators</b> (according to program of the Center for Green Chemistry & Green Engineering, Yale University), <b>Belgrade, Serbia</b>
<i>Jul 2017.</i>	<b>The Zürich School of Crystallography (Bring Your Own Crystals), University of Zürich, Switzerland</b>
<i>Oct 2016.</i>	<b>3<sup>rd</sup> European Crystallographic School, 2016. Bol, Hrvatska</b>

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