

# Curriculum Vitae

## PERSONAL DATA

**NAME AND SURNAME** KATA MLINARIĆ-MAJERSKI  
**ACADEMIC TITLE** SENIOR SCIENTIST (FULL PROFESSOR)  
**YEAR AND THE INSTITUTION**  
**PHD OBTAINED** 1979 FACULTY OF NATURAL SCIENCES AND MATHEMATICS,  
UNIVERSITY OF ZAGREB,  
ZAGREB, CROATIA  
**ADDRESS** LABORATORY OF SYNTHETIC ORGANIC CHEMISTRY  
RUĐER BOŠKOVIĆ INSTITUTE  
BIJENIČKA CESTA 54, 10 000 ZAGREB, CROATIA  
**PHONE** 385 (0)-1-4680196  
**FAX** 385 (0)-1-4680195  
**E-MAIL** [majerski@irb.hr](mailto:majerski@irb.hr)  
**PERSONAL WEB PAGE** <http://www.irb.hr/eng/People/Kata-Majerski>  
**NATIONALITY** CROATIAN

## WORK EXPERIENCE

(CHRONOLOGICALLY)

**DATE (FROM – UNTIL)**  
1998 - Senior Scientist (equivalent to Full Professor )  
1992-1998 - Senior Research Associate (equivalent to Associate Professor)  
1987-1991 - Research Associate  
1979-1987 - Senior Scientific Assistant  
1976-1979 - Senior Scientific Assistant  
1973-1976 – Graduate Student, Ruđer Bošković Institute, Group of Physical-Organic Chemistry, Ruđer Bošković Institute

### OCCUPATION OR POSITION

2008 - 2014 HEAD OF THE DEPARTMENT OF ORGANIC CHEMISTRY AND BIOCHEMISTRY  
1995 – 2015 Head of the Laboratory of Synthetic Organic Chemistry  
1990-1995 - Head of the Laboratory of Synthetic and Physical Organic Chemistry, Ruđer Bošković Institute,

### WORK FIELD

Synthetic and physical organic chemistry

Syntheses and chemistry of polycyclic molecules:

- Unusual carbon-carbon bonding and structure-reactivity relationship
- cage-derived macrocyclic receptors that constitute a novel class of "host" molecules for use in the study of molecular recognition and inclusion phenomena
- cation and anion sensors
- binding of small molecules with *cucurbit[n]uril guests*
- unnatural amino acids and  $\alpha$ - and  $\beta$ -hydroxy acids containing adamantane moiety
- synthesis of biologically active polycyclic molecules

**EDUCATION**  
(CHRONOLOGICALLY)

**DATE** 1979  
**PLACE** ZAGREB  
**INSTITUTION** Faculty of Natural Sciences and Mathematics,  
University of Zagreb, Zagreb, Croatia  
**TITLE** *dr. sc.*

**EDUCATION**  
(CHRONOLOGICALLY)

**DATE** 1976  
**PLACE** ZAGREB  
**INSTITUTION** University of Zagreb, Zagreb, Croatia  
**TITLE** *Mr. sc.*

**EDUCATION**  
(CHRONOLOGICALLY)

**DATE** 1972  
**PLACE** ZAGREB  
**INSTITUTION** Faculty of Natural Sciences and Mathematics,  
University of Zagreb, Zagreb, Croatia  
**TITLE** *B sc.*

**TRAINING**  
(CHRONOLOGICALLY)

**YEAR** JUNE 1984 - DECEMBER 1985  
**PLACE** *Minneapolis, Minnesota, SAD*  
**INSTITUTION** University of Minnesota,  
Chemistry Department (P. G. Gassman group)  
**SUBJECTS AND SKILLS COVERED** *Synthetic and Physical-Organic Chemistry.*

**LANGUAGES**

**MOTHER TONGUE** CROATIAN  
**ENGLISH LANGUAGE** FLUENTLY  
**SPEAKING** YES  
**WRITING** YES  
**READING** YES  
  
**LANGUAGE** GERMAN  
**SPEAKING** NO  
**WRITING** NO  
**READING** YES

**RESEARCH AND OTHER PROJECTS**  
(CHRONOLOGICALLY; LEADER AND ASSOCIATE; FUNDING SOURCE)

**Leader of research projects**

**A. CROATIAN RESEARCH PROJECTS:**

**2007-2013**

"Cage Compounds: Building Blocks for Molecular Architecture"  
Croatian Ministry of Science, Education and Sports, Project No. 098-0982933-2911

**2006-2007**

"Synthesis of fluorescently-labeled macrolide probes"  
GlaxoSmithKline Research Centre Zagreb; Project 03-6290/1-2006

**2002-2006**

"Synthesis, molecular structure and function of polycyclic molecules"  
Croatian Ministry of Science, Education and Sports; Project No.0098052

**2002-2004**

"Potential antitumor drugs"  
HITRA, Project No. TP-B23/2001; (coordinator Dr. Š. Horvat)

**1997-1998**

"Optimization of the synthesis of selected generics"  
Pharmaceutical company PLIVA d.d., Zagreb, Croatia

**1997-1998**

"Synthesis of Intermediates"  
Pharmaceutical company PLIVA d.d., Zagreb, Croatia

**1996-2001**

"Molecular Receptors with Polycyclic Units"  
Croatian Ministry of Science and Technology; Project No. 00980702

**1995-1996**

"Synthesis and applications of adamantane and related compounds"  
Croatian Ministry of Science and Technology

**1991-1996**

"Synthesis and Chemistry of Adamantane Derivatives and Related Polycyclic Molecules"  
Croatian Ministry of Science and Technology; Project No. 1-07-187.

**1989-1991**

Topic in the project:  
"Development and production of medicinally significant chemotherapeutics"  
Federal project P334

**1989-1991**

Topic in the project:  
"Catalytic and biocatalytic procedures for selected industrial products"  
Federal project P 349, (coordinator, prof.dr. V. Šunjić)

**1989-1991**

"Synthesis and Chemistry of Adamantane Derivatives"  
Croatian Ministry of Science and Technology

**B. INTERNATIONAL RESEARCH PROJECTS****2014 - 2015**

"Design, synthesis and spectral analysis of floxacine-haptens"  
TECNA s.r.l. Area di Ricerca, Padriciano, Trieste, Italy

**2009-2010**

"Design and synthesis of carboxyphenyl derivatives: CPAOZ, CPAMOZ, CPSEM and CPAHD"  
TECNA s.r.l. Area di Ricerca, Padriciano, Trieste, Italy

**2006-2008**

"Pores and channels by assembly of cyclic peptides: design, molecular modeling and synthesis"; Bilateral project Croatia-India  
Central Salt & Marine Chemicals Research Institute, Bhavanagar, Gujarat

**2005-2006**

"Design and synthesis of new carboxy-derivatives of steroid molecules"  
TECNA s.r.l. Area di Ricerca, Padriciano, Trieste, Italy

**2001-2004**

"Design and synthesis of new beta-agonists based on clenbuterol and terbutaline derivatives"  
TECNA s.r.l. Area di Ricerca, Padriciano, Trieste, Italy

**2000-2001**

"Synthesis of mycotoxine derivatives"  
TECNA s.r.l. Area di Ricerca, Padriciano, Trieste, Italy

**1995-1998**

"Synthesis and Chemistry of Novel Polycarbocyclic Cage compounds.  
Cage Compounds as Rigid, Lipophilic Units in the Constructions of Macrocyclic Hosts".  
National Science Foundation, SAD – Croatia; Project No. JF-141.

**1989-1992**

"Nontetrahedral Saturated Carbon Atoms"  
National Science Foundation  
SAD - YU/CRO (PN 832)

## TEACHING

(CHRONOLOGICALLY; UNDERGRADUATE, GRADUATE, POSTGRADUATE STUDY PROGRAMMES)

Teaching at postgraduate level at:

University of Zagreb, Faculty of Natural Sciences and Mathematics - since 1989.

Teaching courses: "Reactive Intermediates in Organic Synthesis" [203 (0263)]  
"Methodes in Organic Synthesis" [203 (0266)]

Teaching at undergraduate and postgraduate level at University of Rijeka – since 2009.

Department of Biotechnology

Undergraduate studies: Biotechnology and Pharmaceutical Research

Master and PhD Studies: Medicinal Chemistry

## MENTORSHIP OF DEFENDED DOCTORAL AND MASTER DISSERTATIONS AND TRAINING OF YOUNG RESEARCHERS AND SCIENTISTS

(CHRONOLOGICALLY)

### DIPLOMA THESES:

- 16 - Glavaš, Mladena: „Adamantanski pirolokarboksiamidi – novi anionski receptori“, University of Zagreb: Faculty of Natural Sciences and Mathematics, 16.09. 2015.
- 15 - Opačak, Saša: „Sinteza i karakterizacija novih karbazolnih anionskih receptora“, University of Zagreb: Faculty of Natural Sciences and Mathematics,, 25.09. 2015.
- 14 - Petrovčić, Matija: „Synthesis and characterization of pyrroloquinazolinone derivatives“, University of Zagreb: Faculty of Natural Sciences and Mathematics, 05.02. 2013.
- 13 - Ružica Cirimotić: "Preparation of Homoadamantane Derivatized  $\beta$ -hydroxy-acid", University of Zagreb: Faculty of Natural Sciences and Mathematics, 29.06. 2011.
- 12 - Stella Vukelić: "Preparation of Adamantane Derivatized  $\beta$ -hydroxybutiric acid", University of Zagreb: Faculty of Natural Sciences and Mathematics, 29.06. 2011.
- 11 - Mihaela Gran: "Synthesis of novel hexaaza-crown ethers containing adamantan moiety", University of Zagreb: Faculty of Food Technology and Biotechnology, 28.11. 2008.
- 10 - Tea Hrgovan: "Reduction of Thialactones to Cyclic Thiaethers", University of Zagreb: Faculty of Natural Sciences and Mathematics, 08.12. 2005.
- 9 - Ivana Palej: "Synthesis of adamantane amino acids", University of Zagreb: Faculty of Natural Sciences and Mathematics, 18.09. 2002.
- 8 - Iva Benko: "Reduction of Conjugated Cyclopropyl-tosylhydrazones with Diborane", University of Zagreb: Faculty of Natural Sciences and Mathematics, 10.12. 1999.
- 7 - Jasmina Muharemspahić: "Synthesis and reduction of the 2,8-didehydro-9-noradamantanone", University of Zagreb: Faculty of Natural Sciences and Mathematics, 11.06. 1999.
- 6 - Branka Savin: "Synthesis of 1,4-Disubstituted Adamantane Derivative", University of Zagreb: Faculty of Pharmacy and Biochemistry, 1999.

- 5 - Lada Klaić: "Synthesis of 1-Bromo-3,7-di(carboxymethyl)bicyclo[3.3.1]nonane", University of Zagreb: Faculty of Natural Sciences and Mathematics, 1998.
- 4 - Nataša Sedmak: "Synthesis of Pentacyclo[5.4.0.0<sup>2,6</sup>.0<sup>3,10</sup>.0<sup>5,9</sup>]undecan-8-spiro-3'-diazirine", University of Zagreb, Faculty of Pharmacy and Biochemistry, 28.05.1998.
- 3 - Saša Kazazić: "Solvent and Temperature Effects on the n-Participation in the Synthesis of 4-Chloro-2-adamantanone Derivatives", University of Zagreb: Faculty of Natural Sciences and Mathematics, 1995.
- 2 - Koraljka Mittel: " Synthesis of 8-egzo-Hydroxy-2-noradamantanone", University of Zagreb: Faculty of Pharmacy and Biochemistry, 1995.
- 1 - Hrvoje Tumir: "Synthesis of 1-Alkyladamantane Derivatives, the Polycyclic Precursors in the Synthesis of Alkyl-aza-crown Ethers", University of Zagreb: Faculty of Natural Sciences and Mathematics 1995.

#### **M.Sc. THESES:**

- 7 - Lada Klaić: "Short-Lived Intermediates: Adamantane-1,3-dicarbene", University of Zagreb, 21.07.2003.
- 6 - Tatjana Šumanovac Ramljak: "Synthesis and Properties of Novel aza-Crown Ethers with Adamantane Moieties", University of Zagreb, 29.06.2001.
- 5 - Goran Kragol: "Cyclopropane Ring Rearrangement. Synthesis and Chemistry of 2,4-Didehydro-5-brendane and 2,8-Didehydro-9-nor-adamantane Derivatives", University of Zagreb, 1996.
- 4 - Marijana Hibšer: "Effect of Carbonyl Group on the Reactivity of [4.1.1]Propellane", University of Zagreb, 1991.
- 3 - Dražen Pavlović: "Studies on Photochemical Reactions of Polycyclic  $\beta,\gamma$ -Unsaturated Ketones", University of Zagreb, 1990.
- 2 - Kaselj, Mira: "Synthesis and Chemistry of 1,7-Methanohomopentaprismene, Derivative of [2.2.1]propellane", University of Zagreb, 1990.
- 1 - Dunja Šafar Cvitaš: "2,4-Dimethylmethano-2,4-didehydroadamantane, Derivative of [3.1.1]Propellane", University of Zagreb, 1989.

#### **Ph. D. THESES:**

- 12 - Marina Šekutor: "Adamantane Compounds with a Guanidine Subunit: Synthesis, Characterization and Application", University of Zagreb: Faculty of Science and Mathematics, 13.12. 2013.
- 11 - Marija Alešković: "Adamantane Dipyrrromethanes – Novel Anion Receptors", University of Zagreb: Faculty of Science and Mathematics, 02.06. 2011.
- 10 - Ivana Palej Jakopović: "Novel 4"-quinolone derivatives of azithromycin connected by oxygen interrupted linkers" University of Zagreb: Faculty of Science and Mathematics, 24.05. 2011.
- 9 - Tatjana Šumanovac Ramljak: "Cryptands with Incorporated Cage Molecules. Synthesis and properties" University of Zagreb: Faculty of Science and Mathematics, 28.01. 2011.

- 8 - Marija Matković: "Priprava novih peptidomimetika s adamantanskom jedinicom"  
University of Zagreb: Faculty of Science and Mathematics, 14.05. 2010.
- 7 Ines Vujasinović: "Synthesis, Characterization and Complexsational Properties of Thiamacrocyclic ligands",  
University of Zagreb: Faculty of Science and Mathematics, 2007.
- 6 - Marijana Vinković: "Synthesis and Properties of Adamantano-Crown Thiaethers",  
University of Zagreb: Faculty of Science and Mathematics, 2002.
- 5 - Jelena Veljković: "Divalent Carbon Intermediates. Synthesis and Chemistry of Polycyclic Pentylienes",  
University of Zagreb: Faculty of Science and Mathematics, 1999.
- 4 - Goran Kragol: "Synthesis and Characterization of Novel Adamantano-Crown Ethers",  
University of Zagreb: Faculty of Science and Mathematics, 1999.
- 3 - Drazen Pavlović: "Synthesis and Chemistry of Macrocyclic Molecules with Adamantane as a Building Block",  
University of Zagreb: Ruđer Bošković Institute, 1994.
- 2 - Mira Kaselj: "Molecules With Twist Bent  $\sigma$ -Bond. Synthesis and Chemistry of 1,2-Methanoadamantane",  
University of Zagreb: Ruđer Bošković Institute, 1993.
- .1 - Vladimir Vinković: "Effect of Deuterium on Carbon-13 NMR Shifts of Saturated Polycyclic Systems",  
University of Zagreb: Ruđer Bošković Institute, 1991.

#### **VISITS TO FOREIGN RESEARCH AND EDUCATION INSTITUTIONS**

(CHRONOLOGICALLY; ONLY VISITS LONGER THAN 3 MONTHS)

Visiting professor:

Polish Academy of Science,  
Institute of Physical Chemistry,  
Warsaw, Poland,  
(April 2012.)

University of KwaZulu-Natal  
School of Chemistry,  
Durban, South Africa  
(February – March 2012)

Lanzhou University  
College of Chemistry and Chemical Engineering,  
Lanzhou, China  
(June, 2010)

The University of North Texas,  
Denton, Texas, SAD  
(October - December 2003)  
(May - August 2000)  
(April 1998)  
(March 1996)

The South Africans Universities:  
RAU, Johannesburg,  
University of Port Elizabeth, Port Elizabeth  
Natal University, Durban

(April 2003)

The University of Toledo,  
Toledo, Ohio, SAD  
(June-September 1988)

Visiting scientist  
University of Minnesota,  
Minneapolis, Minnesota, SAD  
(June-July 1991)

## AWARDS AND RECOGNITION

(CHRONOLOGICALLY)

The Croatian State Award for scientific achievement in the field of natural sciences, 2004.

Advisory board member of Croatica Chemica Acta, 2015.

## ORGANISATIONAL SKILLS AND COMPETENCES

(CHRONOLOGICALLY; ORGANISATIONAL OF HOME AND INTERNATIONAL SCIENCE EVENTS )

Member of the work-group for the University programs at the University of Rijeka, Department of Biotechnology :

Undergraduate studies: Biotechnology and Pharmaceutical Research

Master Studies:

Pharmaceutical Research and Development

Medicinal Biotechnology

Medicinal Chemistry

Graduate (PhD) studies of Medicinal Chemistry

Member of the Scientific and Organizing Committee of the  
XVIII CROATIAN MEETING OF CHEMISTS AND CHEMICAL ENGINEERS  
February 16-19, 2003 Zagreb, Croatia

Member of the Organizing Committee of the  
13th EUROPEAN SYMPOSIUM ON ORGANIC CHEMISTRY  
September, 10-15, 2003, Cavtat, Croatia

## MEMBERSHIP IN SCIENCE ORGANISATIONS AND BODIES

(CHRONOLOGICALLY; HOME AND INTERNATIONAL ORGANISATIONS AND BODIES)

- |           |  |
|-----------|--|
| 2009-2015 | HKD-member in EuCheMS-u (European Association for Chemical and Molecular Science, Division of Organic Chemistry)                                 |
| 2005-     | Member of Graduate Studies Council, Faculty of Science, University of Zagreb   |
| 2005-2015 | Member of the Scientific Council of RBI  |
| 2006-2009 | President of the Section of Organic Chemistry of Croatian Chemical Society – HKD   |
| 2002-2005 | President of the Scientific Council of Department of Chemistry.  |
| 1992-1998 | President of the Section "Nomenclature in Organic Chemistry"- Croatian Society of Chemical Engineers and Croatian Chemical Society, - HKD / HKDI |
| 1989-1994 | Member of the Scientific Council of the Chemistry Section of RBI.  |

Member of the Croatian Chemical Society

Member of Croatian Society of Chemical Engineers

### COMMISSIONS, COMMITTEES, BOARDS AND WORK GROUPS

(CHRONOLOGICALLY; HOME AND INTERNATIONAL)

2013-	Member of the ASHE Accreditation Council, Croatia (Agency of Science and Higher Education)
2013-	President of Scientific Field Committee for the Field of Chemistry
2009-2013	President of Scientific Field Committee for the Field of Chemistry
2008-2014	Head of the Department of Organic Chemistry and Biochemistry
2005-2009	Counsellor for Science and Education of Director General of RBI
2004-2005	Head of the Department of Organic Chemistry and Biochemistry
2003-2005	President of the RBI Board for large equipment.
2003-2005	Member of the RBI Board for the PhD students

### PAPERS

(CHRONOLOGICALLY; RESEARCH BOOKS, HOME AND INTERNATIONALS RESEARCH JOURNALS, HOME AND INTERNATIONAL CONFERENCE PROCEEINGS)

More than 300 titles:

>140 scientific papers cited in CC

> 140 conference abstracts

17 Review articles

5 papers in Conference proceedings

8 patent applications

3 books

>20 invited lectures

### OTHER RESEARCH ACTIVITIES

(CHRONOLOGICALLY; CHIEF EDITOR OR EDITOR OF RESEARCH BOOK, HOME AND INTERNATIONALS RESEARCH JOURNALS, HOME AND INTERNATIONAL CONFERENCE PROCEEINGS AND OTHER)

2011-2015	Associate Editor and Member of Editorial Board of Croatica Chemica Acta.
2010-2013	Member of Editorial Board of RBI Annual Report 2010, 2011, 2012.
2005-2009	Member of Editorial Board of RBI Annual Report 2005, 2006, 2007, 2008.
2000-2007	Member of the Editorial Board of magazine "Rugjer" 2000-2007.
1993-2010	Member of the Editorial Board of Croatica Chemica Acta

142. Mandić, Leo; Mlinarić-Majerski, Kata; Griesbeck, Axel G; Basarić, Nikola:  
“Photodecarboxylation of adamantane amino acids activated by phthalimide“  
*Eur. J. Org. Chem.* **2016** (2016) 4404-4414.
141. Škalamera, Đani; Cao, Liping; Isaacs, Lyle; Glaser, Robert; Mlinarić-Majerski, Kata:  
“Steric hindrance to the syntheses and stabilities of 1, 5- and 2, 6- naphthalene N-permethylated diammonium salts”  
*Tetrahedron* **72** (2016) 1541-1546.
140. Govender, Thavendran; Govinden, Usha; Mocktar, Chunderik; Kruger, Hendrik G.; Veljković, Jelena; Cindro, Nikola; Bobinac, Damir; Žabčić, Ivana; Mlinarić-Majerski, Kata; Basarić, Nikola:  
“In vitro investigation of the antimicrobial activity of a series of lipophilic phenols and naphthols”  
*S. Afr. J. Chem.* **69** (2016) 44-50.
139. Šekutor, Marina; Opačak, Saša; Alešković, Marija; Mlinarić-Majerski, Kata:  
“Synthesis and Anion Binding Properties of a Novel 1, 8-dipyrrolocarbazole Schiff-base”  
*Croat. Chem. Acta.* **88** (2015) 405-411.
138. Blažek Bregović, Vesna; Basarić, Nikola; Mlinarić-Majerski, Kata:  
“Anion binding with urea and thiourea derivatives”  
*Coord. Chem. Rev.* **295** (2015) 80-124.
137. Blažek Bregović, Vesna; Halasz, Ivan; Basarić, Nikola; Mlinarić-Majerski, Kata:  
“Anthracene adamantylbisurea receptors: switching of anion binding by photocyclization”  
*Tetrahedron* **71** (2015) 9321-9327.
136. Cao, Liping; Škalamera, Đani; Zavalij, Peter Y.; Hostaš, Jiří; Hobza, Pavel; Mlinarić-Majerski, Kata; Glaser, Robert; Isaacs, Lyle:  
“Influence of hydrophobic residues on the binding of CB[7] toward diammonium ions of common ammonium ammonium distance”  
*Org. & Biomol. Chem.* **13** (2015) 6249-6254.
135. Cindro, Nikola; Antol, Ivana; Mlinarić-Majerski, Kata; Halasz, Ivan; Wan, Peter; Basarić, Nikola:  
“Reactivity of cations and zwitterions formed in photochemical and acid-catalyzed reactions from m-hydroxycycloalkyl substituted phenol derivatives”  
*J. Org. Chem.* **80** (2015) 24; 12420-12430.
134. Kralj, Marijeta; Uzelac, Lidija; Wang, Yu-Hsuan; Wan, Peter; Tireli, Martina; Mlinarić-Majerski, Kata; Piantanida, Ivo; Basarić, Nikola:  
“Enhancement of antiproliferative activity by phototautomerization of anthrylphenols”  
*Photochem. Photobiol. Sci.* **14** (2015) 6; 1082-1092.
133. Mirosavljević, K; Matković, M; Mlinarić-Majerski, K; Noethig-Laslo, V:  
“Effect of Adamantyl Compounds on Dynamics of Spin Labelled Multilamellar Liposomes”  
*Croat. Chem. Acta* **87** (2014) 3; 249-253.
132. Sohara, M.; Šumanovac Ramljak, T.; Mlinarić-Majerski, K; Basarić, N:  
“Photodecarboxylation of N-Adamantyl- and N-Phenylphthalimide Dipeptide Derivatives”  
*Croat. Chem. Acta* **87** (2014) 4; 431-446.
131. Šekutor, Marina; Mlinarić-Majerski, Kata:  
“Adamantyl aminoguanidines as receptors for oxo-anions“

*Tetrahedron Lett.* **55** (2014) 49; 6665-6670.

130. Petrovičić, Matija; Alešković, Marija; Mlinarić-Majerski, Kata:  
“One-Pot Synthesis of Pyrrolo[1,2-c]quinazolinone Derivatives”  
*Synlett* **25** (2014) 19; 2769-2772.
129. Šekutor, Marina; Štimac, Adela; Mlinarić-Majerski, Kata:  
“Syntheses and characterization of Liposome-incorporated adamantyl aminoguanidines”  
*Org. & Biomol. Chem.* **12** (2014) 13; 6005-6013.
128. Šumanovac Ramljak, Tatjana; Sohora, Margareta; Antol, Ivana; Kontrec, Darko; Basarić, Nikola; Mlinarić-Majerski, Kata:  
“Memory of chirality in the phthalimide photocyclization of adamantane dipeptides”  
*Tetrahedron Lett.* **55** (2014) 30; 4078-4081.
127. Škalamera, Đani; Mlinarić-Majerski, Kata; Martin-Kleiner, Irena; Kralj, Marijeta; Wan, Peter; Basarić, Nikola:  
“Near-visible light generation of a quinone methide from 3-hydroxymethyl-2-anthrol”  
*J. Org. Chem.* **79** (2014)10; 4390-4397.
126. Alešković, Marija; Basarić, Nikola; Došlić, Nađa; Tomišić, Vladislav; Mlinarić-Majerski, Kata:  
“HSO<sub>4</sub><sup>-</sup> sensing based on proton transfer in H-bonding complexes.”  
*Supramol. Chem.* **26** (2014) 10-12; 850-855.
125. Šekutor, Marina; Molčanov, Krešimir; Cao, Liping; Isaacs, Lyle; Glaser, Robert; Mlinarić-Majerski, Kata:  
“Design, Synthesis, and X-ray Structural Analyses of Diamantane Diammonium Salts: Guests for Cucurbit[n]uril (CB[n]) Hosts”  
*Eur. J. Org. Chem.* **2014** (2014) 2533-2542.
124. Basarić, Nikola; Sohora, Margareta; Cindro, Nikola; Mlinarić-Majerski, Kata; De Clercq, Erik; Balzarini, Jan:  
“Antiproliferative and Antiviral Activity of Three Libraries of Adamantane Derivatives.”  
*Archiv der pharmazie* **347** (2014) 334-340.
123. Basarić, Nikola; Mlinarić-Majerski, Kata; Kralj, Marijeta:  
“Quinone methides: photochemical generation and its application in biomedicine”  
*Curr. Org. Chem.* **18** (2014) 3-18.
122. Cao, Liping; Šekutor, Marina; Zavalij, Peter Y; Mlinarić-Majerski, Kata; Glaser, Robert; Isaacs, Lyle:  
“Cucurbit[7]uril-Guest Pair with an Attomolar Dissociation Constant.”  
*Angew. Chem. Int. ed.* **53** (2014) 988-993.
121. Matković, Marija; Vukelić, Stella; Cirimotić, Ružica; Kragol, Goran; Molčanov, Krešimir; Mlinarić-Majerski, Kata:  
“Synthesis of novel adamantyl and homoadamantyl substituted  $\beta$ -hydroxybutyric acids. ”  
*Mol. Div.* **17** (2013) 817-826.
120. Ganguly, Bishwajit; Kesharwani, K. Manoj; Basarić, Nikola; Suresh, Eringathodi; Biswas, Abul Kalam; Mlinarić-Majerski, Kata:  
“Conformational Preference of Glycinamide in Solution: An Answer Derived from Combined Computational and Experimental Studies”  
*J. Mol. Graph & Mod* **46** (2013) 52-58.
119. Đ. Škalamera, K. Mlinarić-Majerski, L. Uzelac, M. Kralj, P. Wan, N. Basarić:  
“Photosolvolytic of bulky (4-hydroxyphenyl)naphthalene derivatives”  
*Photochem. Photobiol. Sci.* **12** (2013) 2043-2056.

118. Alešković, Marija; Basarić, Nikola; Halasz, Ivan; Liang, Xing; Qinc, Wenwu; Mlinarić-Majerski, Kata:  
„Aryl substituted adamantane-dipyrromethanes: Chromogenic and fluorescent anion sensors.“  
*Tetrahedron* **69** (2013) 1725-1734.
117. Basarić, Nikola; Došlić, Nađa; Ivković, Jakov; Wang, Yu-Hsuan; Veljković, Jelena; Mlinarić-Majerski, Kata; Wan, Peter:  
„Excited State Intramolecular Proton Transfer (ESIPT) from Phenol to Carbon in Selected Phenyl-naphthols and Naphthylphenols.“  
*J. Org. Chem.* **78** (2013) 1811-1823.
116. Blažek, Vesna; Molčanov, Krešimir; Mlinarić-Majerski, Kata; Krešimir; Kojić-Prodić, Biserka; Basarić, Nikola:  
„Adamantane bisurea derivatives: Anion binding in the solution and in the solid state.“  
*Tetrahedron* **69** (2013) 517-526.
115. Cindro, Nikola; Halasz, Ivan; Mlinarić-Majerski, Kata; Basarić, Nikola:  
„Photoinduced H-abstraction in homo- and protoadamantylphthalimide derivatives in solution and in organized and constrained media.“  
*Eur. J. Org. Chem.* (2013) 929-938.
114. Šekutor, Marina; Glasovac, Zoran; Mlinarić-Majerski, Kata:  
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*J. Phys. Chem. A* **117** (2013) 2242-2252.
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