UNIVERZITET U BEOGRADU – FARMACEUTSKI FAKULTET
IZBORNOM VEĆU

Na osnovu odluke Izbornog veća Univerziteta u Beogradu – Farmaceutskog fakulteta br. 804/3 od 15.04.2022. godine, imenovana je Komisija za pripremu referata o prijavljenim kandidatima po raspisanom konkursu za izbor jednog redovnog profesora za užu naučnu oblast Farmaceutska-medicinska hemija i strukturna analiza.

Komisija u sastavu:

1. Prof. dr Olivera Čudina, Univerzitet u Beogradu - Farmaceutski fakultet
2. Prof. dr Zorica Vujić, Univerzitet u Beogradu - Farmaceutski fakultet
3. Prof. dr Katarina Anđelković, Univerzitet u Beogradu - Hemijski fakultet

podnosi sledeći

REFERAT

Na konkurs objavljen 27.04.2022. godine u listu "Poslovi", broj 984-985, za jednog redovnog profesora za užu naučnu oblast Farmaceutska-medicinska hemija i strukturna analiza prijavio se jedan kandidat, dr Katarina Nikolić, vanredni profesor na Katedri za farmaceutsku hemiju Univerziteta u Beogradu – Farmaceutskog fakulteta,
Na osnovu priložene dokumentacije utvrđeno je da kandidat ispunjava opšte uslove konkursa, pa Komisija Izbornom veću Farmaceutskog fakulteta podnosi detaljan izveštaj, kao i konačno mišljenje i zaključak.

U prilogu:

Obrazac 2: Predlog za izbor u zvanje redovnog profesora

Obrazac 4B. Sažetak Referata Komisije o prijavljenim kandidatima za izbor u zvanje redovnog profesora

Obrazac 5. Izjava o izvornosti

Biografski podaci

Katarina Nikolić je rođena 1975. godine u Sremskoj Mitrovici. U Rumi je završila osnovnu školu kao nosilac Vukove diplome i gimnaziju prirodno-matematičkog smera sa odličnim uspehom.

Farmaceutski fakultet u Beogradu je upisala 1993. godine i diplomirala septembra 1998. godine sa prosečnom ocenom 9,23. Povodom jubileja Univerziteta u Beogradu je 1999. godine dobila *nagradu za najboljeg studenta Farmaceutskog fakulteta* u školskoj 1997/98. godini.

Školske 1998/99. godine je upisala magistarske studije iz molekularne spektroskopije na Fakultetu za fizičku hemiju u Beogradu. Položila je sve ispite predviđene nastavnim programom sa prosečnom ocenom 9,75 i odbranila magistarsku tezu pod nazivom: "Primena bliske infracrvene spektroskopije u kvantitativnoj analizi Hidrokortizon Natrijum Sukcinata za injekcije", u martu 2001. godine.

Doktorsku disertaciju pod nazivom: "Molekulsko modeliranje i *in vitro* ispitivanje antioksidativnih osobina fenilselenosukcinil-α-tokoferil estara sa potencijalnim antiproliferativnim dejstvom" je odbranila u aprilu 2007. godine na Katedri za Farmaceutsku hemiju i analitiku lekova, Farmaceutskog fakulteta u Beogradu, pod mentorstvom dr Danice Agbaba.

Specijalistički rad na zdravstvenoj specijalizaciji Ispitivanje i kontrola lekova pod nazivom "Hemometrijsko ispitivanje hromatografskog ponašanja rivastigmina, selegilina i galantamina □ Farmakologija rivastigmina, selegilina i galantamina" je odbranila u oktobru 2021. na Farmaceutskom fakultetu u Beogradu .

Dr Katarina Nikolić je bila na studijskom boravku (FP7/COST-STSM-CM1103-10295) na *University of St Andrews, St Andrews, UK (Dr John Mitchell, EaStCHEM School of Chemistry)* pod nazivom: *Theoretical prediction of the pharmaceutical targets of the examined multitarget compounds* u periodu 11-20. jun 2012.

U okviru bilateralnog projekta *Hubert Curien Partnership Project for collaboration France-Serbia* 2020-2022 pod nazivom: *Identification of novel DOT1L and DNMT1/3A inhibitors*, dr Katarina Nikolić je bila na studijskom boravku na *Intitute Pasteur* u Parizu u periodu 24.11 - 4. 12.2021. godine.

Pohađala je Trening školu: *Perspectives in Clinical Proteomics Training Workshop, Held at: Wellcome Trust Conference Centre Wellcome Trust Genome Campus Hinxton Cambridge UK*, 15-17. 03. 2012. godine.

Akademsko angažovanje i radno iskustvo

U periodu 1998-2002. godine dr Katarina Nikolić je radila u kontroli kvaliteta lekova, razvoju i validaciji novih analitičkih metoda fabrike lekova *Medochemie/Biogena* na Kipru.

Od 2001. do 2005. godine je bila angažovana kao istraživač saradnik na međunarodnom projektu pod rukovodstvom prof. dr. Anastasiosa Keramidasa na Hemijskom fakultetu Univerziteta u Nikoziji, Kipar. Od oktobra 2005. do janura 2007. godine je predavala hemiju na osnovnim studijama, *KES College*-Nikozija, Kipar.

Dr Katarina Nikolić je od 2007. godine angažovana kao naučni saradnik na projektu finansiranom od strane Ministarstva nauke Republike Srbije, na Katedri za

farmaceutsku hemiju Farmaceutskog fakulteta u Beogradu. U zvanje viši naučni saradnik izabrana je 2009. godine, a 2015. je izabrana u zvanje naučni savetnik.

Od januara 2013. godine zaposlena je na Farmaceutskom fakultetu u Beogradu u zvanju docenta, od novembra 2017. godine u zvanju vanrednog profesora na Katedri za farmaceutsku hemiju.

OBAVEZNI USLOVI ZA IZBOR U ZVANJE REDOVNOG PROFESORA

1. NASTAVNA AKTIVNOST

1.1. ISKUSTVO U PEDAGOŠKOM RADU SA STUDENTIMA

Dr Katarina Nikolić ima 10 godina pedagoškog iskustva u radu sa studentima. Učestvuje u realizaciji praktične i teorijske nastave u okviru integrisanih akademskih studija-studijski program *Farmacija* na obaveznim predmetima *Farmaceutska hemija 1*, *Farmaceutska hemija 2* i *Farmaceutska hemija 3* i na izbornom predmetu *Odabrana poglavlja farmaceutske hemije*.

Učestvuje u izvođenju praktične i teorijske nastave (predmeti *Pharmaceutical chemistry 2* i *Pharmaceutical chemistry 3*) u okviru integrisanih akademskih studija na engleskom jeziku na Farmaceutskom fakultetu u Beogradu.

Učestvovala je u izvođenju nastave na Doktorskim akademskim studijama-modul Farmaceutska hemija (program akreditovan 2013.) na predmetima *Metode u dizajniranju lekova, Hemometrijske metode u farmaceutskoj hemiji, Računarske metode u hemijskoj biologiji, Spektroskopske metode 2 i Seminar 3*, kao i na predmetu *Hemijske i biološke interakcije biomolekula u razvoju novih lekova* (program akreditovan 2020.).

Od školske 2021/22. godine učestvuje u realizaciji nastave na novom master studijskom programu *Napredna analiza podataka*, akreditovanom na Univerzitetu u Beogradu. Za ovu master studiju je prof. dr Katarina Nikolić pripremila plan i program za akreditaciju i učestvuje u realizaciji na predmetu *Napredna analiza podataka u farmaceutskom istraživanju i razvoju.*

1.2. OCENA PEDAGOŠKOG RADA DOBIJENA U STUDENTSKIM ANKETAMA TOKOM CELOKUPNOG PROTEKLOG IZBORNOG PERIODA

Od izbora u zvanje vanredni profesor na studentskim anketama u praktičnoj i teorijskoj nastavi sa studentima Farmaceutskog fakulteta Univerziteta u Beogradu, na skali od 1 do 5, prof. dr Katarina Nikolić je ocenjena srednjom ocenom **4,73** (Tabela 1).

Tabela 1. Tabelarni prikaz prosečnih ocena za praktičnu i teorijsku nastavu za period nakon izbora u zvanje vanredni profesor.

	Predmet						
Školska godina	Farmaceutska hemija 1		Farmaceutska hemija 2		Farmaceutska hemija 3		Odabrana pog. FH
	Teorijska nastava	Praktična nastava	Teorijska nastava	Praktična nastava	Teorijska nastava	Praktična nastava	Teorijska nastava
2017/18.	-	4,71	-	-	4,66	4,67	4,92
2018/19.	-	4,64	4,70	4,67	4,64	4,67	4,53
2019/20.	-	4,66	4,64	4,67	4,55	4,65	5,00
2020/21.	-		-	4,74	4,94	4,94	4,95
2021/22.	-		-	-	4,75	4,74	5,00
∑		**4,67**	**4,67**	**4,69**	**4,71**	**4,73**	**4,88**
∑	**4,73**						

1.3. MENTORSTVO I ČLANSTVO U KOMISIJAMA ZA ODBRANU ZAVRŠNIH RADOVA NA INTEGRISANIM AKADEMSKIM STUDIJAMA

Dr Katarina Nikolić bila je mentor ukupno 10 završnih radova na integrisanim akademskim studijama i član komisije za odbranu 4 završna rada. Od izbora u zvanje vanrednog profesora bila je mentor 4 završna rada.

U zvanju docenta dr Katarina Nikolić je bila mentor za odbranu 6 završnih radova na Farmaceutskom fakultetu u Beogradu.

1. Teodora Đikić (februar 2013.) Farmaceutski fakultet u Beogradu
2. Jelena Oluić (avgust 2015.) Farmaceutski fakultet u Beogradu
3. Svetlana Erić (jun 2016.) Farmaceutski fakultet u Beogradu
4. Nemanja Đoković (septembar 2016.) Farmaceutski fakultet u Beogradu
5. Milica Radan (septembar 2017.) Farmaceutski fakultet u Beogradu
6. Mirjana Antonijevic (jul 2017.) Farmaceutski fakultet u Beogradu

Od izbora u zvanje vanredni profesor dr Katarina Nikolić je bila mentor **4** završna rada:

1. Milan Jovanovic (septembar 2018.) "3D-QSAR studija selektivnih inhibitora PI3Kα kinaze kao potencijalnih antineoplastika", Farmaceutski fakultet u Beogradu
2. Aleksandar Rajkovic (septembar 2019.) "3D-QSAR studija i analiza struktura farmakofore inhibitora ABL1 tirozin kinaza", Farmaceutski fakultet u Beogradu
3. Milan Beljkaš (avgust 2020.) "Molekulsko modelovanje, sinteza i ispitivanje antimigratornih i antiinvazivnih osobina novih derivata 1-benzhidrilnog piperazina", Farmaceutski fakultet u Beogradu - **Prva Konkursna nagrada Fond Nenada M. Kostića za najbolje diplomske i master radove odbranjene u periodu od 1. aprila 2020. do 31. marta 2021. godine iz oblasti hemijskih nauka**
4. Ana Postolović (jul 2021.) "Racionalni dizajn inhibitora sirtuina 2 primenom analize strukture farmakofore i molekulskog dokinga", Farmaceutski fakultet u Beogradu

1.4. MENTORSTVO I ČLANSTVO U KOMISIJAMA ZA PRIJAVU, OCENU I ODBRANU DOKTORSKE DISERTACIJE

Dr Katarina Nikolić je bila mentor ukupno 7 doktorskih disertacija i član komisije za odbranu 10 doktorskih disertacija, Od izbora u zvanje vanredni profesor je mentor 4 doktorske disertacije i bila je član komisije za odbranu 3 doktorske disertacije.

U zvanju docenta dr Katarina Nikolić je bila mentor 3 odbranjene doktorske disertacije:

1. Dipl. farm. Slavica Filipić (21.3.2013. godine) na Farmaceutskom fakultetu u Beogradu, pod nazivom: "Kvantitativni odnosi strukture, aktivnosti i retencionih osobina liganada imidazolinskih i alfa$_2$ adrenergičkih receptora".
2. Dipl. farm. Marija Čarapić (7.9.2015. godine) na Farmaceutskom fakultetu u Beogradu, pod nazivom: „Razvoj hromatografskih metoda za određivanje sadržaja, stepena čistoće i retecionih karakteristika ziprazidona primenom eksperimentalnog dizajna".
3. Dipl. farm. Nataša Đorđević Filijović (25.12.2015. godine) na Farmaceutskom fakultetu u Beogradu, pod nazivom: „Karakterizacija i procena kritičnih parametara stabilnosti tableta olanzapina i aripiprazola primenom eksperimentalnog dizajna".

U zvanju docenta dr Katarina Nikolić je bila član komisije za odbranu 7 doktorskih disertacija:

- Mag. farm. Branka Ivković (20.3.2013.) na Farmaceutskom fakultetu u Beogradu
- Dipl. farm. Brankica Filipić (14.11.2013.) na Farmaceutskom fakultetu u Beogradu.
- Dipl. farm. Marija Popović (3.9.2015.) na Farmaceutskom fakultetu u Beogradu.
- Dipl. farm. Vladimir Dobričić (22.12.2014.) na Farmaceutskom fakultetu u Beogradu.
- Dipl. farm. Miralem Smajić (22.9.2016.) na Farmaceutskom fakultetu u Beogradu.
- Dipl. biol. Branislava Gemović (3.4.2015.) na Biološkom fakultetu u Beogradu.
- Dipl. farm. Musbah Shenger (13.4.2017.), na Farmaceutskom fakultetu u Beogradu

Od izbora u zvanje vanredni profesor dr Katarina Nikolić je mentor jedne odbranjene, jedne ocenjene i dve prijavljene doktorske disertacije:

1. Mast. hem. Strahinja Stevanović (odbranjena 25. 03. 2022.), na Farmaceutskom fakultetu u Beogradu pod nazivom: "*In silico* selekcija i *in vitro* ispitivanja prirodnih i sintetskih inhibitora rasta parazita *Leishmania* spp."
2. Mag. farm. Dušan Ružić na Farmaceutskom fakultetu u Beogradu pod nazivom: „Racionalni dizajn, sinteza i in vitro ispitivanja selektivnih inhibitora histon deacetilaze 6". Izveštaj Komisije za ocenu i odbranu završene doktorske disertacije je prihvaćen na sednici NNV 14.04.2022. godine.
3. Mag. farm. Nemanja Đoković na Farmaceutskom fakultetu u Beogradu pod nazivom: „Simulacije molekulske dinamike, dizajn, sinteza i in vitro ispitivanje inhibitora epigenetskih proteina kao potencijalnih antineoplastika". Tema doktorske disertacije je odobrena na sednici VNOMN 24.12.2020.
4. Mag. farm. Milica Radan na Farmaceutskom fakultetu u Beogradu pod nazivom: „Određivanje strukture farmakofore, dizajn i *in vitro* ispitivanje liganada sa višestrukim dejstvom kao potencijalno efikasnijih terapeutika složenih neuroloških i mentalnih oboljenja". Tema doktorske disertacije je odobrena na sednici VNOMN 24.12.2020.

Od izbora u zvanje vanredni profesor dr Katarina Nikolić je bila član komisije 3 odbranjene doktorske disertacije:

1. Mag. farm. Darija Obradović (20.06.2021.), na Farmaceutskom fakultetu u Beogradu, pod nazivom: „Modelovanje retencionog ponašanja liganada imidazolinskih i serotoninskih receptora i srodnih jedinjenja u različitim hromatografskim uslovima".
2. Mag. farm. Žarko Gagić (13.04.2018.), na Farmaceutskom fakultetu u Beogradu pod nazivom: „Određivanje strukture farmakofore, dizajn, sinteza i ispitivanje antiproliferativne aktivnosti derivata α-tokoferola i γ-tokotrienola", član komisije i mentor
3. Mag. farm. Jelica Vučićević (10.01.2020.), na Farmaceutskom fakultetu u Beogradu pod nazivom: „Heminformatička analiza, dizajn i ispitivanje proapoptotske aktivnosti novih liganada imidazolinskih receptora", član komisije i mentor

1.5. UDŽBENICI, ZBIRKE ZADATAKA, PRAKTIKUMI

Dr Katarina Nikolić je koautor jednog pomoćnog udžbenika i jednog osnovnog udžbenika za predmet *Farmaceutska hemija 3*.

1. PRAKTIKUM IZ FARMACEUTSKE HEMIJE III
Autori: Katarina Nikolić, Slavica Filipić, Milkica Crevar Sakač
Farmaceutski fakultet, Univerzitet u Beogradu, Beograd, 2014. ISBN 978-86-6273-021-3

2. ADRENERGICI, ANTIANGINALNI LEKOVI I VAZODILATATORI
Autor: Katarina Nikolić
Farmaceutski fakultet, Univerzitet u Beogradu, Beograd, 2022. ISBN: 978-86-6273-078-

1.6. PODRŠKA VANNASTAVNIM AKADEMSKIM AKTIVNOSTIMA STUDENATA

Dr Katarina Nikolić je bila mentor 17 studentskih istraživačkih radova (od izbora u zvanje vanredni profesor 7 radova) i član Stručne Komisije Studenskog Mini-kongresa na Farmaceutskom fakultetu u Beogradu (2013, 2014. i 2017. godine).

1. student Aleksandar Rajkovic, naziv rada: "Molekulsko modelovanje, 3D-QSAR studija i analiza struktura farmakofore inhibitora ABL1 tirozin kinaza", XI Mini-kongres studenata Farmaceutskog fakulteta, april 2018. godine, KSBMNS, Kopaonik, 26-30. april 2018. godine, p. 983.
2. student Alen Čebzan, naziv rada: "Molekulsko modelovanje, 3D-QSAR studija i analiza struktura farmakofore inhibitora MAPK1 (mitogen-aktivirane protein kinaze-1)", XI Mini-kongres studenata Farmaceutskog fakulteta, april 2018. godine.
3. student Milan Jovanović, naziv rada: "Molekulsko modelovanje, 3D-QSAR studija i analiza struktura farmakofore inhibitora kinaze PI3K-α", XI Mini-kongres studenata Farmaceutskog fakulteta, april 2018. godine.
4. student Ana Postolović, naziv rada: "Molekulsko modelovanje inhibitora sirtuina 2 primenom molekulskog dokinga i analiza strukture farmakofore", XIV Mini-kongres studenata Farmaceutskog fakulteta, april 2021. godine.
5. student Branko Radović, naziv rada: "Sinteza i molekulsko modelovanje novog derivata fenitoina kao potencijalnog inhibitora humanie histon deacetilaze 6", XIV Mini-kongres studenata Farmaceutskog fakulteta, april 2021. godine - **najbolji rad na sesiji Farmaceutske hemije**
6. student Marija Radiša, naziv rada: „Sinteza, molekulsko modelovanje i ispitivanje citotoksičnih aktivnosti paroksetina i njegovog derivata na odabranim tumorskim ćelijama", XV Mini-kongres studenata Farmaceutskog fakulteta, april 2022. godine.
7. student Alen Čebzan, naziv rada: „Kompjuterski dizajn novih MAPK inhibitora komparativnom analizom rezultata 3D-QSAR modelovanja i molekulskog dokinga", XV Mini-kongres studenata Farmaceutskog fakulteta, april 2022. godine.

1.7. VREDNOVANJE NASTAVNOG I PEDAGOŠKOG RADA (PREMA ČLANU 9. PRAVILNIKA O BLIŽIM USLOVIMA ZA IZBOR NASTAVNIKA NA FARMACEUTSKOM FAKULTETU)

Tabela 2. Vrednovanje nastavnog i pedagoškog rada za period nakon izbora u zvanje vanredni profesor, osim za nastavnu literaturu koja se odnosi na celokupnu nastavnu karijeru.

Naziv	Vrednost
Zbirna ocena nastavne aktivnosti (teorijska, praktična nastava) dobijena na studentskoj anketi	5
Učešće u realizaciji nastave:	
Farmaceutska hemija 2 – teorijska nastava (preuzela nastavni program)	1
Farmaceutska hemija 3 – teorijska nastava (preuzela nastavni program)	1
Farmaceutska hemija 1 – praktična nastava (preuzela nastavni program)	1
Farmaceutska hemija 2 – praktična nastava (preuzela nastavni program)	1
Farmaceutska hemija 3 – praktična nastava (dopunila nastavni program)	2
Odabrana poglavlja farmaceutske hemije (dopunila nastavni program)	2
Metode u dizajniranju lekova– DAS (dopunila nastavni program)	4
Spektroskopske metode 2 – DAS (dopunila nastavni program)	4
Hemometrijske metode u farmaceutskoj hemiji– DAS (dopunila nastavni program)	4
Seminar 3 – DAS (dopunila nastavni program)	4
Računarske metode u hemijskoj biologiji – DAS (dopunila nastavni program)	4
Hemijske i biološke interakcije biomolekula u razvoju novih lekova – DAS (dopunila nastavni program)	4
Napredna analiza podataka u farmaceutskom istraživanju i razvoju – master studije	6
Praktikum	15
Udžbenik, knjiga	25
Mentor odbranjenog završnog rada IAS – 4x0,5	2
Član komisije za odbranu doktorske disertacije – 3x3	9
Mentor odbranjene doktorske disertacije – 1x10	10
UKUPNO	**104**

2. NAUČNO-ISTRAŽIVAČKA AKTIVNOST

2.1. RUKOVOĐENJE ILI UČEŠĆE U NAUČNO-ISTRAŽIVAČKIM PROJEKTIMA

Dr Katarina Nikolić je učestvovala u radu 3 nacionalna i 10 međunarodnih naučno-istraživačkih projekata. Od izbora u zvanje vanredni profesor učestvuje u radu 2 nacionalna i 8 međunarodnih naučno-istraživačkih projekata.

2.1.1. Nacionalni projekti

Od januara 2006. godine Katarina Nikolić učestvuje kao saradnik na projektima koje finansira Ministarstvo nauke Srbije:

- 2006-2010. Naziv projekta: "*Sinteza, kvantitativni odnos između strukture/osobina i aktivnosti, fizičko-hemijska karakterizacija i analiza farmakološki aktivnih supstanci*"
  Broj projekta: 142071, Farmaceutski fakultet, Univerzitet u Beogradu
  Rukovodilac projekta: Prof. dr Danica Agbaba
- 2010-2019. Naziv projekta: „*Sinteza, kvantitativni odnos između strukture i dejstva, fizičko-hemijska karakterizacija i analiza farmakološki aktivnih supstanci*"
  Broj projekta: 172033, Farmaceutski fakultet, Univerzitet u Beogradu
  Rukovodilac projekta: Prof. dr Danica Agbaba
- 2010-2019. Naziv projekta: „*Primena EIIP/ISM bioinformatičke platforme u otkrivanju novih terapeutskih targeta i potencijalnih terapeutskih molekula*"
  Broj projekta:173001, Institut za Nuklearne nauke Vinča
  Rukovodilac projekta: Prof. dr Veljko Veljković

Od 2019. godine, nakon prelaska na institucionalno finansiranje naučnoistraživačkog rada, prof. dr Katarina Nikolić je imenovana za rukovodioca istraživačke grupe Farmaceutskog fakulteta Univerziteta u Beogradu, koja se sastoji od 11 članova.

2.1.2. Međunarodni projekti

1. Saradnik, član upravnog odbora i rukovodilac radne grupe za kompjutersku hemiju (WG-1) na evropskom projektu FP7/COST (European Cooperation in the field of Scientific and Technical Research) pod nazivom: "*Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain.*" Action CM1103, 2011-2015. http://www.cost.eu/COST_Actions/cmst/Actions/CM1103
2. Saradnik i član upravnog odbora na evropskom projektu FP7/COST (European Cooperation in the field of Scientific and Technical Research) pod nazivom GLISTEN: GPCR-Ligand Interactions, Structures, and Transmembrane Signaling: a European Research Network Action CM1207, 2013-2017. http://www.cost.eu/COST_Actions/cmst/Actions/CM1207

3. Učesnik i član upravnog odbora EU projects: FP7/COST CM1406 action (2015-2019): *Epigenetic Chemical Biology (EPICHEM)*: http://www.cost.eu/COST_Actions/cmst/Actions/CM1406
4. Učesnik EU projects: HORISON 2020/COST Action CA15135 (2016-2020): *Multi-target paradigm for innovative ligand identification in the drug discovery process (MuTaLig).* http://www.cost.eu/COST_Actions/ca/CA15135
5. Učesnik EU projects: HORISON 2020/COST Action CA16205 (2017-2021): *European Network on Understanding Gastrointestinal Absorption-related Processes (UNGAP):* http://www.cost.eu/COST_Actions/ca/CA16205
6. Učesnik EU projects: Horison 2020/ COST CA17104 action (2018-2022): *New diagnostic and therapeutic tools against multidrug resistant tumors:*http://www.cost.eu/COST_Actions/ca/CA17104
7. Učesnik i član upravnog odbora EU projects: Horison 2020/ COST action CA18133 (2019-2023): *European Research Network on Signal Transduction.* https://www.cost.eu/actions/CA18133/#tabs|Name:overview
8. Učesnik i član upravnog odbora EU projects: Horison 2020/ COST action CA18240 (2019-2023): *ADHEsion GPCR Network: Research and Implementation Set the path for future Exploration.* https://www.cost.eu/actions/CA18240/#tabs|Name:overview
9. Rukovodilac istraživanja: Bilateral project, Hubert Curien Partnership Project for collaboration France-Serbia 2020-2022 (Program Pavle Savic 2020): *Identification of novel DOT1L and DNMT1/3A inhibitors*, with Epigenetic Chemical Biology, Institut Pasteur, CNRS UMR3523, Paris 75015 France (Prof Paola Arimondo research group).
10. Rukovodilac istraživanja: *Deutsche Forschungsgemeinschaft* (DFG) project named: *Control of epigenetic states through light-triggered protein-protein interaction mediators*, 2020-2023 PI Asst. Prof. Olalla Vázquez, Fachbereich Chemie Philipps-Universität Marburg, Germany.

2.2. OBJAVLJENI RADOVI

Prof. dr Katarina Nikolić je do sada ukupno objavila 107 radova u časopisima od međunarodnog značaja (M_{20}), 3 poglavlja u knjizi međunarodnog značaja (M_{13} i M_{14}), 8 radova u domaćim časopisima (M_{50}), 122 saopštenja na međunarodnim naučnim skupovima (M_{30}) i 16 saopštenja na nacionalnim naučnim skupovima (M_{64}). Od izbora u zvanje vanredni profesor publikovala je 29 radova (M_{20}): 5 M_{21a}, 10 M_{21}, 12 M_{22}, i 2 M_{23}, 2 poglavlja u knjizi međunarodnog značaja (M_{14}), 3 rada u domaćem časopisu M_{52}, 52 saopštenja na međunarodnim naučnim skupovima (M_{30}): 1 M_{31}, 12 M_{32}, 6 M_{33} i 33 M_{34} i 7 saopštenja na nacionalnim naučnim skupovima (M_{64}).

Kumulativni IF objavljenih radova Katarine Nikolić (u poslednjih 5 godina) je 130,326. Prvi autor ili nosilac rada je u 9 radova sa kumulativnim IF 31,365. Ukupan broj citata bez autocitata je 1110 (Scopus), a H-indeks 17 (Scopus),

SPISAK OBJAVLJENIH PUBLIKACIJA I SAOPŠTENJA

Poglavlje u istaknutoj monografiji međunarodnog značaja (M_{13})

Pre izbora u zvanje vanredni profesor

1. Danica Agbaba and **Katarina Nikolic:** Chapter 26: *TLC of Antihypertensive and Antihypotensive drugs* (p.481-527) In: **Thin layer chromatography in drug analysis**, Edited by Łukasz Komsta, Monika Waksmundzka-Hajnos and Joseph Sherma. Published by CRC Press (Taylor &Francis) December 20, 2013. ISBN 978-1-4665-0715-9.

Poglavlje u monografiji međunarodnog značaja (M_{14})

Posle izbora u zvanje vanredni profesor

2 x 4 = 8

1. Ruzic D., Djokovic N., **Nikolic K.** (2021) Fragment-Based Drug Design of Selective HDAC6 Inhibitors. pages 155-170 In: Ballante F. (eds) Protein-Ligand Interactions and Drug Design. Methods in Molecular Biology, vol 2266. Humana Press-Springer Protocols, New York, NY. https://doi.org/10.1007/978-1-0716-1209-5_9
2. T. Djikic, Z. Gagic, **K. Nikolic.** Molecular Docking for Computer-Aided Drug Design, Chapter 16 - Design and Discovery of Kinase Inhibitors Using Docking Studies. Fundamentals, Techniques, Resources and Applications 2021, Pages 337-365. Academic Press https://doi.org/10.1016/B978-0-12-822312-3.00009-6

Objavljeni radovi međunarodnog značaja (M_{20}):

Radovi u međunarodnom časopisu izuzetnih vrednosti (M_{21-a})

Pre izbora u zvanje vanredni profesor

1. Butini S, **Nikolic K**, Kassel S, Brückmann H, Filipic S, Agbaba D, Gemma S, Brogi S, Brindisi M, Campiani G, Stark H. Polypharmacology of dopamine receptor ligands. *Progress in Neurobiology* 142, 68-103 (2016) https://doi.org/10.1016/j.pneurobio.2016.03.011 (IF 2016: **13.217**, Neurosciences **7/259**).
2. Ismaili L, Refouvelet B, Benchekroun M, Brogi S, Brindisi M, Gemma S, Campiani G, Filipic S, Agbaba D, Esteban G, Unzeta M, **Nikolic K**, Butini S, Marco-Contellese J. Multitarget compounds bearing tacrine- and donepezil-like structural and functional motifs for the potential treatment of Alzheimer's disease. *Progress in Neurobiology*

151, 4–34 (2017) https://doi.org/10.1016/j.pneurobio.2015.12.003 (IF 2017: **14.163**, Neuroscinces **8/261**).

Posle izbora u zvanje vanredni profesor

5 x 10 = 50

1. Vucicevic J, **Nikolic K**, Mitchell JBO. Rational drug design of antineoplastic agents using 3D-QSAR, cheminformatic, and virtual screening approaches. *Curr. Med. Chem.* 2019;26(21):3874-3889. https://doi.org/10.2174/0929867324666170712115411 (IF 2019: **4.184**, Chemistry/Medicinal (**17/63**))
2. S. Abás, S. Rodríguez-Arévalo, A. Bagán, C. Griñán-Ferré, F. Vasilopoulou, I. Brocos-Mosquera, C. Muguruza, B. Pérez, E. Molins, F. Javier Luque, P. Pérez-Lozano, S. de Jonghe, D. Daelemans, L. Naesens, J. Brea, M. Isabel Loza, E. Hernández-Hernández, J. A. García-Sevilla, M. Julia García-Fuster, M. Radan, T. Djikic, **K. Nikolic**, M. Pallàs, L. F. Callado, C. Escolano. Bicyclic α□Iminophosphonates as High Affinity Imidazoline I2 Receptor Ligands for Alzheimer's Disease. J. Med. Chem. 2020, 63, 7, 3610–3633. https://doi.org/10.1021/acs.jmedchem.9b02080 (IF 2020: **7.446**, Chemistry, Medicinal (**3/63**)) – **nagrada Farmaceutskog fakulteta za izuzetan doprinos naučnoistraživačkom radu**
3. I. Asanovic, E. Strandback, A. Kroupova, Dj. Pasajlic, A. Meinhart, P. Tsung-Pin, N. Djokovic, D. Anrather, T. Schuetz, M.J. Suskiewicz, S. Sillamaa, T. Kocher, R. Beveridge, **K. Nikolic**, A. Schleiffer, M. Jinek, M. Hartl, T. Clausen, J.Penninger, P. Macheroux, S. Weitzer, J. Martinez. The oxidoreductase PYROXD1 uses NAD(P)+ as an antioxidant to sustain tRNA ligase activity in pre-tRNA splicing and unfolded protein response. Molecular Cell 81 (12), P2520-2532.E16, June 17, 2021. DOI: https://doi.org/10.1016/j.molcel.2021.04.007 (IF 2020: **17.970**, Biochemistry & Molecular Biology (**6/296**)) – **nagrada Farmaceutskog fakulteta za izuzetan doprinos naučnoistraživačkom radu**
4. S. Rodriguez-Arévalo, A. Bagán, Christian G. Ferré, F. Vasilopoulou, M. Pallàs, I. Brocos-Mosquera, L.F. Callado, M. Isabel Loza, A.L. Martínez, J. Brea, B. Pérez, E. Molins, S. De Jonghe, D. Daelemans, M. Radan, T. Djikic, **K. Nikolic**, E.H. Hernández, M.J. García-Fuster, J.A. García-Sevilla, C. Escolano, Benzofuranyl-2-imidazoles as imidazoline I2 receptor ligands for Alzheimer's disease, European Journal of Medicinal Chemistry 2021, 222, 113540, https://doi.org/10.1016/j.ejmech.2021.113540 (IF 2020: **6.514**, Chemistry, Medicinal (**5/63**)) - **nagrada Farmaceutskog fakulteta za izuzetan doprinos naučnoistraživačkom radu**
5. Albert L, Nagpal J, Steinchen W, Zhang L, Werel L, Djokovic N, Ruzic D, Hoffarth M, Xu J, Kaspareit J, Abendroth F, Royant A, Bange G, **Nikolic K**, Ryu S, Dou Y, Essen LO, Vázquez O. Bistable Photoswitch Allows in Vivo Control of Hematopoiesis. ACS Cent. Sci. 2022, 8, 57−66. https://doi.org/10.1021/acscentsci.1c00434 (IF 2020: **14.553**, Chemistry, Multidisciplinary (**17/178**)).

Radovi u vrhunskom međunarodnom časopisu (M_{21})

Pre izbora u zvanje vanredni profesor

1. **K. Nikolic**, QSAR Study of Aromatic Organochalcogens with Glutathione Peroxidase – like Antioxidant Activity, *QSAR & Combinatorial Science*, 26 (3), 358-367 (2007). https://doi.org/10.1002/qsar.200610013 (IF 2006: **1.987**, Computer Science/Interdisciplinary Application (**16/86**), Chemistry Multidisciplinal (**33/124**))
2. **K. Nikolic**, Design and QSAR study of analogs of alpha-tocopherol with enhanced antiproliferative activity against human breast adenocarcinoma cells, *Journal of Molecular Graphics and Modelling*, 26, 868–873 (2008). https://doi.org/10.1016/j.jmgm.2007.05.008 (IF 2008: **2.347**, Computer Science, Interdisciplinary Applications **12/94**)
3. S. Filipic, **K. Nikolic,** M. Krizman, and D. Agbaba, The Quantitative Structure-Retention Relationship (QSRR) analysis of some centrally acting antihypertensives and diuretics, *QSAR & Combinatorial Science*, 27, 1036 – 1044 (2008). https://doi.org/10.1002/qsar.200710161 (IF 2008: **2.594**, Computer Science, Interdisciplinary Applications **10/94**)
4. **K. Nikolic**, S. Filipic, and D. Agbaba, QSAR study of Imidazoline antihypertensive drugs, *Bioorganic & Medicinal Chemistry*, 16, 7134–7140 (2008). https://doi.org/10.1016/j.bmc.2008.06.051 (IF 2008: **3.075**, Chemistry/Medicinal **10/40**)
5. **K. Nikolic**, S. Filipic, and D. Agbaba, QSAR study of selective I1-Imidazoline Receptor Ligands, *SAR & QSAR in Environmental Research*, 20, 133–144 (2009). https://doi.org/10.1080/10629360902726015 (IF 2008: **2.238**, Computer Science, Interdisciplinary Applications **15/94**)
6. **K. Nikolic**, D. Agbaba, Design and QSAR study of analogs of γ-tocotrienol with enhanced antiproliferative activity against human breast cancer cells, *Journal of Molecular Graphics and Modelling*, 27, 777–783 (2009). https://doi.org/10.1016/j.jmgm.2008.11.007 (IF 2008: **2.347**, Computer Science, Interdisciplinary Applications **12/94**).
7. **K. Nikolic**, D. Agbaba, Prediction of hepatic microsomal intrinsic clearance and human clearance values for drugs, *Journal of Molecular Graphics and Modelling*, 28, 245-252 (2009). https://doi.org/10.1016/j.jmgm.2009.08.002 (IF 2008: **2.347**, Computer Science, Interdisciplinary Applications **12/94**).
8. **K. Nikolic**, B. Ivković, Ž. Bešović, S. Marković, D. Agbaba, A validated enantiospecific method for determination and purity assay of clopidogrel, *Chirality*, 21 (10), 878-885 (2009) https://doi.org/10.1002/chir.20681 (IF 2008: **2.212**, Chemistry/Analytical **25/70**).
9. **K. Nikolic**, M. Pavlovic, A. Smolinski, D. Agbaba, The Chemometric Study and Quantitative Structure Retention Relationship modeling of Liquid Chromatography separation of Ziprasidone components, *Combinatorial Chemistry & High Throughput Screening*, 2012, 15(9): 730-744. https://doi.org/10.2174/138620712803519699 (IF 2010: **2.573**, Chemistry/Applied **12/70**)
10. **K. Nikolic**, D. Agbaba, Pharmacophore development and SAR studies of Imidazoline Receptor Ligands, Mini-Reviews in Medicinal Chemistry, Volume 12, 14 Issues, 2012, https://doi.org/10.2174/1389212225125755575 (IF 2010: **2.884**, Chemistry/Medicinal **14/54**).

11. **K. Nikolic,** S. Filipic, D. Agbaba, H. Stark, Procognitive Properties of Drugs with Single and Multitargeting H3 Receptor Antagonist Activities. *CNS Neuroscience & Therapeutics* 20, 613–623 (2014). https://doi.org/10.1111/cns.12279 (IF 2014: **3.931**, Pharmacology & Pharmacy **43/255**).
12. **K. Nikolic,** N. Veljkovic, B. Gemovic, T. Srdic-Rajic, and D. Agbaba, Imidazoline-1 Receptor Ligands as Apoptotic Agents: Pharmacophore Modeling and Virtual Docking Study, *Combinatorial Chemistry & High Throughput Screening*, 16, 298-319 (2013) https://doi.org/10.2174/1386207311316040004 (IF 2012: **2.000**, Chemistry, Applied **23/71**)
13. B. M. Ivkovic, **K. Nikolic**, B. B. Ilic, Z. S. Zizak, R. B. Novakovic, O. A. Cudina, S. M. Vladimirov, Phenylpropiophenone derivatives as potential anticancer agents: Synthesis, biological evaluation and quantitative structure-activity relationship study, *European Journal of Medicinal Chemistry* 63, 239-255, (2013) https://doi.org/10.1016/j.ejmech.2013.02.013 (IF 2012: **3.499**, Chemistry, Medicinal **13/59**).
14. S. Filipic, **K. Nikolic,** I. Vovk, M. Krizman, D. Agbaba, Quantitative structure-mobility relationship analysis of imidazoline receptor ligands in CDs-mediated CE, *Electrophoresis* 34, 471–482 (2013) https://doi.org/10.1002/elps.201200171 (IF 2012: **3.261**, Chemistry, Analytical **14/75**).
15. V. Dobričić, B. Marković, **K. Nikolic,** V. Savić, S. Vladimirov, O. Čudina. 17β-carboxamide steroids – in vitro prediction of human skin permeability and retention using PAMPA technique. *European Journal of Pharmaceutical Sciences* 52, 95–108, (2014) https://doi.org/10.1016/j.ejps.2013.10.017 (IF 2014: 3.350, Pharmacology & Pharmacy 66/255).
16. V. Dobričić, **K. Nikolic,** S. Vladimirov, O. Čudina. Biopartitioning micellar chromatography as a predictive tool for skin and corneal permeability of newly synthesized 17b-carboxamide steroids. *European Journal of Pharmaceutical Sciences* 56, 105–112, (2014) https://doi.org/10.1016/j.ejps.2014.02.007 (IF 2014: 3.350, Pharmacology & Pharmacy **66/255**).
17. O. M. B. Aguilera, G. Esteban, I. Bolea, **K. Nikolic**, D. Agbaba, I. Moraleda, I. Iriepa, A. Samadi, E. Soriano, M. Unzeta, J. M. Contelles. Design, synthesis, pharmacological evaluation, QSAR analysis, molecular modeling and ADMET of novel donepezileindolyl hybrids as multipotent cholinesterase/monoamine oxidase inhibitors for the potential treatment of Alzheimer's disease. *European Journal of Medicinal Chemistry* 63, 239-255, (2013) https://doi.org/10.1016/j.ejmech.2013.12.028 (IF 2012: **3.499**, Chemistry, Medicinal **13/59**).
18. B. Filipic, **K. Nikolic**, S. Filipic, B. Jovcic, D. Agbaba, J. Antic Stankovic, M. Kojic, N. Golic. Identifying the CmbT substrates specificity by using a quantitative structure–activity relationship (QSAR) study. *Journal of the Taiwan Institute of Chemical Engineers* 45, 764–771, (2014) https://doi.org/10.1016/j.jtice.2013.09.033 (IF 2014: **3.000**, Engineering, Chemical **19/135**).
19. **K. Nikolic**, D. Agbaba, H. Stark. Pharmacophore modeling, drug design and virtual screening on multi-targeting procognitive agents approaching histaminergic pathways. *Journal of the Taiwan Institute of Chemical Engineers* 46, 15–29 (2015).

https://doi.org/10.1016/j.jtice.2014.09.017 (IF 2015: **2.848**, Engineering, Chemical **19/135**).

20. O.M. Bautista-Aguilera, G. Esteban, M. Chioua, **K. Nikolic**, D. Agbaba, I. Moraleda, I. Iriepa, E. Soriano, A. Samadi, M. Unzeta, J. M. Contelles, Multipotent cholinesterase/monoamine oxidase inhibitors for the treatment of Alzheimer's disease: design, synthesis, biochemical evaluation, ADMET, molecular modeling, and QSAR analysis of novel donepezil-pyridyl hybrids. Drug Design, Development and Therapy 8: 1893-1910 (2014). https://doi.org/10.2147/DDDT.S69258 (IF 2014: **3.028**, Chemistry, Medicinal **17/59**).
21. **K. Nikolic**, L. Mavridis, O.M.B. Aguilera, J.M. Contelles, H. Stark, M. Carreiras, I. Rossi, P. Massarelli, D. Agbaba, R.R. Ramsay, J.B.O. Mitchell. Predicting targets of compounds against neurological diseases using cheminformatic methodology. J. Comput Aided Mol Des 29, 183–198 (2015) https://doi.org/10.1007/s10822-014-9816-1 (IF 2015: **3.199**, Computer Science, Interdisciplinary Applications **13/104**).
22. O.M. Bautista-Aguilera, A. Samadi, M. Chioua, **K. Nikolic**, S. Filipic, D. Agbaba, E. Soriano, L. Andrés, M.I. Rodríguez-Franco, S. Alcaro, R.R. Ramsay, F. Ortuso, M. Yañez, J.M. Contelles. N-Methyl-N-((1-methyl-5-(3-(1-(2-methylbenzyl)piperidin-4-yl)propoxy)-1H-indol-2-yl)methyl)prop-2-yn-1-amine, a New Cholinesterase and Monoamine Oxidase Dual Inhibitor. J. Med. Chem. 57, 10455-10463 (2014) https://doi.org/10.1021/jm501501a (IF 2014: **5.447**, Chemistry, Medicinal **3/59**).
23. J. Vucicevic, **K. Nikolic**, V. Dobricic , D. Agbaba. Prediction of Blood – Brain Barrier Permeation of α-Adrenergic and Imidazoline Receptor Ligands using PAMPA technique and Quantitative-Structure Permeability Relationship analysis. *European Journal of Pharmaceutical Sciences* 68 (2015) 94–105 https://doi.org/10.1016/j.ejps.2014.12.014 (IF 2015: **3.773**, Pharmacology & Pharmacy **53/255**).
24. Z. Gagic, **K. Nikolic**, B. Ivkovic, S. Filipic, D. Agbaba. QSAR studies and design of new analogs of vitamin E with enhanced antiproliferative activity on MCF-7 breast cancer cells. J. Taiwan Institute of Chemical Engineers Volume 59, February 2016, Pages 33-44, http://dx.doi.org/10.1016/j.jtice.2015.07.019. (IF 2016: **4.217**, Engineering, Chemical **16/135**)
25. T. Srdic-Rajic, **K. Nikolic**, M. Cavic, I. Djokic, B. Gemovic, V. Perovic, N. Veljkovic. Rilmenidine suppresses proliferation and promotes apoptosis via the mitochondrial pathway in human leukemic K562 cells. *European Journal of Pharmaceutical Sciences* 81, 172–180 (2016). https://doi.org/10.1016/j.ejps.2015.10.017 (IF 2016: **3.756**, Pharmacology & Pharmacy **54/257**)
26. Hughes R.E., **Nikolic K**, Ramsay RR, One for All? Hitting Multiple Alzheimer's Disease Targets with One Drug. *Frontiers in Neuroscience* 2016 Apr; 10: Article No 177. https://doi.org/10.3389/fnins.2016.00177 (IF 2016: **3.566**, Neurosciences **83/259**)
27. Khanfar M, Affini A, Lutsenko K, **Nikolic K**, Butini S and Stark H. Multiple Targeting Approaches on Histamine H3 Receptor Antagonists. *Frontiers in Neuroscience* 2016 May; 10: Article No 201. https://doi.org/10.3389/fnins.2016.00201 (IF 2016: **3.566**, Neurosciences **83/259**)

28. **Nikolic K**, Mavridis L, Djikic T, Vucicevic J, Agbaba D, Yelekci K, Mitchell JB. Drug Design for CNS Diseases: Polypharmacological Profiling of Compounds Using Cheminformatic, 3D-QSAR and Virtual Screening Methodologies. *Frontiers in Neuroscience* 2016 Jun;10: article No 265. https://doi.org/10.3389/fnins.2016.00265 (IF 2016: **3.566**, Neurosciences **83/259**)
29. Gagic Z, Ivkovic B, Srdic-Rajic T, Vucicevic J, **Nikolic K**, Agbaba D. Synthesis of the vitamin E amino acid esters with an enhanced anticancer activity and in silico screening for new antineoplastic drugs. *European Journal of Pharmaceutical Sciences* 2016 Jun;88:59-69. https://doi.org/10.1016/j.ejps.2016.04.008 (IF 2016: **3.756**, Pharmacology & Pharmacy **54/257**)
30. Vucicevic J, Srdic-Rajic T, Pieroni M, Laurila JM, Perovic V, Tassini S, Azzali E, Costantino G, Glisic S, Agbaba D, Scheinin M, **Nikolic K**, Radi M, Veljkovic N. A combined ligand- and structure-based approach for the identification of rilmenidine-derived compounds which synergize the antitumor effects of doxorubicin. *Bioorganic Medicinal Chemistry* 2016 Jul ;24(14):3174-83. https://doi.org/10.1016/j.bmc.2016.05.043 (IF 2016: **2.930**, Chemistry, Organic **16/59**)
31. Filipic S, Ruzic D, Vucicevic J, **Nikolic K**, Agbaba D. Quantitative structure-retention relationship of selected imidazoline derivatives on α1-acid glycoprotein column. Journal of Pharmaceutical and Biomedical Analysis 2016 Aug;127:101-11. https://doi.org/10.1016/j.jpba.2016.02.053 (IF 2016: **3.255**, Chemistry, Analytical **18/76**)
32. Grujić M, Popović M, Popović G, **Nikolic K**, Agbaba D. Protolytic Equilibria of Sartans in Micellar Solutions of Differently Charged Surfactants. *Journal of Pharmaceutical Sciences* 2016 Avg;105(8): 2444-2452. https://doi.org/10.1016/j.xphs.2016.06.007 (IF 2016: **2.713**, Chemistry, Medicinal **26/60**)
33. Savić J, Dobričić V, **Nikolic K**, Vladimirov S, Dilber S, Brborić J. In vitro prediction of gastrointestinal absorption of novel β-hydroxy-β-arylalkanoic acids using PAMPA technique. *European Journal of Pharmaceutical Sciences* 100 (2017) 36-41. https://doi.org/10.1016/j.ejps.2017.01.005 (IF 2016: **3.756**, Pharmacology & Pharmacy **54/257**)
34. Dobričić V, Savić S, **Nikolic K**, Vladimirov S, Vujić Z, Brborić J. Application of biopartitioning micellar chromatography and QSRR modeling for prediction of gastrointestinal absorption and design of novel β-hydroxy-β-arylalkanoic acids. *European Journal of Pharmaceutical Sciences* 100 (2017) 280–284. https://doi.org/10.1016/j.ejps.2017.01.023 (IF 2016: **3.756**, Pharmacology & Pharmacy **54/257**)
35. Vucicevic J, Popovic M, **Nikolic K**, Filipic S, Obradovic D, Agbaba D. Use of biopartitioning micellar chromatography and RP-HPLC for the determination of blood–brain barrier penetration of α-adrenergic/imidazoline receptor ligands, and QSPR analysis. *SAR and QSAR in Environmental Research*, 2017, 28, 3, 235–252. http://dx.doi.org/10.1080/1062936X.2017.1302506. (IF 2017: **2.227**, Chemistry, Multidisciplinary **84/171**)

Posle izbora u zvanje vanredni profesor

10 x 8 = 80

1. Rupar, J., Aleksić, M.M., **Nikolić, K.**, Popović-Nikolić, M.R., Comparative electrochemical studies of kinetic and thermodynamic parameters of Quinoxaline and Brimonidine redox process. *Electrochimica Acta*, Volume 271, 1 May 2018. Pages 220-231. https://doi.org/10.3390/molecules26082227 (IF (2018): **5.383**, Electrochemistry **5/26**)
2. Obradović D, Oljačić S, **Nikolic K,** Agbaba D. Investigation and prediction of retention characteristics of imidazoline and serotonin receptor ligands and their related compounds on mixed-mode stationary phase. *J Chromatogr A* 1585: 92-104 (2019) https://doi.org/10.1016/j.chroma.2018.11.051 (IF 2019: **4.049**, Chemistry, Analytical **14/86**)
3. * Ruzic D, Petkovic M, Agbaba D, Ganesan A, **Nikolic K.** Combined Ligand and Fragment-based Drug Design of Selective Histone Deacetylase-6 Inhibitors. *Molecular Informatics* 2019 May;38(5):e1800083. https://doi.org/10.1002/minf.201800083 (IF 2019: **2.741**, Mathematical & Computational Biology **11/59**)
4. Bouchet S, Linot C, Ruzic D, Agbaba D, Fouchaq B, Roche J, **Nikolic K,** Blanquart C, Bertrand P. Extending Cross Metathesis To Identify Selective HDAC Inhibitors:Synthesis, Biological Activities, and Modeling. *ACS Medicinal Chemistry Letters* 2019, 10, 863−868. https://doi.org/10.1021/acsmedchemlett.8b00440 (IF 2019: **3.975**, Chemistry, Medicinal **17/61**)
5. * Gagic Z, Ruzic D, Djokovic N, Djikic T, **Nikolic K.** *In silico* methods for design of kinase inhibitors as anticancer drugs. *Frontiers in Chemistry* 08 January 2020, Volume 7, Article 873. https://doi.org/10.3389/fchem.2019.00873 (IF 2020: **5.221**, Chemistry, Multidisciplinary **53/178**)
6. * Djikic T, Vucicevic J, Laurila J, Radi M, Veljkovic N, Xhaard H, **Nikolic K.** Deciphering Imidazoline Off□Targets by Fishing in the Class A of GPCR field. *Molecular Informatics* 2020 July, 39 (7); 1900165 https://doi.org/10.1080/10826076.2020.1725551 (IF 2019: **2.741**, Mathematical & Computational Biology **11/59**)
7. * N. Djokovic, D. Ruzic, T. Djikic, S. Cvijic, J. Ignjatovic, S. Ibric, K. Baralic, A. Buha Djordjevic, M. Curcic, D. Djukic-Cosic, **K. Nikolic**. An Integrative in Silico Drug Repurposing Approach for Identification of Potential Inhibitors of SARS-CoV-2 Main Protease. Molecular Informatics 2021, 40(5): e2000187 https://doi.org/10.1002/minf.202000187 (IF 2020: **3.353**, Mathematical & Computational Biology **15/58**)
8. * Radan M, Djikic T, Obradović D, **Nikolic K.** Application of in vitro PAMPA technique and in silico computational methods for blood-brain barrier permeability prediction of novel CNS drug candidates. *European Journal of Pharmaceutical Sciences* 2021, 168:106056. https://doi.org/10.1016/j.ejps.2021.106056 (IF 2020: **4.383**, Pharmacology & Pharmacy **88/276**)
9. * D. Obradović, M. Radan, T. Đikić, M. Popović Nikolić, S. Oljačić, **K. Nikolic**. The evaluation of drug-plasma protein binding interaction on immobilized human serum albumin stationary phase, aided by different computational approaches. *Journal of*

Pharmaceutical and Biomedical Analysis, 211, 114593, 2022. https://doi.org/10.1016/j.jpba.2022.114593 (IF 2020: **3.935**, Chemistry, Analytical **24/87**)

10. Ruzic D, Djoković N, Srdić-Rajić T, Echeverria C, **Nikolic K**, Santibanez JF. Targeting Histone Deacetylases: Opportunities for Cancer Treatment and Chemoprevention. *Pharmaceutics* 2022; 14(1):209. https://doi.org/10.3390/pharmaceutics14010209 (IF 2020: **6.321**, Pharmacology & Pharmacy **29/276**)

Radovi u istaknutom međunarodnom časopisu (M_{22})

Pre izbora u zvanje vanredni profesor

1. J. Letica, S. Markovic, J. Zirojevic, **K. Nikolic,** D. Agbaba, High-Performance Liquid Chromatographic Determination of Pantoprazole and Its Main Impurities in Pharmaceuticals. *Journal of AOAC Internatinal*, 93 (4): 1121-1128 (2010). (IF 2010: **1.229**, Chemistry/Analytical **46/73**)
2. M. Pavlovic, M. Malesevic, **K. Nikolic,** D. Agbaba, Development and Validation of an HPLC Method for Determination of Ziprasidone and Its Impurities in Pharmaceutical Dosage Forms. *Journal of AOAC International*, 94 (3), 713-722 (2011). https://doi.org/10.1093/jaoac/94.3.713 (IF 2010: **1.229**, Chemistry/Analytical **46/73**)
3. S. Tadić, **K. Nikolic,** D. Agbaba, Development and Optimization of an HPLC Analysis of Citalopram and its four Nonchiral Impurities using Experimental Design Methodology. *Journal of AOAC International*, 95(3):733-743 (2012) (IF 2010: **1.229**, Chemistry/Analytical **46/73**)
4. **K. Nikolic,** S. Filipic, D. Agbaba, Multi-Target QSAR and Docking Study of Steroids Binding to Corticosteroid-Binding Globulin and Sex Hormone-Binding Globulin, *Current Computer-Aided Drug Design*, 8 (4): 296-308 (2012), https://doi.org/10.2174/157340912803519642 (IF 2009: **1.680**, Computer Science, Interdisciplinary Applications **31/95**)
5. **K. Nikolic,** D. Agbaba, Imidazoline Antihypertensive Drugs: Selective I1-Imidazoline Receptors Activation. Cardiovascular Therapeutics 30 (4), 209-216 (2012) https://doi.org/10.1111/j.1755-5922.2011.00269.x (IF 2011: **2.353**, Pharmacology & Pharmacy **119/261**).
6. **K. Nikolic,** N. Djordjevic Filijovic, B. Maricic, D. Agbaba. Development of a novel RP-HPLC method for the efficient separation of aripiprazole and its nine impurities. *Journal of Separation Science* 36, 3165–3175 (2013). https://doi.org/10.1002/jssc.201300477 (IF 2013: **2.594**, Chemistry, Analytical **28/76**)
7. **K. Nikolic**, S. Filipic, A. Smoliński, R. Kaliszan, D. Agbaba. Partial Least Square and Hierarchical Clustering in ADMET Modeling: Prediction of Blood – Brain Barrier Permeation of α-Adrenergic and Imidazoline Receptor Ligands. *Journal of Pharmacy and Pharmaceutical Sciences* 16(4) 622 - 647, (2013) https://doi.org/10.18433/j3jk5p (IF 2012: **2.198**, Pharmacology & Pharmacy **130/261**).
8. M. R. Popovic, G. V. Popovic, S. V. Filipic, **K. Nikolic**, D. D. Agbaba. The effects of micelles of differently charged surfactants on the equilibrium between (Z)- and (E)-diastereomers of five ACE inhibitors in aqueous media. Monatsh Chem (2015)

146:913–921 https://doi.org/10.1007/s00706-014-1400-9 (IF 2014: **1.222**, Chemistry, Multidisciplinary **91/157**).

9. Filipic S, Elek M, Popovic M, **Nikolic K**, Agbaba D. Development of Hydrophilic Interaction Liquid Chromatography Method for the Analysis of Moxonidine and Its Impurities. J Anal Methods Chem. Volume 2016, Article ID 3715972, 7 pages, 2016; http://dx.doi.org/10.1155/2016/3715972 (IF 2016: **1.801**, Chemistry, Analytical **46/76**)
10. V. Dobričić, V. Jaćević, J. Vučićević, **K. Nikolic**, S. Vladimirov, O. Čudina Evaluation of Biological Activity and Computer-Aided Design of New Soft Glucocorticoids. Arch. Pharm. Chem. Life Sci. 2017, 350, e1600383 First published: 18 April 2017, http://dx.doi.org/10.1002/ardp.201600383 (IF 2017: **2.288**, Chemistry, Medicinal **38/59**)

Posle izbora u zvanje vanredni profesor

12 x 5 = 60

1. Popović-Nikolić M.R., Popović G.V., Grujić M., **Nikolic K**, Agbaba D. A theoretical study on ionization of sartans in aqueous media and on interactions with surfactant micelles. J. Molecular Graphics and Modelling, Volume 82, June 2018, Pages 67-73. http://dx.doi.org/10.1016/j.jmgm.2018.04.008 (IF 2017: **1.885**, Computer Science, Interdisciplinary Applications **56/105**)
2. Albert L, Peñalver A, Djokovic N, Werel L, Hoffarth M, Ruzic D, Xu J, Essen LO, **Nikolic K**, Dou Y, Vázquez O. Modulating Protein-Protein Interactions with Visible-Light Responsive Peptide Backbone Photoswitches. *ChemBioChem* 2019 Jun 3;20(11):1417-1429. http://dx.doi.org/10.1002/cbic.201800737 Epub 2019 Apr 25. (IF 2017: **2.774**, Chemistry, Medicinal **26/59**)
3. Čarapić M, **Nikolic K**, Marković B, Petković M, Pavlovic M, Agbaba D. Ultra□ performance liquid chromatography tandem mass spectrometry for the rapid, simultaneous analysis of ziprasidone and its impurities. *Biomedical Chromatography* 2019 Feb;33(2):e4384. http://dx.doi.org/10.1002/bmc.4384 Epub 2018 Oct 17. (IF 2017: **1.688**, Chemistry, Analytical **47/81**)
4. * Radan M, Ruzic D, Antonijevic M, Djikic T, **Nikolic K**. *In silico* Identification of Novel 5-HT2A Antagonists Supported with Ligand- and Target- Based Drug Design Methodologies. *J. Biomol. Struct. Dyn.* 2021, 39(5) 1819-1837 https://doi.org/10.1080/07391102.2020.1738961 (IF 2018: **3.310**, Biophysics **23/73**)
5. Zukić S, Oljacic S, **Nikolic K**, Veljović E, Špirtović-Halilović S, Osmanović A, Završnik D. Quantitative structure–activity relationships of xanthen-3-one and xanthen-1,8-dione derivatives and design of new compounds with enhanced antiproliferative activity on HeLa cervical cancer cells. *J. Biomol. Struct. Dyn.* 2021, 39(11) https://doi.org/10.1080/07391102.2020.1775125 (IF 2018: **3.310**, Biophysics **23/73**)
6. * Stevanovic S, Marjanović DjS, Trailović SM, Zdravković N, Perdih A, **Nikolic K**. Potential modulating effect of the Ascaris suum nicotinic acetylcholine receptor (nAChR) by compounds GSK575594A, diazepam and flumazenil discovered by structure-based

virtual screening approach. *Mol. Biochem. Parasit.* 2021, 242: 111350. https://doi.org/10.1016/j.molbiopara.2021.111350 (IF 2018: **2.158**, Parasitology 15/37)

7. M. Elek, N. Djokovic, A. Frank, S. Oljacic, A. Zivkovic, **K. Nikolic**, H. Stark. Synthesis, in silico, and in vitro studies of novel dopamine D2 and D3 receptor ligands, *Arch. Pharm.* 2021; 354: e2000486. http://dx.doi.org/10.1002/ardp.202000486 (IF 2020: **3.751**, Chemistry, Medicinal **27/63**)
8. S. Stevanovic, M. Sencanski, M. Danel, C. Menendez, R. Belguedj, A. Bouraiou, **K. Nikolic**, S. Cojean, P. M. Loiseau, S. Glisic, M. Baltas, A. T. García-Sosa. Synthesis, In Silico, and In Vitro Evaluation of Anti-Leishmanial Activity of Oxadiazoles and Indolizine Containing Compounds Flagged against Anti-Targets. *Molecules* 2019 Apr; 24(7): 1282. Published online 2019 Apr 2. http://dx.doi.org/10.3390/molecules24071282 (IF 2019: **3.267**, Chemistry, Multidisciplinary **70/177**)
9. Bon, C., Si, Y., Pernak, M., Barbachowska, M.; Levi-Acobas, E., Cadet Daniel, V., Jallet, C., Ruzic, D., Djokovic, N., Djikic, T., **Nikolic K**, Halby L., Arimondo P. Synthesis and Biological Activity of a Cytostatic Inhibitor of MLLr Leukemia Targeting the DOT1L Protein. Molecules 2021, 26, 5300. https://doi.org/10.3390/molecules26175300. (IF 2020: **4.412**, Chemistry, Multidisciplinary **63/178**)
10. Jovanović M, Turković N, Ivković B, Vujić Z, **Nikolic K**, Grubišić S. 3D-QSAR, molecular docking and in silico ADMET studies of propiophenone derivatives with anti-HIV-1 protease activity. *Struct Chem* 32, 2341–2353 (2021). https://doi.org/10.1007/s11224-021-01810-1 (IF 2019: **2.081**, Chemistry, Multidisciplinary **98/177**)
11. Milović, J. Petronijević, N. Joksimović, M. Beljkaš, D. Ružić, **K. Nikolic**, M. Vraneš, A. Tot, Marija Đ. Crnogorac, T. Stanojković, N. Janković. Anticancer evaluation of the selected tetrahydropyrimidines: 3D-QSAR, cytotoxic activities, mechanism of action, DNA, and BSA interactions. *J. Molec. Struct.* 1257, 132621 (2022), https://doi.org/10.1016/j.molstruc.2022.132621 (IF 2020: **3.196**, Chemistry, Physical **83/162**)
12. * Alves Avelar LA, Ruzic D, Djokovic N, Kurz T, **Nikolic K.** Structure-based design of selective histone deacetylase 6 zinc binding groups. *J Biomol Struct Dyn.* 2020 38(11), 3166-3177 https://doi.org/10.1080/07391102.2019.1652687 (IF 2018: **3.310**, Biophysics **23/73**)

Radovi u međunarodnom časopisu (M_{23})

Pre izbora u zvanje vanredni profesor

1. **K. Nikolic,** C. Sergides, A. Pittas. The application of the Near Infrared Reflectance Spectroscopy (NIRS) for quantitative analisys of hydrocortisone in primary matherials. *Journal of Serbian Chemical Society*, 66 (3), 189-198, (2001) https://doi.org/10.2298/JSC0103189N (IF 2005: **0.389**, Chemistry, Multidisciplinary (**99/124**).
2. **K. Nikolic**, Theoretical Study of Phenolic Antioxidants Properties in Reaction with Oxygen-Centered Radicals. *Journal of Molecular Structure THEOCHEM*, 774 (1-3), 95-105 (2006). https://doi.org/10.1016/j.theochem.2006.07.017 (IF 2005: **1.045**, Chemistry/Physical (**78/111**)).
3. **K. Nikolic**, QSAR Study of α-Tocopherol derivatives with Chemotherapeutic Activity against Human Breast Cancer Cells, *Journal of Molecular Structure THEOCHEM*, 809 (1-3), 137-143 (2007). https://doi.org/10.1016/j.jmgm.2007.05.008 (IF 2005: **1.045**, Chemistry/Physical (**78/111**)).
4. **K. Nikolic**, Mechanistic studies of Phenolic Antioxidants in Reaction with Nitrogen and Oxygen Centered Radicals. https://doi.org/10.1016/j.theochem.2007.05.011 *Journal of Molecular Structure THEOCHEM*, 818 (1-3), 141-150 (2007). (IF 2007: **1.112**, Chemistry/Physical **74/110**)
5. K. Vučićević, G. Popović, **K. Nikolic**, I. Vovk, and D. Agbaba, An experimental design approach to selecting the optimum HPLC conditions for the determination of 2-arylimidazoline derivatives. *Journal of Liquid Chromatography and Related Techniques*, 32(5) 656-667 (2009). https://doi.org/10.1080/10826070802711113 (IF 2008: **1.026**, Chemistry/Analytical **50/70**)
6. **K. Nikolic**, D. Agbaba, QSAR Study and Design of Novel Organoselenium and α-Tocopherol Derivatives with Enhanced Chemotherapeutic Activity. *Letters in Drug Design & Discovery*, 6 (3), 228-235 (2009). https://doi.org/10.2174/157018009787847882 (IF 2008: **0.786**, Chemistry/Medicinal **33/40**)
7. Rakic Ignjatovic, **K. Nikolic**, B. Miljkovic, M. Pokrajac, D. Agbaba, M. Prostran, Determination of moclobemide and its metabolites in human plasma by SPE-HPLC-UV: evaluation of critical experimental conditions and quantitative structure-retention relationship model for prediction of chromatographic behaviour of potentially interfering drugs. *Journal of Liquid Chromatography and Related Techniques*, 32, 2080–2096 (2009). https://doi.org/10.1080/10826070903126963 (IF 2008: **1.026**, Chemistry/Analytical **50/70**)
8. N. Ravanic, S. Filipic, **K. Nikolic**, G. Popovic, I.Vovk, B. Simonovska, D. Agbaba, Analysis of alpha-Lipoic Acid in Drug Formulations and Dietary Supplement Preparations. *Acta Chromatographica* 21 (3), 433-441 (2009). https://doi.org/10.1556/achrom.21.2009.3.7 (IF 2007: **0.746**, Chemistry/Analytical **52/70**)
9. D. Antic, S. Filipic, B. Ivkovic, **K. Nikolic**, D. Agbaba, Direct Separation of Clopidogrel Enantiomers by Reverse-Phase Planar Chromatography Method Using β-

Cyclodextrin as a Chiral Mobile Phase Additive. *Acta Chromatographica* 23 (2), 235–245 (2011). https://doi.org/10.1556/achrom.23.2011.2.4 (IF 2007: **0.746**, Chemistry/Analytical **52/70**).

10. K. Ranković, S. Filipić, **K. Nikolic**, D. Agbaba, TLC determination of tiapride hydrochloride and its impurities in pharmaceuticals. *Journal of Liquid Chromatography & Related Technologies* 35 (10), 1336-1345 (2012) https://doi.org/10.1080/10826076.2012.675870 (IF 2010: **0.953**, Chemistry/Analytical **53/73**).
11. I. Savic, G. Nikolic, I. Savic, **K. Nikolic**, D. Agbaba, Development and Optimization of formulaton for treatment of copper defficiency in human organism. *Acta Poloniae Pharmaceutica- Drug Research*, 69(4), 739-749 (2012). (IF 2011: **0.663**, Pharmacology & Pharmacy **227/261**).
12. I. Savic, **K. Nikolic**, G. Nikolic, I. Savic, D. Agbaba, Application of mathematical modeling for the development and optimization formulation with bioactive copper complex. *Drug Development and Industrial Pharmacy* 2013, 39, 7, 1084-1090. https://doi.org/10.3109/03639045.2012.707208 (IF 2011: **1.618**, Pharmacology & Pharmacy **164/261**).
13. N. Djordjević Filijović, A. Pavlović, **K. Nikolic**, D. Agbaba. Validation of an HPLC method for determination of aripirazole and its impurities in pharmaceuticals. *Acta Chromatographica*, 26(1), 13-28 (2014). https://doi.org/10.1556/achrom.26.2014.1.15 (IF 2014: **0.577**, Chemistry, Analytical **65/74**)
14. V. Topić, S. Filipić, G. Popović, **K. Nikolic**, D. Agbaba. TLC determination of glimepiride and its main impurities in pharmaceuticals. *Journal of Liquid Chromatography & Related Technologies* 36(17), 2422-2430, (2013) https://doi.org/10.1080/10826076.2013.790767 (IF 2013: **0.638**, Chemistry, Analytical **67/76**)
15. Ranković, S. Filipić, **K. Nikolic**, D. Agbaba, TLC determination of tiapride hydrochloride and its impurities in pharmaceuticals. *Journal of Liquid Chromatography & Related Technologies* 35 (10), 1336-1345 (2012). https://doi.org/10.1080/10826076.2012.675870 (IF 2012: **0.565**, Chemistry, Analytical **64/75**)
16. N. Djordjević Filijović, M. D. Antonijevic, A. Pavlovic, I. Vuckovic, **K. Nikolic**, D. Agbaba. The stress stability of olanzapine: studies of interactions with excipients in solid state pharmaceutical formulations. *Drug Development and Industrial Pharmacy*, 2015 Mar;41(3):502-14. https://doi.org/10.3109/03639045.2014.884114 (IF 2015: **2.429**, Chemistry, Medicinal **32/59**)
17. **K. Nikolic**, D. Agbaba, Imidazoline receptors ligands (Ligandi Imidazolinskih Receptora), *Hemijska industrija* 66(5) 619–635 (2012), https://doi.org/10.2298/HEMIND120221037N (IF 2012: **0.463**, Engineering, Chemical **104/133**)
18. S. M. Shenger, S. Filipic, **K. Nikolic**, D. Agbaba. Estimation of lipophilicity and retention behavior of some alpha adrenergic and imidazoline receptor ligands using RP-TLC. *Journal of Liquid Chromatography & Related Technologies* 37(20), 2829-2845 (2014) https://doi.org/10.1080/10739149.2014.906880 (IF 2014: **0.606**, Chemistry, Analytical **64/74**)

19. **K. Nikolic**, M. Aleksic, V. Kapetanovic, D. Agbaba. Voltammetric and theoretical studies of the electrochemical behavior of cephalosporins at a mercury electrode. *J. Serb. Chem. Soc.* 80 (8) 1035–1049 (2015) https://doi.org/10.2298/JSC150129019N (IF 2015: **0.970**, Chemistry, Multidisciplinary **120/163**).
20. S. Filipic, M. Elek, **K. Nikolic**, D. Agbaba. Quantitative Structure–Retention Relationship Modeling of the Retention Behavior of Guanidine and Imidazoline Derivatives in Reversed-Phase Thin-Layer Chromatography. *Journal of Planar Chromatography* 28 (2015) 2, 119–125. https://doi.org/10.1556/jpc.28.2015.2.6 (IF 2015: **0.611**, Chemistry, Analytical **65/75**)
21. M. Đanić, N. Pavlović, B. Stanimirov, S. Vukmirović, **K. Nikolic**, D. Agbaba, M. Mikov. The influence of bile salts on the distribution of simvastatin in the octanol/buffer system. *Drug Dev Ind Pharm.* 2016; 42(4):661-7. https://doi.org/10.3109/03639045.2015.1067626 (IF 2016: **2.295**, Chemistry, Medicinal **36/60**).
22. S. Filipic, MSM Shenger, **K. Nikolic**, D. Agbaba. Determination of Moxonidine and Its Impurities by Thin-Layer Chromatography. *Journal of Planar Chromatography: Modern TLC.* 28 (2) 1121-1125 (2015). https://doi.org/10.1080/10826076.2015.1028291 (IF 2015: **0.611**, Chemistry, Analytical **65/75**)
23. M. Smajic, **K. Nikolic**, Z. Vujic, L. Ahmetovic, V. Kuntic. 3D-QSAR studies and pharmacophore identification of AT1 receptor antagonists. *Medicinal Chemistry Research* January 2016, Volume 25, Issue 1, pp 51-61. https://doi.org/10.1007/s00044-015-1470-1 (IF 2016: **1.277**, Chemistry, Medicinal **48/60**)
24. Obradovic D, Filipic S, **Nikolic K**, Carapic M, Agbaba D. Optimization of TLC method for separation and determination of ziprasidone and its impurities. *J Liq Chromatogr R T.* 2016 Mar;39(5-6):271-6. https://doi.org/10.1080/10826076.2016.1163183 (IF 2016: **0.697**, Chemistry, Analytical **68/76**)
25. Obradovic D, Filipic S, **Nikolic K**, Agbaba D. Optimization of the Thin-Layer Chromatography Method for the Separation of Ziprasidone and Its Impurities. *JPC-J Planar Chromat.* 2016 July;29(4) 239-46. https://doi.org/10.1556/1006.2016.29.4.1 (IF 2016: **0.736**, Chemistry, Analytical **65/76**)
26. Filipic S, Antic A, Vujovic M, **Nikolic K**, Agbaba D. A Comparative Study of Chromatographic Behavior and Lipophilicity of Selected Imidazoline Derivatives. *J Chromatogr Sci.* 2016 Aug; 54(7):1137-45. https://doi.org/10.1093/chromsci/bmw081 (IF 2016: **0.984**, Chemistry, Analytical **59/76**)
27. D. Obradović, S. Oljačić, **K. Nikolic**, D. Agbaba. Influence of selected mobile phase properties on the TLC retention behavior of ziprasidone and its impurities. *J. Liq. Chrom. Rel. Techn.* 2017, VOL. 40, NOS. 5–6, 247–251. http://dx.doi.org/10.1080/10826076.2017.1298026 (IF 2016: **0.697**, Chemistry, Analytical **68/76**).

28. S. Oljacic, A. Arsic, D. Obradovic, **K. Nikolic**, D. Agbaba. Analysis of the Retention Behavior of Selected Antipsychotics and Their Impurities by Thin-Layer Chromatography. *Journal of Planar Chromatography* (2017) 30(5), 1-10. https://doi.org/10.1556/1006.2017.30.5.2 (IF 2016: **0.736**, Chemistry, Analytical **65/76**).
29. J. Oluić, **K. Nikolic**, J. Vucicevic, Z. Gagic, S. Filipic, D. Agbaba. 3D-QSAR, Virtual Screening, Docking and Design of Dual PI3K/mTOR Inhibitors with Enhanced Antiproliferative Activity. *Combinatorial Chemistry & High Throughput Screening* 2017, 20 (4), 292-303. https://doi.org/10.2174/1386207320666170427143858 (IF 2017: **1.205**, Pharmacology & Pharmacy **226/261**)
30. S. Oljacic, A. Arsic, D. Obradovic, **K. Nikolic**, D. Agbaba. Analysis of the Retention Behavior of Selected Antipsychotics and Their Impurities by Thin-Layer Chromatography. *Journal of Planar Chromatography* (2017) 30(5), 1-10. https://doi.org/10.1556/1006.2017.30.5.2 (IF 2016: **0.736**, Chemistry, Analytical **65/76**)

Posle izbora u zvanje vanredni profesor

2 x 3 = 6

1. D. Obradović, D. Jovanović, S. Pešić, J. Tomić, S. Oljačić, **K. Nikolić**, D. Agbaba. Analysis of the retention behavior of selected antiarrhythmics by means of thin-layer chromatography. *Journal of Liquid Chromatography & Related Technologies*. Volume 42, 2019, Issue 9-10: Thin Layer Chromatography. 317-323 https://doi.org/10.1080/10826076.2019.1585613. (IF 2019: **0.992**, Chemistry, Analytical **75/86**)
2. Bošković J, Ružić D, Čudina O, **Nikolic K**, Dobričić V. Design of Dual COX-2 and 5-LOX Inhibitors with Iron-Chelating Properties Using Structure-Based and Ligand-Based Methods, *Letters in Drug Design & Discovery* 2022, 19(4), 279-292. https://doi.org/10.2174/1570180818666210714161908 (IF 2020: **1.150**, Chemistry, Medicinal **57/63**)

Naučni radovi objavljeni u nacionalnom časopisu (M_{52})

Pre izbora u zvanje vanredni profesor

1. **Nikolić K**, Filipić S, Agbaba D. Ligandi I1-Imidazolinskih receptora sa centralnim antihipertenzivnim dejstvom, *Arhiv za farmaciju* 2013; 63: 293-306. https://scindeks.ceon.rs/article.aspx?artid=0004-19631303293N
2. Gagić Ž, Ivković B, **Nikolić K**, Agbaba D. Primena metoda tankoslojne hromatografije i hromatografije na koloni u sintezi α-tokoferil-lizin estra sa antiproliferativnom aktivnošću na ćelijama karcinoma dojke. *Arhiv za farmaciju* 2014, 64: 261-270. https://scindeks.ceon.rs/article.aspx?artid=0004-19631403261G
3. **Nikolic K**, Filipic S, Agbaba D. Polypharmacology of dopamine D1-like receptor antagonists. *Arhiv za farmaciju* 2015; 65: 287-303. https://scindeks.ceon.rs/article.aspx?artid=0004-19631505287N

4. M. Radan, **K. Nikolić**, J. Vućićević, S. Oljačić, D. Agbaba. 3D-QSAR studija i razvoj farmakofore agonista serotoninskih 5-HT2A receptora. Arh. farm. 2017;67: 165 – 179. https://scindeks.ceon.rs/article.aspx?artid=0004-19631703165R
5. Antonijević M, **Nikolić K**, Vučićević J, Oljačić S, Agbaba D. 3D-QSAR modelovanje i analiza farmakofore antagonista serotoninskih 5-HT2A receptora. *Arhiv za farmaciju* 2017, vol. 67, br. 4, str. 233-247. https://scindeks.ceon.rs/article.aspx?artid=0004-19631704233A

Posle izbora u zvanje vanredni profesor

3 x 1,5 = 4,5

1. Jovanović M, **Nikolić K**, Gagić Ž, Agbaba D. Molekulsko modelovanje i analiza 3D-strukture farmakofore selektivnih PI3K-α inhibitora kao antitumorskih agenasa. *Arhiv za farmaciju* 68: 860 – 873 (2018). https://doi.org/10.5937/ArhFarm1804860J
2. Radan M, Bošković J, Dobričić V, Čudina O, **Nikolić K**. Current computer-aided drug design methodologies in discovery of novel drug candidates for neuropsychiatric and inflammatory diseases. *Archives of Pharmacy* 2021, 71, 4. https://doi.org/10.5937/arhfarm71-32523
3. Ružić, D., Đoković, N., **Nikolić, K.**, Vujić, Z. (2021). Medicinska hemija inhibitora histon deacetilaza. *Archives of Pharmacy* 2021, 71(2), 73-100. https://doi.org/10.5937/arhfarm71-30618

Zbornici međunarodnih naučnih skupova (M_{30}):

Pre izbora u zvanje vanredni profesor

Predavanje po pozivu sa međunarodnog skupa štampano u celini (M_{31}):
1. Nikolic K, Vucicevic J, Popovic M, Filipic S, Obradovic D, Dobričić V, Agbaba D. Study of blood-brain barrier permeation using parallel artifical membrane permeability assay and quantitative-structure permeability relationship modeling. 11th Central European Symposium on Pharmaceutical Technology. September 22-24, 2016, Belgrade, Serbia. Book of Abstracts, Arh. farm. 2016; 66/Special Issue, Invited lectures, IL 08, 25-26p.

Posle izbora u zvanje vanredni profesor

Predavanje po pozivu sa međunarodnog skupa štampano u celini (M_{31}): 3 poena

1. Ruzic D, Djokovic N, Petkovic M, Agbaba D, Lahtela-Kakkonen M, Ganesan A, Nikolic K. Rational design of selective histone deacetylase inhibitors. 14th International Conference on Fundamental and Applied Aspects of Physical

Chemistry, 24-28 September, 2018, Belgrade, Serbia. PHYSICAL CHEMISTRY 2018 (Proceedings), Volume II, 923-929p

Predavanje po pozivu sa međunarodnog skupa štampano u izvodu (M_{32})

Pre izbora u zvanje vanredni profesor

1. Nikolić K., "*Predictive models for specific recognition between the ligands and enzymes*", CM1103 Action Conference 2012: The beginning: projects and expertise to address drug design for malfunction in the monoaminergic system, Brisel, Belgija, 1-3 Februar 2012.
2. Nikolić K., "*Development of predictive theoretical models for enzyme inhibition*", CM1103 Action WGs Meeting 2012: Structure-based drug design for diagnosis and treatment of neurological diseases: dissecting and modulating complex function in the monoaminergic systems of the brain, Lisbon, Portugal, 28-29 April 2012.
3. Nikolic K., Agbaba D., Stark H. Pharmacophore Modeling of Novel *Nonimidazole Histamine H_3 Receptor Ligands with Inhibitory Histamine N-Methyltransferase Activity.* CM1103 Action conference: "Interdisciplinary Chemical Approaches for Neuropathology", Valletta, Malta, 22-25 October 2013.
4. K. Nikolic, L. Mavridis, O.M. Bautista-Aguilera, J.L. Marco-Contelles, H. Stark, M. Carreiras, I. Rossi, P. Massarelli, D. Agbaba, R.R. Ramsay, J.B.O. Mitchell. *Theoretical and pharmacological study of multi-target compounds against neurological diseases.* CM 1103 Action conference, 8nd-10th October 2014, Bordeaux, France.
5. K. Nikolic, L. Mavridis, O.M. Bautista-Aguilera, J.L. Marco-Contelles, H. Stark, M. Carreiras, I. Rossi, P. Massarelli, D. Agbaba, R.R. Ramsay, J.B.O. Mitchell. *Development of a chemometric method to study the pharmacological and side effects of drugs.* VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.
6. Katarina Nikolic, Lazaros Mavridis, Teodora Djikic, Oscar M. Bautista-Aguilera, José Marco-Contelles, Holger Stark, Maria do Carmo Carreiras, Ilaria Rossi, Paola Massarelli, Danica Agbaba, Kemal Yelekci, Rona R. Ramsay, and John B. O. Mitchell. Computer-Aided Drug design for Neurological Targets. COST CM1103 ESR Conference in Belgrade 6th-8th May, Belgrade, Serbia.
7. Vucicevic J, Nikolić K, Popović M, Filipić S, Agbaba D. The use of biopartitioning micellar chromatography for determination of BBB penetration of α-adrenergic/imidazoline receptor ligands. p. 54, 21st International Symposium on Separation Sciences. Slovenija 30.6.-3.7. 2015.
8. K. Nikolic, S. Filipic, J. Vucicevic, D. Ruzic, D. Agbaba. Computer-Aided Drug Design of Antineoplastic Agents. COST CM1406 -EPIGEN MEETING September 28-29, 2015, Budapest, Hungary
9. K. Nikolic, L. Mavridis, T. Djikic, O. M. Bautista-Aguilera, J. Vucicevic, J. Marco-Contelles, H. Stark, M. Carreiras, I. Rossi, P. Massarelli, D. Agbaba, K. Yelekci, R. R. Ramsay, J.B.O. Mitchell. Computer-Aided Drug Design of Multitarget Ligands. Final Action Conference COST CM1103 21-23rd, October 2015, Istanbul, Turkey.

10. Ruzic D, Nikolic K, Agbaba D, Ganesan A. Molecular modelling – design of selective Histone Deacetylase 6 epigenetic inhibitors, ISC and Alumni Symposium, Department of Biophysical Chemistry, Max Planck University, Goettingen, Germany (August 19, 2016), 15p.
11. Ruzic D, Nikolic K, Agbaba D, Ganesan A. Molecular docking studies into new crystal second catalytic domain of HDAC6. CM1406 – Epigenetic Chemical Biology (EPICHEMBIO) – COST CM1406. WG1 Scientific Workshop – EPIGENETIC CHEMICAL PROBES. Belgrade, 16. January 2017. page 16.

Posle izbora u zvanje vanredni profesor

12 x 1,5 = 18,0

1. Ruzic D, Djokovic N, Petkovic M, Agbaba D, Lahtela-Kakkonen M, Ganesan A, Nikolic K. Computer-Aided drug design of selective histone deacetylase inhibitors. European Congress on Advanced Chemistry, July 12-13, 2018, Paris, France. pp. 28. J Org Inorg Chem 2018, Volume 4.
2. Dusan Ruzic, Nemanja Djokovic, Milos Petkovic, Danica Agbaba, Maija Lahtela-Kakkonen, Katarina Nikolic, A. Ganesan. Computer-aided design of histone deacetylase inhibitors. Epigenetic Chemical Biology – Action CM1406, Computational Methods in Drug Design. Training School 22 – 24 March 2018, Istanbul, Turkey.
3. S. Rodríguez-Arévalo, A. Bagán, P. Pérez-Lozano, F. Vasilopoulou, C. Griñán-Ferré, M. Pallàs, B. Pérez, L. F. Callado, E. Hernández, J. M. García-Fuster, J. A. García-Sevilla, M. Radan, T. Djikic, K. Nikolic, J. Brea, M. I. Loza, L. Naesens, C. Escolano. Preclinical data on (2-imidazolin-4-yl) phosphonates. 19th National Meeting "New challenges in drug discovery", Faculty of Pharmacy of the University of the Basque Country, Vitoria-Gasteiz (Spain). July 8-11, 2019.
4. Milica Radan, Mirjana Antonijevic, Teodora Djikic, Dusan Ruzic, Katarina Nikolic. Combined 3D-QSAR modeling, molecular dynamics and molecular docking studies in rational drug design of novel 5-HT2A antagonists. 8th International Conference on Computational Bioengineering (ICCB2019), Belgrade, Serbia. September 4-6, 2019.
5. Ruzic, D., Djokovic, N., Petkovic, M., Agbaba, D., Gul, S., Lahtela-Kakkonen, M., Ganesan, A., and Nikolic, K. Rational design and evaluation of selective HDAC inhibitors. EpiChemBio WG1 meeting, Salerno, 4-5 March 2019.
6. Milica Elek, Annika Frank, Nemanja Djokovic, Slavica Oljacic, Aleksandra Zivkovic, Katarina Nikolic, Holger Stark. Pentafluorosulfanyl (SF5) moiety as promising substituent in synthesis and design of novel D2 and D3 receptors ligands. BOOK of ABSTRACTS MedChem2019; Paul Ehrlich Euro-PhD Network & MuTaLig COST Action meeting; p. 66. Catanzaro (Italy), June 13th-15th 2019
7. D. Ruzic, N. Djokovic, M. Petkovic, D. Agbaba, S. Gul, M. Lahtela-Kakkonend, A. Ganesan, K. Nikolic. Computer-Aided Drug Design and Evaluation of Selective HDAC Inhibitors. 12th EUROPEAN CONFERENCE ON COMPUTATIONAL THEORETICAL CHEMISTRY PERUGIA, 1-5 SEPTEMBER 2019
8. Milica Radan, Dusan Ruzic, Mirjana Antonijevic, Teodora Djikic, Katarina Nikolic. Application of computational methods for antipsychotic drug design and

optimization. 10th International Conference on Biotechnology and Bioengineering (ICBB2020). Dec. 16-18, 2020. Virtual (Video Online).

9. Adam Lee, A. Ganesan, İpek Bulut, Ceyda Açılan Ayhan, Dusan Ruzic, Katarina Nikolic, Sheraz Gul. Multitargeting epi-epi drugs for multidrug reistance. COST Action 17104 (STRATAGEM), WG2 Meeting and International Online Symposium on "Synthesis and nanodelivery strategies for new therapeutic tools against Multidrug Resistant Tumours", December 2020, page 12.
10. M. Radan; D. Ruzic; M. Antonijevic; T. Djikic; K. Nikolic. Application of Computational Methods for Antipsychotic Drug Design and Optimization. Basic Clin Pharmacol Toxicol. 2021;128(Suppl. 2): page 3.
11. Ruzic, D., Djokovic, N., Bon C., Petkovic, M., Ellinger B., Gul, S., Santibanez F. J., Lahtela-Kakkonen, M., Halby L., Ganesan, A., Srdic-Rajic T., Arimondo P., Nikolic, K. Epigenetic drug discovery: Successful examples of Computer-Aided Drug Designing of Histone Deacetylase (HDAC6 and SIRT2) and Histone Methyltransferase (DOT1L) inhibitors. e-EuCo-CTC 2021, Online conference, EuChemS Division of Computational and Theoretical Chemistry, November 18-19 2021. ABSTRACTS OF PRESENTATIONS, BIOMOLECULAR SYSTEMS, page 35.
12. Ruzic, D., Djokovic, N., Bon C., Petkovic, M., Ellinger B., Gul, S., Santibanez F. J., Lahtela-Kakkonen, M., Halby L., Ganesan, A., Srdic-Rajic T., Arimondo P., Nikolic, K. Computer-Aided Drug Designing of Histone Deacetylase and Histone Methyltransferase inhibitors, Journal Club on Drug Design, Institut Pasteur, Paris, France, 26 November 2021.

Saopštenje sa međunarodnog skupa štampano u celini (M_{33}):

Pre izbora u zvanje vanredni profesor

1. K. Nikolić, M. M. Aleksić, V. Kapetanović. *Voltammetric and theoretical study of cephalosporins at the mercury electrode.* 12th International Conference on Fundamental and Applied Aspects of Physical Chemistry, Belgrade, Serbia, 22-26 September 2014.
2. J. Vučićević, K. Nikolić, V. Dobričić, D. Agbaba. *Application of PAMPA model to predict BBB permeability of forty comercial drugs.* 12th International Conference on Fundamental and Applied Aspects of Physical Chemistry, Belgrade, Serbia, 22-26 September 2014.
3. Ž. Gagic, B. Ivkovic, J. Vucicevic, D.Agbaba, K. Nikolic. *The synthesis of amino acid analog of vitamin E.* 12th International Conference on Fundamental and Applied Aspects of Physical Chemistry, Belgrade, Serbia, 22-26 September 2014.
4. Dobričić V, Savić J, Nikolic K, Vladimirov S, Brborić J. In vitro prediction of gastrointestinal absorption of novel β-hydroxy-β-arylalcanoic acids using parallel artificial membrane permeability assay. 11th Central European Symposium on Pharmaceutical Technology, September 22-24, 2016, Belgrade, Serbia. Book of Abstracts, Arh. farm. 2016; Special Issue, Poster Presentations, PP30, 137-138 p.
5. Filipic S, Ruzic D, Vucicevic J, Nikolic K, Agbaba D. Linear solvation energy relationship study of selected imidazoline receptor ligands on α1-acid glycoprotein

column. 13th International Conference on Fundamental and Applied Aspects of Physical Chemistry, September 26-30, 2016, Belgrade, Serbia. PHYSICAL CHEMISTRY 2016 (Proceedings), Volume II, 821-824p.

6. Popović M, Popović G, Nikolić K, Grujić M, Agbaba D. Theoretical study of ionization of sartans in aqueous media. 13th International Conference on Fundamental and Applied Aspects of Physical Chemistry. September 26-30, 2016, Belgrade, Serbia. PHYSICAL CHEMISTRY 2016 (Proceedings), Volume II, 801-804p.
7. Filipic S, Elek M, Popovic M, Nikolic K, Agbaba D. Optimization and validation of a hydrophilic interaction liquid chromatography method for determination of moxonidine and its impurities. PHYSICAL CHEMISTRY 2016 (Proceedings), Volume II, 825-828p.
8. Pavel Mucaji, Atanas G. Atanasov, Andrzej Bak, Violetta Kozik, Karolina Sieron, Mark Olsen, Weidong Pan, Yazhou Liu, Shengchao Hu, Junjie Lan, Norbert Haider, Robert Musiol, Jan Vanco, Marc Diederich, Seungwon Ji, Jan Zitko, Dongdong Wang, Danica Agbaba, Katarina Nikolic, Slavica Oljacic, Jelica Vucicevic, Daniela Jezova, Anna Tsantili-Kakoulidou, Fotios Tsopelas, Constantinos Giaginis, Teresa Kowalska, Mieczyslaw Sajewicz, Jerzy Silberring, Przemyslaw Mielczarek, Marek Smoluch, Izabela Jendrzejewska, Jaroslaw Polanski, Josef Jampilek. The Forty-Sixth Euro Congress on Drug Synthesis and Analysis: Snapshot. Molecules 2017, 22, 1848, 1-37 doi:10.3390/molecules22111848

Posle izbora u zvanje vanredni profesor

6 x 1,0 = 6,0

1. Ž. Gagić, M. Jovanović, D. Agbaba, K. Nikolić, 3D-Molecular pharmacophore determination of PI3K-α kinase inhibitors. 14th International Conference on Fundamental and Applied Aspects of Physical Chemistry. Belgrade 24-28 September 2018. (Proceedings) B07-P. page 97-100.
2. Djokovic N, Rajkovic A, Nikolic K. 3D-QSAR study of pyrazolo[3,4-d]pyrimidines and1,3,4-thiadiazoles as bcr-abl1 inhibitors. BCR-ABL1. 14th International Conference on Fundamental and Applied Aspects of Physical Chemistry. Belgrade 24-28 September 2018. (Proceedings) B09-P. page 105-108.
3. D. Ružić, A. Čebzan, K. Nikolić. A 3D-QSAR study on a set of MAPK1 inhibitors. 14th International Conference on Fundamental and Applied Aspects of Physical Chemistry), September 24-28, 2018, Belgrade, Serbia. PHYSICAL CHEMISTRY 2018 (Proceedings), Volume II, B08-P, 101-104p.
4. D. Obradović, M. Radan, M. Popović-Nikolić, S. Oljačić, K. Nikolić. The molecular basis of drug-plasma protein interaction for CNS active compounds. 1st International Conference on Chemo and Bioinformatics (ICCBIKG), October 26-27, 2021. Kragujevac, Serbia – pages: 375-378. https://doi.org/10.46793/ICCBI21.375O
5. Djokovic, N., Postolovic, A., Nikolic, K. (2021). Molecular modeling of 5□ [(amidobenzyl)oxy]□ nicotinamides as sirtuin 2 inhibitors using alignment-(in)dependent 3D-QSAR analysis and molecular docking. 1st International

Conference on Chemo and BioInformatics, ICCBIKG October 26-27, 2021. Kragujevac, Serbia, pages 410-413 https://doi.org/10.46793/ICCBI21.410DJ

6. M. Carapic, K. Nikolic, D. Agbaba. QSRR modeling of liquid chromatography separation of ziprasidone compounds. 1st International Conference on Chemo and BioInformatics, ICCBIKG October 26-27, 2021. Kragujevac, Serbia. pages 284-287 https://doi.org/10.46793/ICCBI21.284C

Saopštenja sa međunarodnih skupova štampana u izvodu (M_{34})

Pre izbora u zvanje vanredni profesor

1. K. Nikolic, X. Druza, A. Keramidas, and M. Rikku, NMR Study of Antioxidant Ability of Aromatic Selenium Derivatives - Diphenyl Diselenide, and Phenyl-Seleno-Succinic Methyl Ester, pp. 212-214, Seventh Chemical Congress Greece – Cyprus, Nicosia, Cyprus (Novembar 2001).
2. K. Nikolic, and D. Agbaba Theoretical Study of Phenolic Antioxidants Properties in Reaction with Oxygen-Centered Radicals, IV Pharmaceutical Science Congress, Belgrade, Serbia (Nov-Dec 2006).
3. K. Nikolic, and D. Agbaba, Theoretical Study of Phenolic Antioxidants in reaction with Nytrogen Centered Radicals, The Eleventh Electronic Computational Chemistry Conference, Monmouth University, West Long Branch, NJ, 2-20 April 2007.
4. K. Nikolic, and D. Agbaba, Theoretical Analysis of Phenolic Antioxidants in reaction with Oxygen-Centered Radicals , The Eleventh Electronic Computational Chemistry Conference, Monmouth University, West Long Branch, NJ, 2-20 April 2007.
5. K. Nikolic, and D. Agbaba, QSAR study of gamma-Tocopherol and Cholesterol Analogs with Antiproliferative Activity against Human Breast Adenocarcinoma Cells, Pharmaceutical Science World Congress, Amsterdam, The Netherlands, 22-25 April 2007.
6. K. Nikolic, and D. Agbaba, Theoretical Study of Phenolic Antioxidants Properties in Reaction with Nitrogen and Oxygen Centered Radicals, Pharmaceutical Science World Congress, Amsterdam, The Netherlands, 22-25 April 2007.
7. K. Nikolic, and D. Agbaba, Design of novel organoselenium and alpha-tocopherol compounds with enhanced chemotherapeutic activity, 5th Jointh Meeting on Medicinal Chemistry, Portorož, Slovenia, 17-21 June 2007.
8. K. Nikolic, and D. Agbaba, QSAR study of antiproliferative activity of α-tocopherol and cholesterol derivatives against human breast cancer cells, 5th Jointh Meeting on Medicinal Chemistry, Portorož, Slovenia, 17-21 June 2007.
9. K. Nikolic, and D. Agbaba, Theoretical Study of Phenolic Antioxidants Properties in Reaction with Nitrogen and Oxygen Centered Radicals, Humboldt Conference of Noncovalent Interactions, Vršac, Serbia, 15-18 Nov 2007.
10. S. Filipic, K. Nikolic, S. Eric, and D. Agbaba, Theoretical study of inclusion complexes between β-cyclodextrin and guanidine/imidazoline analogs, Humboldt Conference of Noncovalent Interactions, Vršac, Serbia, 15-18 Nov 2007.
11. V. Tadić, S. Djordjević, I. Arsić, K. Nikolic, N. Gligorijevic, S. Radulović, G. Marković, Cytotoxic activity and antioxidative properties of Sideritis scardica extracts, 7th Joint Meeting of GA, AFERP, ASP, PSI & SIF, August 3–8, 2008, Athens, Greece.

12. S. Filipic, K. Nikolic, M. Krizman and D. Agbaba, Theoretical study of inclusion complexes between β-cyclodextrin and guanidine/imidazoline analogs, Drugs Fut 2008, 33 (Suppl. A) P067: XXth Int Symp Med Chem (Aug 31-Sept 4, Vienna) 2008.
13. K. Nikolic and D. Agbaba, QSAR study and design of novel organoselenium and α-tocopherol compounds with enhanced chemotherapeutic activity, P-10, IX Plant Research Conference, (17-20 Sept, Kosmaj, Serbia) 2008.
14. K. Vučićević, K. Nikolic, T. Šolmajer, and D. Agbabaa, The Quantitative Structure-Retention Relationship (QSRR) analysis of some centrally acting antihypertensives, P-78, 17th European Symposium on QSAR in "omics" and Systems Biology, (21-26 Sept, Uppsala, Sweden) 2008.
15. K. Nikolic, S. Filipic, and D. Agbaba, The QSAR study of selective I1-Imidazoline Receptor Ligands, P-79, 17th European Symposium on QSAR in "omics" and Systems Biology, (21-26 Sept, Uppsala, Sweden) 2008.
16. K. Nikolic, S. Filipic, and D. Agbaba, QSAR study of Imidazoline antihypertensive drugs, P02 page 52, Trends in Drug Research, (03-08 May, Noordwijkerhout, Netherlands) 2009.
17. N. Ravanic, K. Nikolic, G. Popovic, I. Vovk,B. Simonovska, and D. Agbaba, Determination of thioctic acid in drug formulations and in dietary suplement preparations, P-62, The XXXII Symposium, Chromatographic Methods of Investigationg the Organic Compounds, (03. -05. June, Katowice, Poland) 2009.
18. K. Nikolic, S. Filipic, and D. Agbaba, QSAR and Docking study of binding affinities to steroid-binding globulins, Second Humboldt Conference of Noncovalent Interactions, Vršac, Serbia, 22-25 October, 2009.
19. K. Nikolic, S. Filipic, and D. Agbaba, Theoretical evaluation of steroids binding affinity to corticosteroid-binding globulin (CBG) and sex hormone-binding globulin (SHBG). 18th EURO QSAR - Poster II-72 (19/09/10 - 24/09/10), Rhodes, Greece.
20. S. Filipic, K. Nikolic, I. Vovk, M. Krizman, and D. Agbaba, The Quantitative Structure-Retention Relationship (QSRR) analysis of some centrally acting antihypertensives and diuretics in cyclodextrin-mediated capillary electrophoresis. Macedonian Pharmaceutical Bulletin 2011; 57: Supplement II page 37.
21. M. Pavlovic, K. Nikolic, A. Smolinski, D. Agbaba, Chemometric models for efficient predictions of chromatographic behavior of ziprasidone and its impurities P-62, The XXXIV Symposium, Chromatographic Methods of Investigationg the Organic Compounds, (08-10 June, Katowice, Poland) 2011.
22. V. Marinkovic, I. Savic, I. Savic, K. Nikolic, P. Sibinovic, D. Agbaba, Photostability Study of Alopres® tablets, P-16, The XXXIV Symposium, Chromatographic Methods of Investigationg the Organic Compounds, (08-10 June, Katowice, Poland) 2011.
23. S. Filipic, K. Nikolic, I. Vovk, M. Krizman, D. Agbaba, Partial least sqares analysis (PLS) of electrophoretic behaviour of some centrally acting antihypertensives and diuretics, 13-P-2, Second congress of pharmacists of Bosnia and Herzegovina with international participation, 17-20 nevember 2011, Banja Luka, BIH.
24. S. Filipić, K. Nikolic, A. Smoliński, D. Agbaba. Principal Component Analysis and Hierarchical Clustering Analysis as novel approach for study bioactivity of α-adrenergic and imidazoline receptors ligands. P- 4. The XXXVIth symposium Chromatographic methods of investigating the organic compounds, (05-07 June, Katowice, Poland) 2013.

25. K. Ranković, S. Filipić, K. Nikolić, D. Agbaba. TLC determination of tiapride hydrochloride and its impurities in pharmaceuticals. P-17. The XXXVIth symposium Chromatographic methods of investigating the organic compounds, (05-07 June, Katowice, Poland) 2013.
26. K. Nikolic, D. Agbaba, H. Stark, Pharmacophore Modeling, Drug Design and Virtual Screening on Procognitive Histamine H3 Receptor Ligands with Inhibitory Histamine N-Methyltransferase Activity. The XXIII International Symposium on Medicinal Chemistry (EFMC-ISMC 2014). Lisbon, Portugal, September 7-11, 2014.
27. K. Nikolic, L. Mavridis, O. M. Bautista-Aguilera, J. Marco-Contelles, H. Stark, M. do Carmo Carreiras, I. Rossi, P. Massarelli, D. Agbaba, R. Ramsay, J.B.O. Mitchell. Pharmacophore Modeling, Drug Design and Virtual Screening on Procognitive Histamine H3 Receptor Ligands with Inhibitory Histamine N-Methyltransferase Activity. The XXIII International Symposium on Medicinal Chemistry (EFMC-ISMC 2014). Lisbon, Portugal, September 7-11, 2014.
28. Gagic Z, Nikolic K, Ivkovic B, Filipic S, Agbaba D. Primena hromatografskih metoda u sintezi α-tokoferil-lizin estra. p. 165, III Kongres farmaceuta Bosne i Hercegovine sa međunarodnim učešćem. BiH 14-17. 5. 2015.
29. Filipic S, Shenger MSM, Nikolic K, Agbaba D. Optimization of chromatographic condition for separation of moxonidine and its impurities by TLC. p. 184, III Kongres farmaceuta Bosne i Hercegovine sa međunarodnim učešćem. BiH 14-17. 5. 2015.
30. Filipic S, Nikolic K, Agbaba D. Imidazoline and alpha adrenergic receptors ligands: functional relationships between structures, activity, and chromatographic/electrophoretic behaviour. p. 159, III Kongres farmaceuta Bosne i Hercegovine sa međunarodnim učešćem. BiH 14-17. 5. 2015.
31. Smajić M, Nikolic K, Vujić Z. Determination of pharmacophore and 3D-QSAR studies of AT1 receptor antagonists. p. 159, III Kongres farmaceuta Bosne i Hercegovine sa međunarodnim učešćem. BiH14-17. 5. 2015.
32. Obradović D, Filipić S, Nikolić K, Čarapić M, Agbaba D. Optimization of chromatographic condition for separation of ziprasidone and its impurities by TLC. p. 12, The XXXVIIIth Symposium Chromatographic methods of investigating the organic compounds. Poljska 27-29. 5. 2015.
33. Filipić S, Nikolić K, Križman M, Vovk I, Agbaba D. QSRR and QSMR modeling of chromatographic and electrophoretic behaviour of imidazoline and alpha adrenergic receptors ligands. p. 130, 21st International Symposium on Separation Sciences. Slovenija 30.6.-3.7. 2015.
34. Popović M, Popović G, Filipić S, Nikolić K, Agbaba D. RP-HPLC and DFT study on separation of enalapril and ramipril (Z)- and (E)-diastereomers. p. 67, 21st International Symposium on Separation Sciences. Slovenija 30.6.-3.7. 2015.
35. Gagic Z, Nikolic K, Ivkovic B, Filipic S, Agbaba D. Design of new vitamin E derivatives as potential anticancer agents. p. 123, Drugi kongres farmaceuta Crne Gore sa međunarodnim učešćem. Crna Gora 28-31. 5. 2015.
36. Vucicevic J, Popović M, Nikolić K, Filipić S, Agbaba D. Application of different in vitro techniques for predicting blood brain barrier penetration imidazoline receptor ligands. p. 190, Drugi kongres farmaceuta Crne Gore sa međunarodnim učešćem. Crna Gora 28-31. 5. 2015.

37. Filipic S, Nikolic K, Smolinski A, Agbaba D. Hierarchical clustering analysis of selected drugs based on chromatographic and electrophoretic data. p. 34. COST Action CM1207 – GLISTEN: GPCR-Ligand Interactions, Structures, and Transmembrane Signalling – A European Research Network. Holandija 12-13. 10. 2015.
38. Filipic S, Nikolic K, Vucicevic J, Agbaba D, Stark H. 3D-QSAR and design of dopamine D3 receptor ligands. 1st Annual Meeting of MuTaLig COST Action CA15135, July 21-22, 2016, Lugano, Switzerland.
39. Olujić J, Nikolic K, Vucicevic J, Gagic Z, Filipic S, Agbaba D. Targeting the PI3K/mTOR pathway as an antitumor strategy: 3D-QSAR study and design of dual PI3K/mTOR inhibitors. 1st Annual Meeting of MuTaLig COST Action CA15135, July 21-22, 2016, Lugano, Switzerland, 50p.
40. Vucicevic J, Djokovic N, Filipic S, Nikolic K, Agbaba D. Application of 3D-QSAR and virtual screening methods for design of novel antidepressants affecting serotonin transporters and histamine H3 receptors. First WG Meeting of COST ACTION CA15135, November 19-20, 2016, Budapest, Hungary. 88p.
41. Ruzic D, Nikolic K. Agbaba D, Gansesan A. Computer aided drug design – a step closer to selective HDAC-6 inhibitor? 3rd Freiburg Epigenetic Spring Meeting and COST Action EpiChemBio CM1406, Freiburg (10-13. April 2016)
42. Ruzic D, Sencanski M, Nikolic K, Agbaba D, Gansesan A. Structural insight in HDAC-6 inhibition: Molecular docking studies of naphthalimide based HDAC inhibitors, COST Action EpiChemBio CM1406, Groningen (15-16. September 2016), 27-28p.
43. Ruzic D, Nikolic K, Agbaba D. A theoretical study of interaction between HDAC-1 and HDAC-6 enzymes and in silico designed inhibitors, Fourth Conference of Young Chemists of Serbia, Belgrade, Serbia, November 5, 2016, 101p.
44. Obradović D, Filipić S, Nikolić K, Čarapić M, Agbaba D. Determination of Ziprasidone and Its Impurities by Thin-Layer Chromatography. The 39th Symposium „"Chromatographic methods of investigating the organic compounds" May 31st till June 3rd, 2016, Szczyrk, Poland
45. Filipic S, Antic A, Vujovic M, Nikolic K, Agbaba D. A comparative study of chromatographic behaviour and lipophilicity of selected imidazoline derivatives. The 39th Symposium „"Chromatographic methods of investigating the organic compounds" May 31st till June 3rd, 2016, Szczyrk, Poland
46. Vucicevic J, Srdic-Rajic T, Pieroni M, Laurila JM, Perovic V, Tassini S, Azzali E, Costantino G, Glisic S, Agbaba D, Scheinin M, Nikolic K, Radi M, Veljkovic N. Rational design and computational profiling of agonists/antagonists for GPCRs. CM1207 COST action (GLISTEN) conference, Prague 25-27 September 2016, 55-56p.
47. Čarapić M, Nikolic K, Marković B, Agbaba D. Characterization of unknown impurity of ziprasidone with new UPLC MS/MS method. The XXXIXth Symposium Chromatographic methods of investigating the organic compounds. Poland 24-25 May 2017.
48. Vucicevic J, Nikolic K, Tassini S, Azzali E, Srdic-Rajic T, Laurila J, Perovic V, Scheinin M, Picroni M, Costantino G, Agbaba D, Radi M, Veljkovic N. Imidazoline

I1 receptor ligands with low GPCR binding, GLISTEN Meeting, Aschwil, Switzerland, pp. 30.

49. Oljačić S, Arsić A, Obradović D, Nikolić K, Agbaba D. Analysis of retention behavior of selected antipsychotics and their impurities by thin layer chromatography. The XXXIXth Symposium Chromatographic methods of investigating the organic compounds. Poland 24-25 May 2017.

Posle izbora u zvanje vanredni profesor

33 x 0,5 = 16,5

1. K. Nikolic, D. Ruzic, N. Djokovic, M. Petkovic, D. Agbaba, M. L. Kakkonen and A. Ganesan. Computer-aided drug design of selective histone deacetylase inhibitors, J Org Inorg Chem 2018, European Congress on Advanced Chemistry July 12-13 2018 Paris, France, Volume: 4 DOI: 10.21767/2472-1123-C2-005
2. Nikolic K, Antonijevic M, Radan M, Agbaba D, Djikic T. Combined ligand and structure-based approach in search for 5-ht2a receptor agonists and antagonists, ECSF-GPCR meeting for young researchers, July 2018, Berlin, Germany.
3. D. Ruzic, K. Nikolic, M. Petkovic, A. Ganesan, D. Agbaba. Rational drug design of histone deacetylase 6 inhibitors. EFMC-ISMC 2018 Symposium, Ljubljana 2-6. Sept 2018, P346.
4. J. Savić, V. Dobričić, K. Nikolic, J. Brborić.Ddesign of novel β-hydroxy-β-arylalkanoic acids with improved gastrointestinal absorption based on QSRR studies. EFMC-ISMC 2018 Symposium, Ljubljana 2-6. Sept 2018, P346.
5. N. Djokovic, K. Nikolic, M. Lahtela-Kakkonen, D. Agbaba. Combined molecular dynamics and virtual screening studies to identify novel Sirtuin 2 inhibitors. EFMC-ISMC 2018 Symposium, Ljubljana 2-6. Sept 2018, P347.
6. N. Đoković, K. Nikolić, M. Lahtela-Kakkonen, D. Agbaba. Identification of potential Sirtuin 2 inhibitors through molecular dynamics simulation, virtual screening, and binding free-energy analysis. 4th International Epigenetic congress EpiNanties 2018, 16-17. October 2018, Nanties, France
7. S. Bouchet, C. Linot, D. Ruzic, D. Agbaba, B. Fouchaq, J. Roche, K. Nikolic, C. Blanquart, V. Zwick, A. Nurisso, C. Simões-Pires, A. Lehotzky, J. Ovadi, M. Cuendet, P. Bertrand. Development of cross metathesis for the design of HDAC inhibitors. 4th International Epigenetic congress EpiNanties 2018, 16-17. October 2018, Nanties, France.
8. Djikic T, Antonijevic M, Radan M, Ruzic D, Nikolic K. Rational drug design of novel 5-HT2A antagonists, XII European Workshop in Drug Design, 19-24 maj 2019. Siena, Italy.
9. Bagán, S. Abás, S. Rodríguez-Arévalo, F. Vasilopoulou, C. Griñán-Ferré, M. Pallàs, P. Pérez-Lozano, M. Radan, T. Djikic, K. Nikolic. C.Escolano. (2-imidazolin-4-yl) phosphonates:Green Chemistry and Biology Walk Together. 2nd Molecules Medicinal Chemistry Symposium. Facing Novel Challenges in Drug Discovery15-17 of May 2019.
10. Milica Radan, Mirjana Antonijevic, Dusan Ruzic, Teodora Djikic, Danica Agbaba, and Katarina Nikolic. Structure and ligand based drug design strategies in the

development of novel serotonin 5-HT2a receptor antagonists. 2nd Symposium in Biomedicine: Basic and Clinical Neuroscience, May, 2019. Belgrade, Serbia.

11. Milica M. Radan, Teodora M. Djikic, Dusan B. Ruzic, Katarina M. Nikolic. Rational drug design of novel 5-HT2A antagonists. 7th Conference of the Young Chemists of Serbia, Belgrade, Serbia. 2nd November, 2019.
12. Milan J. Jovanovic, Zarko P. Gagic, Katarina M. Nikolic. 3D-QSAR studies and design of selective PI3K-α kinase inhibitors as potential antineoplastics. 7th Conference of the Young Chemists of Serbia, Belgrade, Serbia. 2nd November, 2019.
13. Yang Si, Corentin Bon, Dusan Ruzic, Katarina Nikolić, Fabrice Agou, Ludovic Halby and Paola Arimondo. Development and Screening of Novel Chemical Probes Targeting Histone Methyltransferases, Cancer Genetics and Epigenetics, Gordon Research Conference, April 7 - 12, 2019
14. M. Radan, M. Antonijevic, T. Djikic, D. Ruzic and K. Nikolic. Combined 3D-QSAR modeling, molecular dynamics and molecular docking studies in rational drug design of novel 5-HT2A antagonists, 8th International Conference on Computational Bioengineering (ICCB2019), September 4-6, 2019, Belgrade, Serbia
15. Katarina Nikolic, Dusan Ruzic, Milan Beljkas, Milos Petkovic, Sheraz Gul, Juan F. Santibanez and Tatjana Srdic-Rajic. Is there a borderline between cytotoxic and antimetastatic effects of selective Histone deacetylase 6 inhibitors in solid malignancies? 56th Cancerology week, Hotel Crowne plaza, November, 6 - 9. 2019, Belgrade, Serbia
16. Milica Radan, Dusan Ruzic, Mirjana Antonijevic, Teodora Djikic, and Katarina Nikolic. Discovery of new 5-HT2A receptor antagonists with a strategy of combining ligand and target-based drug design methodologies. 3rd Meeting of the European Research Network on Signal Transduction: From the genomic to the systems level, October 12-14, 2020. Flash poster talk
17. Milica Radan, Dusan Ruzic, Mirjana Antonijevic, Teodora Djikic, and Katarina Nikolic. In silico rational drug design and modelling studies of novel 5-HT2A receptor antagonists. EFMC-ISMC & EFMC-YMCS Virtual Poster Session Powered by the EFMC Young Scientists Network, September 9, 2020.
18. S. Rodriguez-Arévalo, A. Bagán, C. Griñán-Ferré, F. Vasilopoulou,a M. Pallàs, I. Brocos-Mosquera, C. Muguruza, L. F. Callado, E. Hernández, M. J. García-Fuster, J. A. García-Sevilla, B. Pérez, E. Molins, J. Brea, M. I. Loza, M. Radan, T. Djikic, K. Nikolic, and C. Escolano. Benzofuranylimidazoles: synthesis, affinity for imidazoline I2 receptors and improvement in the cognition of 5xFAD mouse model. Italian Young Medicinal Chemistry Virtual Meeting, 22-24 JULY, 2020.
19. Bagán, S. Rodríguez-Arévalo, F. Vasilopoulou, C. Griñán-Ferré, M. Pallàs,a I. Brocos-Mosquera, C. Muguruza, L. F. Callado, M. Radan, T. Dijikic, K. Nikolic, C. Escolano. (2-Imidazolin-4-yl)phosphonates as Imidazoline I2 Receptor Ligands for Neurodegenerative Diseases. Italian Young Medicinal Chemistry Virtual Meeting, 22-24 July, 2020.
20. S. Rodríguez-Arévalo, S. Abás,a A. Bagán, C. Griñán-Ferré, F. Vasilopoulou, I. Brocos-Mosquera,b C. Muguruza, L. F. Callado, B. Pérez, J. Brea, M. I. Loza, E. Hernández-Hernández, J. A. García-Sevilla, M. J. García-Fuster, M. Radan, T. Djikic, K. Nikolic, C. Díaz, J. Pérez, C. Ramos, F. Vicente, E. Molins, M. Pallàs, and C. Escolano. A bicyclic α□iminophosphonate improves cognitive decline in 5xFAD

murine model. Italian Young Medicinal Chemistry Virtual Meeting, 22-24 JULY, 2020.

21. Milica Radan, Dusan Ruzic, Mirjana Antonijevic, Teodora Djikic, and Katarina Nikolic. Combined ligand-based and structure-based approaches in rational drug design of novel 5-HT2A receptor antagonists. 2nd ERNEST Online Meeting. New Perspectives in Signal Transduction: GPCRs and Beyond, March 28-30, 2020. Flash poster talk
22. Nemanja Djokovic, Minna Rahnasto-Rilla, Maija Lahtela-Kakkonen, Katarina Nikolic. Exploring the chemical space of sirt2 inhibitors through biomolecular simulations. EFMC-ISMC & EFMC-YMCS, Virtual event, September 9, 2020. p. 112
23. Milica Radan, Dušan Ružić, Mirjana Antonijević, Teodora Djikic, Katarina Nikolic. Discovery of potential multi-target-directed 5-HT2A receptor ligands. 4th ERNEST conference, virtual meeting, April 12-14, 2021.
24. Ruzic, D., Petkovic, M., Gul, S., Santibanez, J.F., Srdic-Rajic, T., Nikolic, K. (2021). Novel 1-benzhydryl piperazine derivative inhibits the migration and invasiveness of breast cancer cells: Synthesis, molecular modelling and biological characterization. EACR 2021 Congress, Innovative Cancer Science: Better Outcomes Through Research, Virtual Congress, 9 – 12 June, 2021.
25. Carmen Escolano, Abas Sonia, Sergio Rodriguez-Arevalo, Andrea Bagan, Christian Griñan-Ferre, Fotini Vasilopoulou, Merce Pallas, Pilar Perez-Lozano, Iria Brocos-Mosquera, Carolina Muguruza, Luis Callado, Belen Perez, Jose Brea, M Loza, Elena Hernandez-Hernandez, Jesus Garcia-Sevilla, M Garcia-Fuster, Milica Radan, Katarina Nikolic, Teodora Djikic, Caridad Diaz, Jose Perez del Palacio, Carmen Ramos, Francisca Vicente, Elies Molins. A bicyclic α iminophosphonate improves cognitive decline in 5xFAD murine model of neurodegeneration. The FASEB Journal 35(S1), 2021. 10.1096/fasebj.2021.35.S1.04974
26. Katarina Nikolic, Milica Radan, Teodora Djikic. Discovery of new potent and selective 5-HT2A/D2 receptor antagonists with a strategy of drug design methodologies. The Fifth General Meeting of the European Research Network on Signal Transduction. University of Bari Aldo Moro, Bari, Italy. October 4-8, 2021.
27. Djokovic, N., Ruzic, D., Djikic, T., Cvijic, S., Ignjatovic, J., Ibric, S., Baralic, K., Buha Djordjevic, A., Curcic, M., Djukic-Cosic, D., Nikolic, K. (2021). Seeking SARS-CoV-2 Mpro inhibitors through an integrative in silico approach. 18th HELENIC SYMPOSIUM on Medicinal Chemistry, 25-27 February 2021, Online Symposium, (ABS100).
28. Ruzic, D., Djokovic, N., Petkovic, M., Agbaba, D., Gul, S., Lahtela-Kakkonen, M., Ganesan, A., Santibanez, J.F., Srdic-Rajic, T., Nikolic, K. (2021). Rational design, synthesis and in vitro testing of selective HDAC6 and SIRT2 inhibitors. EFMC-ICMS International Symposium on Medicinal Chemistry, Virtual Event, Aug. 29-Sept.2,2021, T021(360).
29. Ruzic, D., Petkovic, M., Bernhard, E., Gul, S., Santibanez, J.F., Srdic-Rajic, T., Nikolic, K. (2021). Synthesis, molecular modelling and biological characterization of novel antimigratory and antiinvasive 1-benzhydryl piperazine derivatives. EFMC-ICMS International Symposium on Medicinal Chemistry, Virtual Event, Aug. 29-Sept.2,2021, T033(372).

30. Jovanović, M., Turković, N., Ivković, B., Vujić, Z., Nikolić, K., Grubišić, S. Chalcones with anti-HIV-1 protease activity: 3D-QSAR study, design of novel inhibitors, molecular docking and in silico ADMET characterization. Paul Ehrlich Euro-PhD Network Virtual Meeting 2021, July 26th-28th 2021.
31. T. Djikic, J. Vucicevic, J. Laurila, M. Radi, N. Veljkovic, H. Xhaard, K. Nikolic. Imidazolines: In silico off-target fishing in the class A of G protein-coupled receptors. Belgrade BioInformatics Conference 21-25 June 2021. Biologia Serbica 88, page 43.
32. M. Senćanski, S. Glišić, K. Nikolić, T. Djikić. In silico drug repurposing of small organic molecules and peptide ligands for GPR56 receptor. 2nd General Meeting ADHER'N RISE CA18240, 15-16 July 2021.
33. J. Boskovic, D. Ruzic, O. Cudina, K. Nikolic, V. Dobricic, Design of dual cyclooxygenase-2 and 5-lipoxygenase inhibitors with iron-chelating properties – molecular docking, Paul Ehrlich (PE) Euro-PhD Network virtual meeting (PEVM2021), July 26th-28th, 2021

Saopštenje sa nacionalnog skupa štampano u izvodu (M_{64})

Pre izbora u zvanje vanredni profesor

1. Pavlović M., Vojvodić Lj., Mihaljica S., Nikolić K., Agbaba D., "*Generic drugs – force degradation studies*", Second congress of pharmacists of Bosnia and Herzegovina with international participation, 17-20 nevember 2011, Banja Luka, BIH.
2. J. Vucicevic, K. Nikolic, V. Dobricic, D. Agbaba. Quantitative Structure-Property Relationshi p Study of Imidazoline Receptor Ligands Permeability Across Blood-brain Barrier. pp. 164-165. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.
3. M. Carapic, K. Nikolic, B. Markovic, M. Pavlovic, D. Agbaba. Optimization of RP-UPLC-MS/MS System for Investigation of Zipasidone and its Impurities by Use of Partial Least Squares (PLS) Methodology. pp.190-191. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.
4. M. Smajic, K. Nikolic, Z.Vujic. Determination of Pharmacophore and 3D-QSAR Studies of ATI Receptor Antagonists. pp. 171-172. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.
5. N. Dordevic Filijovic, K. Nikolic, B. Maricic, D. Agbaba. Determination of Pharmacophore and 3D-QSAR Studies of ATI Receptor Antagonists. pp. 189-190. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.
6. M.S.M. Shenger, S. Filipic, K. Nikolic, D. Agbaba. Determination of Moxonidine and its Iompurities by Thin-layer Chromatography. pp. 207. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.
7. S. Filipic, K. Nikolic, G. Popovic, D. Agbaba. Determination of Acidity Constants of Guanidine and Imidazoline Derivatives by Capillary Electrophoresis pp. 208-209. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.

8. V. Dobricic, K. Nikolic, B. Markovic, S. Vladimirov, O. Cudina. The Application of PAMPA and QSPR Analysis for the Design of Novel 17β-Carboxamide Steroids with Improved Skin Retention/Permeability Ratio. pp. 102-103. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.
9. Z.Gagic, K. Nikolic, D. Aqbaba, B. Ivkovic. QSAR studies and Design of New Analogs of vitamin E with Antiproliferative Effect on MCF-7 Breast Cancer cells. pp. 166. VI Serbian Congress of Pharmacy with International Participation. 15-19th October 2014, Belgrade, Serbia.

Posle izbora u zvanje vanredni profesor

7 x 0, 2 = 1,4 poena

1. Dobričić V, Savić J, Tubić B, Nikolić K, Brborić J, Marković B, Čudina O. Application of PAMPA technique and QSPR analysis in the evaluation of gastrointestinal absorption and design of new biologically active compounds. VII Serbian Congress of Pharmacy with international participation; Belgrade, October 10-14, 2018. Arh.farm 2018;68:112-113.
2. Djoković N, Nikolić K, Agbaba D, Lahtela□Kakkonen M. Molecular dynamics□based virtual screening of sirtuin 2 inhibitors. VII Serbian Congress of Pharmacy with international participation; Belgrade, October 10-14, 2018. Arh.farm 2018;68:338-339.
3. Ružić D, Nikolić K, Agbaba D. Medicinal chemistry of histone deacetylase 6 inhibitors in silico drug design approaches. VII Serbian Congress of Pharmacy with international participation; Belgrade, October 10-14, 2018. Arh.farm 2018;68: 380-381.
4. Radan M, Antonijević M, Đikić T, Nikolić K, Agbaba D. Combined ligand and structure□based approach in search of 5-HT2A receptor agonists and antagonists. VII Serbian Congress of Pharmacy with international participation; Belgrade, October 10-14, 2018. Arh.farm 2018;68: 389-390.
5. Gagić Ž, Srdić□Rajić T, Nikolić K, Agbaba D. Cytotoxic activity of amino acid esters of vitamin E against breast and lung cancer cell lines. VII Serbian Congress of Pharmacy with international participation; Belgrade, October 10-14, 2018. Arh.farm 2018;68: 391-392.
6. Čarapić M, Nikolić K, Smolinski A, Agbaba D. Modeling of liquid chromatography separation of ziprasidone compounds using multivariate methods of principal component and hierarchical clustering analysis. VII Serbian Congress of Pharmacy with international participation; Belgrade, October 10-14, 2018. Arh.farm 2018;68: 411-412.
7. Nemanja Djokovic, Katarina Nikolic, Danica Agbaba. Identification of potential dual histamine H3 receptor antagonist and serotonin reuptake inhibitors through ligand-based and structure-based approaches. 2nd Symposium in Biomedicine: Basic and Clinical Neuroscience; May 9, 2019. Center for Experimental and Applied Physiology Faculty of Pharmacy University of Belgrade, Belgrade, Serbia.

2.3. ANALIZA RADOVA OBJAVLJENIH POSLE IZBORA U ZVANJE VANREDNI PROFESOR

U okviru naučno-istraživačkog rada dr. Katarina Nikolić se bavi računarskom hemijom i kompjuterskim dizajnom novih antineoplastika, epigenetičkih modulatora, antihipertenziva, CNS lekova, antiparazitika i antivirotika, kao i njihovom sintezom i ispitivanjem u cilju otkrića potencijalno efikasnijih terapeutika. Razvojem novih metoda kompjuterskog dizajna lekova (*Computer-Aided Drug Design*, CADD) baziranih na strukturama liganada (*Ligand Based Drug Design*, LBDD) ili na strukturama ciljnog mesta dejstva aktivnih jedinjenja (*Structure Based Drug Design*, SBDD) omogućena je detaljna analiza farmakofora liganada, ključnih interakcija liganada sa receptorom i detaljna procena uticaja strukturnih modifikacija na aktivnost dizajniranih jedinjenja. Deo naučno-istraživačke aktivnosti dr. Katarine Nikolić se odnosi na hemometrijsku i QSPR/QSRR (*Quantitative Structure Property/Retention Relationship*) analizu retencionog ponašanja, fizičko-hemijskih i farmakokinetičkih osobina ispitivanih grupa farmakološki aktivnih supstanci i novosintetisanih jedinjenja primenom regresionih metoda (multilinearna regresija - *Multiple Linear Regression* (MLR), postupna multilinearna regresija - *Stepwise Multiple Linear Regression* (sMLR), metoda parcijalnih najmanjih kvadrata - *Partial Least Square Regression* (PLSR), analiza glavne komponente - *Principal Component Analysis* (PCA)) i naprednih metoda mašinskog učenja (metoda podržavajućih vektora – *Support Vector Machine* (SVM), veštačke neuronske mreže - *Artificial Neural Networks* (ANN)).

Posttranslacione modifikacije histona obuhvataju kovalentu modifikaciju amino kiselinskih rezidua histona acetil, benzoil formil, krotonil, metil, sukcinil ili nekim drugim grupama, koje vrše kontolu organizacije hromatina i aktivaciju ili represiju transkripcije gena. Nivo acetilacije lizinskih rezidua histona regulisan je ravnotežnom aktivnošću enzima histon acetiltransferaza (HAT) i histon deacetilaza (HDAC) što utiče na remodelovanje hromatina i regulaciji genske ekspresije. Acetilovani lizini histona predstavljaju epigenetičke markere koji pomoću proteina čitača, poput bromodomena, mogu pokrenuti proces transkripcije odgovarajućih gena. Histon deacetilaze su epigenetski enzimi koji utiču na aktivaciju onkogenih i onkosupresivnih mehanizama regulacije ćelijskog ciklusa, pa se zbog toga danas intenzivno ispituju inhibitori histon deacetilaza. Do sada je potvrđena klinička efikasnost i registrovano je pet inhibitora histon deacetilaza za terapiju hematoloških tipova kancera. Sa druge strane, značaj aktivacije određenih proteinskih i lipidnih kinaza u procesima nastanka i rasta ćelija karcinoma doveo je do velikog interesovanja za razvijanje novih antitumorskih lekova koji inhibiraju signalni put onih kinaza kod kojih je pokazana njihova izmenjena aktivnost na određenim tipovima karcinoma. U poglavljima monografija međunarodnog značaja **M_{14}: 1-2**, kao i u radovima **M_{21a}-1; M_{21}: 5, 10; M_{52}: 2, 3**, dat je detaljan pregled, uporedna i kritička analiza najnovijih rezultata istraživanja antineoplastika iz grupe epigenetičkih modulatora i inhibitora kinaza. U okviru ovih publikacija analizirani su rezultati određivanja kvantitativnog odnosa strukture i dejstva farmakološki aktivnih jedinjenja (*Quantitative Structure Activity Relationship*, QSAR), ispitivanja 3D-strukture farmakofora, molekulsko dinamičke simulacije ligand-receptor kompleksa, analize načina vezivanja i ključnih interakcija liganda i receptora određenih virtuelnim dokingom, sistemskog pretraživanja baza hemijskih jedinjenja u odnosu na predloženi

ligand (*Ligand-Based Virtual Screening*) ili u odnosu na ciljno mesto (*Structure-Based Virtual Screening*), kao i različitih metoda racionalnog ili kompjuterskog dizajna, sinteze i ispitivanja potencijalno efikasnijih i bezbednijih antineoplastika iz grupe epigenetičkih modulatora i inhibitora kinaza.

Enzimi iz familije histon deacetilaza su podeljeni u 4 klase, od kojih su klase I, II i IV cink-zavisne hidrolaze, dok su histon deacetilaze III klase NAD+ zavisne oksido-reduktaze. Histon deacetilaza 6 (HDAC6) je u najvećoj meri lokalizovana u citoplazmi gde hidrolizuje acetil-lizin rezidue citoplazmatskih proteina poput α-tubulina, peroksiredoksina, *heat shock* proteina 90 (Hsp90), kortaktina, kao i poliubikvitiranih proteina. Uzimajući u obzir navedene biohemijske uloge HDAC6 u organizaciji i dinamici ćelije, ova izoforma enzima je potvrđena kao važno ciljno mesto dejstva savremenih antikancerskih terapeutika iz grupe epigenetskih modulatora. Određivanjem 3D-strukture farmakofore (3D-QSAR), QSAR analizom formiranih modela i ispitivanjem ključnih ligand-receptor interakcija molekulskim dokingom odabranih inhibitora histon deacetilaza po prvi put su detaljno definisane specifične strukturne determinante ovih jedinjenja koje su neophodne za selektivnu inhibiciju određene izoforme histon deacetilaza, poput HDAC-6. Za 3D-QSAR modelovanje su upotrebljene bioaktivne konformacije ispitivanih liganada, koje su prethodno formirane primenom različitih metoda molekulske dinamike i virtuelnog dokinga. Kompjuterski dizajn selektivnih inhibitora određenih izoformi histon deacetilaza je bio baziran na kombinaciji rezultata 3D-QSAR analize, molekulskog dokinga i virtuelnog skrininga (baziranog na strukturi liganda, fragmenta ili ciljnog mesta dejstva) što je mogućilo sintezu, karakterizaciju i *in vitro* ispitivanje novih tipova modulatora epigenetičkih enzima iz grupe histon deacetilaza kao potencijalno efikasnijih i bezbednijih antikancerskih terapeutika (radovi **M_{21}: 3, 4; M_{22}: 12**).

Ispitivanjem molekulske dinamike i mehanizama ligand-receptor interakcija na dva epigenetska targeta, DOT1-slične histon H3K79 metiltransferaze (DOT1L) i WD ponavljajući domen 5 proteina (WDR5), obuhvaćena je analiza uticaja konformacione dinamike ova dva proteina na racionalni dizajn novih DOT1L ili WDR5 inhibitora, kao novih tipova antineoplastika za hematološke tipove karcinoma. Histon metiltransferaza DOT1L katalizuje mono-, di- i trimetilaciju histona 3 lizinske rezidue 79 (H3K79). Pošto je hipermetilacija H3K79 povezana sa razvojem akutne leukemije (MLLr ćelije) inhibicija metilacije H3K79 usporava proliferaciju MLLr ćelija. Specifični DOT1L inhibitor pinometostat je bio u kliničkim ispitivanjima (faza Ib/II). U okviru publikovane studije izvršen je dizajn, sinteza i ispitivanje novih nanomolarnih inhibitora humanog DOT1L enzima efikasnih u MLLr ćelijama koji su pokazali sličnu inhibitornu aktivnost na DOT1L enzimu, ali poboljšanu metaboličku stabilnost u odnosu na pinometostat. WDR5 protein učestvuje kroz protein-protein interakcije u formiranju različitih multiproteinskih kompleksa. Zbog velike složenosti istraživanja ovih sistema, sa aspekta eksperimentalnih i računarskih metoda, tek su u prethodnih par godina počeli uspešno da se ispituju peptidomimetski inhibitori koji se dovoljno efikasno vezuju sa fleksibilnom dodirnom površinom ovih protein-protein interakcija. Razvijene su nove metode i protokoli ispitivanja ligand-protein interakcija pomoću naprednih metoda molekulske dinamike, molekulskog dokinga i virtuelnog skrininga, pa je tako omogućena analiza veoma kompleksnih sistema u kojima učestvuju WDR5 epigenetski proteini. Kompjuterski dizajn novih modulatora različitih epigenetičkih proteina je omogućilo

sintezu, karakterizaciju i *in vitro* ispitivanje potencijalno efikasnijih i bezbednijih antikancerskih terapeutika (radovi **M_{21a}: 5; M_{22}: 2, 9**).

U publikovanoj PYROXD1 studiji je pokazano da ova oksidoreduktaza štiti tRNA-LC (njegovu subjedinicu RTCB), kao i da se jasno uočava međusobna zavisnost PYROXD1enzima i RTCB u ćelijskim linijama različitih tipova karcinoma. Razvijene su nove metode i protokoli ispitivanja ligand-receptor interakcija pomoću naprednih metoda modelovanja strukture proteina, virtuelnog dokinga, molekulske dinamike i metadinamike čime je omogućena analiza veoma složenih i dinamičnih sistema poput PYROXD1 enzima. (rad **M_{21a}: 3**).

Kombinovanjem rezultata 3D-QSAR analize i virtuelnog dokinga derivata ksantena i tetrahidropiridina definisane su strukturne determinante ispitivanih jedinjenja neophodne za snažniju antikancersku aktivnost na HeLa, A549 i LS174 ćelijskim linijama. Kompjuterski dizajn novih derivata ksantena i tetrahidropiridina je omogućilo sintezu, karakterizaciju i *in vitro* ispitivanje potencijalno efikasnijih i bezbednijih antineoplastika (radovi **M_{22}: 5, 11**).

Određivanjem 3D-strukture farmakofore (3D-QSAR) i QSAR analizom formiranih modela inhibitora COX-2/LOX i PI3K enzima definisane su strukturne determinante ispitivanih jedinjenja neophodne za optimalnu aktivnosta. Za 3D-QSAR modelovanje su upotrebljene bioaktivne konformacije ispitivanih liganada, koje su prethodno formirane primenom različitih metoda molekulskog dokinga. Kombinovanjem rezultata 3D-QSAR analize i virtuelnog dokinga inhibitora COX-2/LOX i PI3K enzima definisane su strukturne determinante ispitivanih jedinjenja neophodne za snažniju antikancersku aktivnost. Kompjuterski dizajn novih COX-2/LOX i PI3K inhibitora omogućava sintezu, karakterizaciju i *in vitro* ispitivanje potencijalno efikasnijih i bezbednijih antikancerskih terapeutika (radovi **M_{23}: 2; M_{52}: 1**).

Razvijen je složeni protokol za dizajn i ispitivanje novih tipova: dualnih antagonista serotoninskih 5-HT2A i dopaminskih D2 receptora, sa smanjenim afinitetom za histaminski H1 receptor; potentnih i selektivnih liganada imidazolinskih I2 receptora, kao i novih liganada dopaminskih D2 i D3 receptora. Formirana je opšta *in silico* plaforma za određivanje dodatnih (*off-target*) interakcija ispitivanih liganada sa G-protein kuplovanim receptorima (*G-Protein Coupled Receptors*, GPCR) primenom metoda molekulskog ukrštenog dokinga i dokinga veoma visoke preciznosti. Poredbenom analizom rezultata 3D-strukture farmakofore (3D-QSAR), QSAR modelovanja, molekulske dinamike, virtuelnog dokinga/skrininga, *in vitro/in silico* ispitivanja ADMET (*Absorption, Distribution, Metabolism, Excretion, and Toxicity*) osobina i kompjuterskog dizajna novih liganada GPCR i imidazolinskih I_2-R je usmereno istraživanje ka sintezi i ispitivanju novih potencijalno efikasnijih i bezbednijih CNS teraputika (radovi **M_{21a}: 2 i 4; M_{21}: 6; M_{22}: 4, 7**).

Definisanje 3D-strukture farmakofore (3D-QSAR), QSAR analiza, virtuelni doking/skrining, kao i kompjuterski dizajn novih inhibitora specifičnih enzima mikroorganizama (virusi, paraziti) je omogućilo sintezu, karakterizaciju i *in vitro* ispitivanje novih potencijalno efikasnijih i bezbednijih antivirotika i antiparazitika (radovi **M_{21}: 7; M_{22}: 6, 8, 10**).

Modelovanje retencionog i elektrohemijskog ponašanja, razvoj novih HPLC analitičkih metoda, hemometrijske studije i *in silico/in vitro* ADMET skrining (*Parallel Artificial Membrane Permeability Assay* (PAMPA), *Biomicelar Chromatography*

(BMC), *Hydrophilic Interaction Liquid Chromatography* (HILIC)) ispitivanih grupa liganada imidazolinskih receptora, G-protein kuplovanih receptora i novosintetisanih jedinjenja je omogućio hemometrijsku i QSPR/QSRR analizu retencionog ponašanja, fizičko-hemijskih i farmakokinetičkih osobina ispitivanih grupa farmakološki aktivnih supstanci i novosintetisanih jedinjenja i formiranje prediktivnih hemometrijskih modela za dalju selekciju najboljih kandidata za sintezu. U ovim hemometrijskim i QSPR/QSRR studijama su korišćene različite kombinacije regresionih metoda (MLR, sMLR, PLSR i PCA) i naprednih metoda mašinskog učenja (SVM i ANN), kao i virtuelni doking i molekulska dinamika (radovi **M_{21}: 1, 2, 8, 9; M_{22}: 1, 3; M_{23}: 1**).

2.4. VREDNOVANJE NAUČNO-ISTRAŽIVAČKOG RADA PREMA PRAVILNIKU O STICANJU ISTRAŽIVAČKIH I NAUČNIH ZVANJA

Tabela 3. Vrsta i kvantifikacija rezultata naučnoistraživačke aktivnosti.

Kategorija časopisa	Od izbora u prethodno zvanje broj/bodova	Ukupno broj/bodova
Poglavlje u monografiji međunarodnog značaja – M13	0/0	1/6
Poglavlje u monografiji međunarodnog značaja – M14	2/8	2/8
Međunarodni časopisi izuzetnih vrednosti – M21-a	5/50	7/70
Vrhunski međunarodni časopisi – M21	10/80	44/360
Istaknuti međunarodni časopisi – M22	12/60	22/110
Međunarodni časopisi – M23	2/6	32/96
Predavanje po pozivu sa međunarodnog skupa štampano u celini – M31	1/3	2/6
Predavanje po pozivu sa međunarodnog skupa štampano u izvodu – M32	12/18	23/34,5
Saopštenje sa međunarodnog skupa štampano u celini – M33	6/6	14/14
Saopštenje sa međunarodnog skupa štampano u izvodu – M34	33/16,5	82/41
Rad u istaknutom nacionalnom časopisu – M52	3/4,5	8/12
Rad u nacionalnom časopisu – M53	0/0	0/0
Predavanje po pozivu sa skupa nacionalnog značaja štampano u celini – M61	0/0	0/0
Saopštenje sa skupa nacionalnog značaja štampano u izvodu – M64	7/1,4	16/3,2
Doktorska disertacija – M71	0/0	1/ 6
Novo tehničko rešenje – M85	0/0	0/0
Učešće na nacionalnim projektima	2/4	3/6
Učešće na međunarodnim projektima	8/32	10/40
UKUPNO BODOVA	**289,4**	**806,7**

IZBORNI USLOVI

VREDNOVANJE IZBORNIH USLOVA

2. DOPRINOS AKADEMSKOJ I ŠIROJ ZAJEDNICI

3. *Članstvo u stručnim ili naučnim asocijacijama u koje se član bira ili koje imaju ograničen broj članova.*

   - Dr Katarina Nikolić je od 2019. godine, na predlog Srpskog hemijskog društva, predstavnik Srbije u okviru *European Chemical Society (EuCheMS) Division of Computational and Theoretical Chemistry (DCTC)*: https://www.euchems.eu/divisions/computational-chemistry-2/
   - Dr Katarina Nikolić je 2022. godine, na predlog predsednika EuChemMS-DCTC udruženja, postala član i sekretar Komisije za dodelu nagrade: *The EuChemS Walter Thiel Award In Computational and Theoretical Chemistry*, pri EuCheMS Division of Computational and Theoretical Chemistry.

4. *Uređivanje časopisa ili monografija priznatih od strane resornog ministarstva za nauku.*

   - Dr Katarina Nikolić je tokom 2021. i 2022. godine aktivna kao urednik tematskog izdanja časopisa *Frontiers in Endocrinology* pod nazivom: *Physiology and Pathophysiology of GPCR Signal Transduction*
   - Dr Katarina Nikolić je 2022. godine izabrana za *Review Editor on the Editorial Board of Protein Biochemistry for Basic and Applied Sciences* (specialty section of *Frontiers in Chemistry* and *Frontiers in Molecular Biosciences*).

8. *Recenzentske aktivnosti u priznatim časopisima i monografijama (dodatni izborni uslov prema Pravilniku o bližim uslovima za izbor u zvanje nastavnika na Farmaceutskom fakultetu)*

   Od izbora u zvanje vanrednog profesora dr Katarina Nikolić je bila recenzent 23 rada u međunarodnim časopisima kategorije M20 i recenzent tri poglavlja u monografiji međunarodnog značaja M13.

9. *Rukovođenje ili angažovanje u radu stručnih tela i organizacionih jedinica Fakulteta i/ili Univerziteta (dodatni izborni uslov prema Pravilniku o bližim uslovima za izbor u zvanje nastavnika na Farmaceutskom fakultetu)*

   Dr Katarina Nikolić je od 2019. godine član Komisije Farmaceutskog fakulteta za ocenu studentskih anketa

10. Predsedavanje ili članstvo u stručnim i naučnim odborima nacionalnih ili međunarodnih skupova

Dr Katarina Nikolić je bila član Naučnog odbora međunarodog skupa: e-EuCo-CTC 2021, Online conference, EuChemS Division of Computational and Theoretical Chemistry, November 18-19 2021.

1. SARADNJA SA DRUGIM VISOKOŠKOLSKIM, NAUČNO-ISTRAŽIVAČKIM USTANOVAMA, ODNOSNO USTANOVAMA KULTURE ILI UMETNOSTI U ZEMLJI I INOSTRANSTVU

4. Učešće na naučno-istraživačkim projektima

- Učesnik i član upravnog odbora EU projects: FP7/COST CM1406 action (2015-2019): *Epigenetic Chemical Biology (EPICHEM)*: http://www.cost.eu/COST_Actions/cmst/Actions/CM1406
- Učesnik EU projects: HORISON 2020/COST Action CA15135 (2016-2020): *Multi-target paradigm for innovative ligand identification in the drug discovery process (MuTaLig).* http://www.cost.eu/COST_Actions/ca/CA15135
- Učesnik EU projects: HORISON 2020/COST Action CA16205 (2017-2021): *European Network on Understanding Gastrointestinal Absorption-related Processes (UNGAP):* http://www.cost.eu/COST_Actions/ca/CA16205
- Učesnik EU projects: Horison 2020/ COST CA17104 action (2018-2022): *New diagnostic and therapeutic tools against multidrug resistant tumors:*http://www.cost.eu/COST_Actions/ca/CA17104
- Učesnik i član upravnog odbora EU projects: Horison 2020/ COST action CA18133 (2019-2023): *European Research Network on Signal Transduction.* https://www.cost.eu/actions/CA18133/#tabs|Name:overview
- Učesnik i član upravnog odbora EU projects: Horison 2020/ COST action CA18240 (2019-2023): *ADHEsion GPCR Network: Research and Implementation Set the path for future Exploration.* https://www.cost.eu/actions/CA18240/#tabs|Name:overview
- Rukovodilac istraživanja: Bilateral project, Hubert Curien Partnership Project for collaboration France-Serbia 2020-2022 (Program Pavle Savic 2020): *Identification of novel DOT1L and DNMT1/3A inhibitors*, with Epigenetic Chemical Biology, Institut Pasteur, CNRS UMR3523, Paris 75015 France (Prof Paola Arimondo research group).
- Rukovodilac istraživanja: *Deutsche Forschungsgemeinschaft* (DFG) project named: *Control of epigenetic states through light-triggered protein-protein interaction mediators*, 2020-2023 PI Asst. Prof. Olalla Vázquez, Fachbereich Chemie Philipps-Universität Marburg, Germany.

2. *Internacionalizacija postojećih studijskih programa u okviru visokoškolskih ustanova.*

Učestvuje u izvođenju praktične i teorijske nastave (predmeti *Pharmaceutical chemistry 2* i *Pharmaceutical chemistry 3*) u okviru integrisanih akademskih studija na engleskom jeziku na Univerzitetu u Beogradu – Farmaceutskom fakultetu

6. Izvođenje nastave ili mentorstvo u zajedničkim međunarodnim studijskim programima.

Dr Katarina Nikolić je bila eksterni član komisije (external examiner): University of Eastern Finland, October 2020: "Exploring SIRT6 modulators and an indirect approach to modulate sirtuin activity" for the degree of Doctor of Science (Pharmacy). Doktorand: Jonna Tenhunen, Mentor: Prof. dr Maija Lahtela-Kakkonen

8. Učestvovanje na međunarodnim kursevima ili školama za užu naučnu oblast za koju se bira

Dr Katarina Nikolić je učestvovala je u okviru Trening škole (*Computational Methods in Drug Design*) sa predavanjem na temu: *Computer-aided design of histone deacetylase inhibitors*. Epigenetic Chemical Biology – Action CM1406, Training School 22-24 March 2018, Istanbul, Turkey.

MIŠLJENJE I PREDLOG

Na konkurs objavljen 27.04.2022. godine u listu "Poslovi" za jednog redovnog profesora za užu naučnu oblast Farmaceutska-medicinska hemija i strukturna analiza prijavio se jedan kandidat dr Katarina Nikolić, vanredni profesor na Katedri za Farmaceutsku hemiju, Farmaceutskog fakulteta, Univerziteta u Beogradu.

Dr Katarina Nikolić ispunjava sve obavezne i izborne uslove predviđene odredbama Zakona o visokom obrazovanju, Statuta Farmaceutskog fakulteta, Pravilnika o minimalnim uslovima za sticanje zvanja nastavnika na Univerzitetu u Beogradu i Pravilnika o bližim uslovima za izbor nastavnika na Farmaceutskom fakultetu u Beogradu, za izbor u zvanje redovni profesor za užu naučnu oblast Farmaceutska-medicinska hemija i strukturna analiza.

U okviru **nastavne aktivnosti**, dr Katarina Nikolić učestvuje u realizaciji teorijske i praktične nastave na Katedri za farmaceutsku hemiju u okviru integrisanih akademskih studija - studijski program Farmacija, u pripremi i izvođenju nastave u okviru doktorskih akademskih studija, kao i u pripremi i realizaciji nastave na master studijskom programu *Napredna analiza podataka*, akreditovanom na Univerzitetu u Beogradu. U studentskim anketama njen nastavni i pedagoški rad ocenjen je ocenom 4,73. Dr Katarina Nikolić je autor jednog osnovnog i jednog pomoćnog udžbenika za predmet Farmaceutska hemija 3.

Bila je mentor 7 doktorskih disertacija i član komisije za odbranu 10 doktorskih disertacija, od toga u zvanju vanredni profesor je mentor 4 doktorske disertacije i član komisije za odbranu 3 doktorske disertacije. Bila je mentor 10 završnih radova na integrisanim akademskim studijama i član komisije za odbranu 4 završna rada, od toga je bila mentor 4 završna rada u zvanju vanredni profesor. Bila je mentor 17 studentskih istraživačkih radova (od izbora u zvanje vanredni profesor 7 radova) i član Stručne Komisije na tri Studenska Mini-kongresa na Farmaceutskom fakultetu u Beogradu.

Vrednovanjem nastavnog i pedagoškog rada prema članu 9 Pravilnika o bližim uslovima za izbor nastavnika na Farmaceutskom fakultetu u Beogradu dr Katarina Nikolić je ostvarila ukupno 104 boda.

U domenu **naučne aktivnosti**, dr Katarina Nikolić je do sada ukupno objavila 107 radova u časopisima od međunarodnog značaja (M_{20}), 3 poglavlja u knjizi međunarodnog značaja (M_{13} i M_{14}), 8 radova u domaćim časopisima (M_{50}), 122 saopštenja na međunarodnim naučnim skupovima (M_{30}) i 16 saopštenja na nacionalnim naučnim skupovima (M_{64}). Od izbora u zvanje vanredni profesor publikovala je 29 radova (M_{20}): 5 M_{21a}, 10 M_{21}, 12 M_{22}, i 2 M_{23}, 2 poglavlja u knjizi međunarodnog značaja (M_{14}), 3 rada u domaćem časopisu M_{52}, 52 saopštenja na međunarodnim naučnim skupovima (M_{30}): 1 M_{31}, 12 M_{32}, 6 M_{33} i 33 M_{34} i 7 saopštenja na nacionalnim naučnim skupovima (M_{64}). Kumulativni IF objavljenih radova Katarine Nikolić (u poslednjih 5 godina) je 130,326. Prvi autor ili nosilac rada je u 9 radova sa kumulativnim IF 31,365. Ukupan broj citata bez autocitata je 1110 (Scopus), a H-indeks 17 (Scopus), Dr Katarina Nikolić je učestvovala u radu 3 nacionalna i 10 međunarodnih naučno-istraživačkih projekata, od toga od izbora u zvanje vanredni profesor učestvuje u radu 2 nacionalna i 8 međunarodnih naučno-istraživačkih projekata.

Vrednovanjem naučno-istraživačkog rada prema Pravilniku o sticanju istraživačkih i naučnih zvanja dr Katarina Nikolić je ostvarila 289,4 bodova od izbora u zvanje vanredni profesor.

U okviru **izbornih uslova**, u domenu *Doprinos akademskoj i široj zajednici*, dr Katarina Nikolić je izabrana za predstavnika Srbije u okviru *European Chemical Society* (EuCheMS) *Division of Computational and Theoretical Chemistry* (DCTC), kao i za člana Komisije za dodelu nagrade: *The EuChemS Walter Thiel Award In Computational and Theoretical Chemistry*, pri EuCheMS *Division of Computational and Theoretical Chemistry*. Dr Katarina Nikolić je tokom 2021. i 2022. godine bila aktivna kao urednik tematskog izdanja časopisa *Frontiers in Endocrinology*. Dr Katarina Nikolić je 2022. godine izabrana za *Review Editor on the Editorial Board of Protein Biochemistry for Basic and Applied Sciences*. Od izbora u zvanje vanrednog profesora recenzent je 23 rada u međunarodnim časopisima kategorije M_{20} i tri poglavlja u monografiji međunarodnog značaja kategorije M_{13}. Od 2019. godine je član Komisije Farmaceutskog fakulteta za ocenu studentskih anketa. Bila je član 1 naučnog odbora međunarodnog skupa.

U domenu *Saradnje sa drugim visokoškolskim, naučno-istraživačkim ustanovama*, dr Katarina Nikolić učestvuje u radu 8 međunarodnih naučno-istraživačkih projekata. Učestvovuje je u izvođenju praktične i teorijske nastave u okviru integrisanih akademskih studija na engleskom jeziku na Farmaceutskom fakultetu u Beogradu. Bila je eksterni član komisije za odbranu doktorske disertacije na *Faculty of Pharmacy, University of Eastern Finland,* 2020. Učestvovala je u realizaciji Trening škole (*Computational Methods in Drug Design*) 2018, Istanbul, Turska.

Na osnovu uvida u priloženu dokumentaciju o nastavnom i naučno-istraživačkom radu, kao i izbornim uslovima, Komisija je zaključila da dr Katarina Nikolić ispunjava sve uslove predviđene odredbama Zakona o visokom obrazovanju, Statuta Farmaceutskog fakulteta, Pravilnika o minimalnim uslovima za sticanje zvanja nastavnika na Univerzitetu u Beogradu i Pravilnika o bližim uslovima za izbor nastavnika na Farmaceutskom fakultetu u Beogradu, za izbor u zvanje redovnog profesora.

Na osnovu ovakvog zaključka, Komisija predlaže Izbornom veću Farmaceutskog fakulteta Univerziteta u Beogradu da usvoji pozitivan referat i uputi predlog Veću naučnih oblasti medicinskih nauka Univerziteta u Beogradu da dr Katarinu Nikolić izabere u zvanje redovni profesor za užu naučnu oblast Farmaceutska-medicinska hemija i strukturna analiza.

Beograd, 01. jun 2022.

Članovi Komisije

Dr Olivera Čudina, redovni profesor
Predsedavajući Komisije
Univerzitet u Beogradu – Farmaceutski Fakultet

Dr Zorica Vujić, redovni profesor
Univerzitet u Beogradu – Farmaceutski Fakultet

Dr Katarina Anđelković, redovni profesor
Univerzitet u Beogradu – Hemijski fakultet