FACTA UNIVERSITATIS
Series: **Physics, Chemistry and Technology** Vol. 16, N° 2, 2018, pp. 191 - 218
https://doi.org/10.2298/FUPCT1802191N

AN OVERVIEW OF THE SCIENTIFIC RESEARCH WORK AT THE DEPARTMENT OF CHEMISTRY OF THE FACULTY OF SCIENCES AND MATHEMATICS IN NIŠ BASED ON THE DEFENDED MASTER'S AND PhD THESES (1971-2017)[†]

UDC 378.096 : 542

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Abstract. *This paper presents an overview of the scientific research work carried out at the Department of Chemistry of the Faculty of Sciences and Mathematics of the University of Niš. The scientific research work was realized in the form of masters and PhD theses, as well as within the projects funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia. In the field of chemistry, a total of 110 masters' theses and 105 doctoral dissertations were defended during the period 1971-2017. Thirty-nine PhD theses are the result of the PhD program introduced 2006. The Chemistry Department gave a significant contribution in the field of education and science by educating a large number of high-quality masters and PhD students some of which have found positions at the Chemistry Department of the Faculty of Sciences and Mathematics in Niš and other Serbian and foreign scientific institutions.*

Key words: *Chemistry Department, master's theses, PhD theses*

1. INTRODUCTION

The Faculty of Philosophy in Niš was founded in 1971 and included a chemistry program within its seven basic study programs. Once the Faculty of Science and Mathematics was founded in 1999, it was developed into the current Department of Chemistry.

With an increase in the number of staff and an improved living standard of the society, in addition to the educational and pedagogical activities of the Department, various

Received March 18th, 2015; accepted January 20th, 2019
[†] Acknowledgement: The authors would like to thank the librarian Srđanka Popović who assisted in the review of the available literature.
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scientific research work activities began to take place. They were realized through the work on and defenses of masters and PhD theses, and as a part of various scientific research projects.

Graduate studies at the department began in 1978, and upon completion of the program, students were awarded the academic title of MSc - master's degree in chemistry. These degrees were offered in the following study programs: Inorganic Chemistry, Organic Chemistry and Biochemistry, Analytic and Physical Chemistry, Industrial Chemistry and Chemistry Education, based on a mentoring system. To date, 110 candidates have been awarded a master's degree in chemistry.

Since 2006, a three-year PhD program has been introduced with 8 exams which all are picked from a list of accredited courses and 6 types of research curricula. The work on PhD theses is carried out under the guidance of a mentor selected from a pre-determined list, and dissertations are defended upon the publication of two papers in international journals ranked as M20 and one paper in the journal published by the University of Niš. According to Rule Book of the Ministry of Education, Science and Technological Development international journals are classified into four categories:

- An excellent international journal, which is among 10% of the journals on the list for the appropriate discipline ranked by the impact factor value (M21a);
- A top international journal, which is among 30% in its field (M21);
- A prominent international journal, which is between 30 and 60% in its field (M22);
- International Journal, which is a scientific journal on the list, but it is not classified in the first 60% (M23).

Since 2011, the defended PhD theses are available on the faculty website in electronic form. Upon completion of the doctoral studies program, a candidate is awarded a PhD in natural science-chemistry. Until the end of 2017, 105 PhD theses have been defended, 39 of which have been defended since 2006.

2. AN OVERVIEW OF THE DEFENDED MASTER'S THESES

The master's thesis program was first offered to students in 1978. The first thesis was defended in 1981, and the last one in 2010. A total of 110 theses have been defended. Among these theses, 64 were defended at the Faculty of Philosophy from 1978 to 1999, and the rest were defended at the Faculty of Science and Mathematics from 2000 to 2010.

A total of 17 theses were defended in the field of inorganic chemistry (Table 1). In theses No. 2, 4, 6-10 and 12-16 geochemical analyses of samples of various geological origin were performed. These theses were done under the supervision of Prof. Pavle Premović, who was the head of several scientific research projects in the field of geochemistry.

Table 1 Master's theses in inorganic chemistry

No	Author	Title	Mentor	Year
1	*Jelica Perović*	Isparavanje molibdena u struji HCl i O_2 kao metoda za koncentrisanje nečistoća i spektrohemijsko određivanje Evaporation of molybdenum in a stream of HCI and O_2 as a method for the concentration of impurities and spectrochemical determination	S. Rajić	1981
2	*Mira Pavlović*	Vanadijum u Aleksinačkim škriljcima Vanadium in Aleksinac shale	P. Premović	1984
3	*Dragan Zlatanović*	Teorijska i termodinamička analiza hemijskih reakcija u sistemu molibden-sulfid/natrijum-hlorid na povišenim temperaturama Theoretical and thermodynamic analysis of chemical reactions in the system molybdenum sulphide-sodium chloride at elevated temperatures	S. Rajić	1985
4	*Gordana Kitanović*	Poliaromatične paramagnetne strukture u algalnim ugljevima Polyaromatic paramagnetic structures in algal coals	P. Premović	1985
5	*Biljana Ćirić*	Organski radikali u rožnacima kasnog prekabrijuma The organic radicals in corneals of late Precambrian	S. Rajić	1985
6	*Zora Grahovac*	Uran u aleksinačkom škriljcu Uranium in Aleksinac shale	P. Premović	1986
7	*Ljubiša Jovanović*	Paramagnetne poliaromatične strukture u prekambrijumskim kerogenima Paramagnetic polyaromatic structures in the precambrian kerogen	P. Premović	1991
8	*Nikola Nikolić*	Fizičko-hemijski uslovi sedimentacije kreda-tercijar graničnih sedimenata u Danskoj Physico-chemical conditions of sedimentation of Cretaceous-Tertiary boundary sediments in Denmark	P. Premović	1993
9	*Branislav Šuhartović*	Geohemijska ispitivanja kerogena tipa II dobijenih iz asfaltena bogatih sumporom Geochemical studies of type II kerogen derived from the sulfur-rich asphaltene	P. Premović	1994
10	*Goran Nikolić*	Identifikacija *orto*-benzo-semihinonskog radikala u mokraći pušača metodom elektronske spinske rezonance Identification of *ortho*-benzo-semiquinone radicals in the urine of smokers by electron spin resonance	P. Premović	1995
11	*Miroslav Premović*	Fizičko-hemijska ispitivanja organskih geopolimera: Fourier-ova transformaciona infracrvena (FTIC) spektrometrija Physical and chemical analyses of organic geopolymers: Fourier transform infrared (FTIC) spectrometry	G. Miletić	1998
12	*Ivana Tonsa*	Ugrađivanje porfirina u asfaltene i kerogen Incorporation of porphyrins into asphaltenes and kerogens	P. Premović	1999
13	*Jorgovanka Bojić*	Kiseonična kerogenizacija asfaltena iz bituminoznih stena Oxygen kerogenization of asphaltenes from bituminous rocks	P. Premović	1999
14	*Dragan Đorđević*	Geohemijska ispitivanja vanadil porfirina u geopolimerima Geochemical investigation of vanadyl porphyrins in geopolymers	P. Premović	2003
15	*Bratislav Todorović*	Geohemijska analiza graničnog sloja krede i tercijara Caravaca (Španija) Geochemical analysis of the boundary layer of the Cretaceous-Tertiary Caravaca (Spain)	P. Premović	2003
16	*Dejan Dulanović*	Geohemijska ispitivanja vanadijuma u keolinitskim glinama Geochemical studies of vanadium in keolinite clay	P. Premović	2004
17	*Žarko Mitić*	Sinteza, fizičko-hemijska i farmakološka ispitivanja Cu(II) kompleksa sa polisaharidima Synthesis, physicochemical and pharmacological studies of Cu(II) complexes with polysaccharides	R. Nikolić	2005

A total of 29 theses were defended in the field of analytical chemistry (Table 2). New analytical methods were developed and existing methods were applied in the analysis of various ions and molecules in model systems and on real samples. This is related to the projects funded by the Ministry of Science and Technological Development of the Republic of Serbia, which were implemented in the periods 1996-2000, 2000-2005, 2005-2010 at the Department of Chemistry, within which equipment of capital value and the necessary funds for the realization of experiments were purchased.

Table 2 Master's theses in analytical and physical chemistry

No	Author	Title	Mentor	Year
1	*Dragan Lazarević*	Mineralne vode Niške banje (istorijski pregled geohemijskih istraživanja) Mineral waters of Niška Banja (historical overview of geochemical investigations)	S. Rajić	1986
2	*Anja Jokić*	Ispitivanje i mogućnosti primene H_2/Pd i D_2/Pd elektrode pri potenciometrijskim određivanjima kiselina u tetrahidrofuranu kao rastvaraču The study of application possibilities of H_2/Pd and D_2/Pd electrode in potentiometric determinations of acids in tetrahydrofuran as a solvent	R. Igov	1990
3	*Sofija Rančić*	Analiza tragova Pb(II), Zn(II) i Cu(II) u pijaćoj vodi primenom kinetičke spektofotometrijske i AAS metode Trace analysis of Pb(II), Zn(II) and Cu(II) in the drinking water using kinetic spectrophotometric and AAS methods	R. Igov	1991
4	*Snežana Mitić*	Kinetičko određivanje tragova Mn(II), Cu(II) i Fe(III) u mineralnim vodama Kinetic determination of trace amounts of Mn(II), Cu(II) and Fe(III) in mineral waters	R. Igov	1991
5	*Milena Miljković*	Spektofotometrijsko odrežđivanje koncentracije reaktivnih boja u tehnološkim rastvorima na obojenim tekstilnim materijalima Spectrophotometric determination of the concentration of reactive dyes in technological solutions on colored textile materials	T. Pecev	1991
6	*Ranko Simonović*	Nove homogeno-katalitičke reakcije za analizu tragova Fe(III), Zn(II) i Cu(II) katalitičkom oksidacijom 4-hidroksikumarina kalijum-permanganatom u kiseloj sredini New homogeneous catalytic reactions for the analysis of traces of Fe(III), Zn(II) and Cu(II) by catalytic oxidation of 4-hydroxycoumarin with potassium permanganate in acid medium	R. Igov	1991
7	*Dragan Dimitrijević*	Spektrohemijska karakterizacija organo-fosfornih bojnih otrova tipa "V" Spectrochemical characterization of organo-phosphorous poison gases of type "V"	R. Igov	1992
8	*Miodrag Ristić*	Određivanje komponenata smeše (Ni, Pb, Cu i Zn) u otpadnim vodama hromatografskim razdvajanjem i spektrofotometrijskim određivanjem Determination of the components of the mixture (Ni, Pb, Cu, and Zn) in wastewaters by chromatographic separation and spectrophotometric determination	P. Premović	1993

9	*Dragana Noro*	Kinetičko određivanje tragova Fe(III), Co(II) i Mn(II) katalitičkom oksidacijom kumarina i nekih derivata kumarina kalijum-permanganatom u kiseloj sredini Kinetic determination of trace amounts of Fe(III), Co(II) and Mn(II) by catalytic oxidation of the coumarin and some derivatives of coumarin with potassium permanganate in acid medium	R. Igov	1994
10	*Svetlana Rašić*	AES analiza difuzionih procesa u sendvič strukturama omskog kontakta AES analysis of diffusion processes in sandwich structures of ohmic contacts	G. Miletić	1995
11	*Anita Todorovski*	Dobivanje i karakterisanje geometrijskih izomera (etilendiamin-*N*,*N*,*N'*-triacetato-*N'*-3-propionato) hromat(II) kompleksa Preparation and characterization of geometric isomers of (ethylenediamine-*N*,*N*,*N'*-triacetate-*N'*-3-propionate) chromate(II) complexes	R. Igov	1995
12	*Valentina Živanović*	Natrijum-pirogalol-5-sulfonat kao indikatorska supstanca za određivanje tragova As(III), Ni(II) i fosfata u rastvoru Sodium pyrogallol-5-sulfonate as indicator substance for the determination of traces of As(III), Ni(II) and phosphate in the solution	M. Obradović	1996
13	*Aleksandar Igov*	Nove homogeno-katalitičke reakcije za analizu tragova La(III),Ti(III) i Mn(II) u rastvoru New homogeneous catalytic reactions for the analysis of traces of La(III), Ti(III) and Mn(II) in solution	T. Pecev	1996
14	*Danijela Nasković*	Ispitivanje kompleksa Fe(III), Mo(VI) sa sulfonisanim produktima pirogalola i rezorcina Investigation of the Fe(III), Mo(VI) complexes with sulfonated products of pyrogallol and resorcinol	M. Obradović	1997
15	*Danijela Kostić*	Kinetičko određivanje vitamina C, B6 i B1 u farmaceutskim preparatima Kinetic determination of vitamin C, B6 and B1 in pharmaceutical compositions	S. Miletić	1998
16	*Vesna Stankov-Jovanović*	Nove kinetičke metode za analizu tragova Bi(III), Ti(III) i Pb(II) u rastvoru New kinetic methods for the analysis of traces of Bi(III),Ti(III) and Pb(II) in solution	T. Pecev	1998
17	*Violeta Mitić*	Nove kinetičke metode za analizu tragova Sb(III), Sn(II), Pb(II) i Al(III) u rastvoru New kinetic methods for the analysis of traces of Sb(III), Sn(II), Pb(II) and Al(III) in solution	R. Igov	1998
18	*Tatjana Anđelković*	Karakterizacija terestične huminske kiseline izolovane modifikovanim postupkom Characterization of terrestrial humic acid isolated by the modified method	J. Perović	2000
19	*Slavica Sunarić*	Ispitivanje reakcija AsO^{2-}, $HAsO_4^{2-}$ i SeO_3^{2-} sa oksalnom kiselinom Investigation of the reaction AsO^{2-}, $HAsO_4^{2-}$ and SeO_3^{2-} with oxalic acid	M. Obradović	2001
20	*Irena Vidović*	Prilog određivanju Pb(II) metodom atomske apsorpcione spektrofotometrije na bazi generisanja olovo hidrida Contribution to the determination of Pb(II) by atomic absorption spectrophotometry method based on lead hydride generation	T. Pecev	2001

21	*Jasmina Mitić*	Istraživanje kvaliteta podzemnih voda na području grada Niša The survey of underground waters quality in the city of Niš	M. Purenović	2001
22	*Aleksandra Pavlović*	Kinetičko određivanje aminokiselina: histidina, arginina i lizina Kinetic determination of amino acids: histidine, arginine, and lysine	S. Mitić	2002
23	*Emilija Pecev-Marinković*	Primena prehrambene boje PONCEAU 4R kao indikatorske supstance u kvantitativnoj hemijskoj analizi The use of food colour PONCEAU 4R as indicator substance in quantitative chemical analysis	Z. Grahovac	2004
24	*Dragan Marinković*	Ispitivanje organohlornih insekticida i polihlorovanih bifenila u nekim vodama za piće hromatografskim metodama Investigation of organochlorine insecticides and polychlorinated biphenyls in some drinking waters by chromatographic methods	B. Radovanović	2004
25	*Danijela Bojić*	Ispitivanje redukcije nitrata egzogenog porekla u usnoj duplji čoveka Investigation of reduction of nitrate of exogenous origin in the human oral cavity	J. Perović	2005
26	*Ružica Micić*	Primena 4-hidroksikumarina za određivanje tragova Mn(II), Mo(VI), V(V) i Th(IV) jona u rastvoru The use of 4-hydroxycoumarin for the determination of traces of Mn(II), Mo(VI), V(V), and Th(IV) ions in solution	S. Mitić	2006
27	*Branka Petković*	Kvantitativno određivanje tragova Au(III), W(VI), Zr(IV) i Mo(VI) jona u rastvoru Quantitative determination of traces of Au(III), W(VI), Zr(IV) and Mo(VI) ions in solution	T. Pecev	2007
28	*Dragan Stanković*	Uticaj hemijskih vrsta pojedinih makro i mikroelemenata geotermalne vode na fizičko-hemijske osobine peloida Bujanovačke banje The impact of chemical species of particular macro and microelements of geothermal water on physical and chemical properties of Bujanovac spa peloids	M. Purenović	2010
29	*Miroslav Milenković*	Određivanje digoksina u farmaceutskim preparatima Determination of digoxin in the pharmaceutical compositions	R. Palić	2010

Seven theses were defended in the field of industrial chemistry and environmental chemistry (Table 3). Most of the research on the theses was advised by Prof. Milovan Purenović who also led a few research projects at the Chemistry Department, which dealt with the synthesis of new composite materials and their application in water treatment.

Table 3 Master's theses in industrial chemistry

No	Author	Title	Mentor	Year
1	*Novica Stanković*	Ispitivanje obojenosti poliestarskih i mikropoliestarskih vlakana disperznim serilen bojama refleksionom spektrofotometrijom Examination of the coloration of polyester and micropolyester fibers with disperse Serilen dyes by reflection spectrophotometry	M. Purenović	1993
2	*Aleksandar Bojić*	Ispitivanje fizičko-hemijskih pojava pri heterogenoj spontanoj elektrokatalizi u vodenim rastvorima nekih organskih i neorganskih jedinjenja primenom čvrstog katalizatora na bazi mikrolegiranog aluminijuma Physicochemical phenomena at heterogenic spontaneous electrocatalysis of some organic and inorganic compounds in aqueous solutions by applying the solid metal catalyst based on microalloyed aluminum	M. Purenović	1997
3	*Dragana Mitić-Stojanović*	Uticaj nekih dodataka i termohemijske obrade na strukturu i fizičko-hemijske osobine u sistemu SiO_2-H_2O The effect of some additives and thermochemical treatment on the structure and physicochemical properties in the system SiO_2-H_2O	M. Purenović	2000
4	*Aleksandra Zarubica*	Korelacija metričke i antikorozione karakterizacije organskih premaza u zaštiti metala The correlation of metric and anticorrosion characterization of organic coatings in metal protection	M. Miljković	2000
5	*Vesna Cvetković*	Elektrohemijsko ponašanje H_2O u prisustvu nekih katalitičkih materija, dodataka i primesa u jonskom, koloidnom i gasovitom stanju Electrochemical behavior of H_2O in the presence of some catalytic materials, additives and impurities in ionic, colloidal and gaseous states	M. Purenović	2005
6	*Violeta Rakić*	Indeksacija i spektroskopska identifikacija prehrambenih boja u životnim namirnicama Indexation and spectroscopic identification of food colors in sustaining food	M. Miljković	2007
7	*Aleksandar Veselinović*	Fotoliza huminskih kiselina u vodenoj sredini Photolysis of humic acids in an aqueous medium	A. Bojić	2009

In the field of chemistry education, 10 theses were defended (Table 4). Most of the theses were done under the supervision of Prof. Miloje Rakočević.

Table 4 Master's theses in chemistry education

No	Author	Title	Mentor	Year
1	*Vesna Andrejić*	Istraživanje esencijalnosti proteinskih aminokiselina Study of the essentiality of protein amino acids	M. Rakočević	1995
2	*Svetlana Spasić-Vukadinović*	Bimarna simetrija proteinskih aminokiselina u molekulu citohroma C Binary symmetry of protein amino acids in the molecule of cytochrome C	M. Rakočević	1995
3	*Rifat Hadrović*	Periodičnost u sistemima organskih molekula kao naučni i nastavni problem Periodicity in the systems of organic molecules as scientific and teaching problem	M. Rakočević	1999
4	*Vladan Đurić*	Klasifikacija proteinskih aminokiselina u relaciji sa pozicijom nukleotidnih baza u kodonima Classification of the protein amino acids in relation with the position of the nucleotide bases in codons	M. Rakočević	1999
5	*Vanja Manitašević*	Naučni i nastavni aspekti klasifikacije proteinskih aminokiselina u četiri stereo-hemijska tipa Scientific and teaching aspects of the classification of protein amino acids into four stereochemical types	M. Rakočević	2000
6	*Predrag Jelenković*	Naučni i nastavni aspekti proučavanja strukture aminokiseline Scientific and educational aspects of the study of the structure of an amino acid	M. Rakočević	2001
7	*Vesna Živković*	Korozija metala - naučni, nastavni i ekološki aspekti Corrosion of metals - scientific, educational and environmental aspects	M. Rakočević	2002
8	*Mirjana Jovanović*	Uticaj posebnog didaktičkog materijala na uspeh u nastavi hemije The impact of special didactic material on the success of teaching chemistry	M. Rakočević	2003
9	*Jelena Franeta*	Hemija životne sredine kao nastavna tema u srednjo-školskoj nastavi Environmental chemistry as a teaching topic in high school teaching	J. Perović	2006
10	*Aleksandra Gošnjić*	Korelacija tradicionalne i kompijuterski podržane interaktivne nastavne metode u obradi nastavne teme proteini Correlation between traditional and computer-supported interactive teaching method in the processing of teaching topic proteins	D. Kostić	2009

Most of the master's theses were defended in the field of organic chemistry and biochemistry (Table 5), which is in accordance with world trends in the development of chemistry. The work mostly dealt with the analysis of essential oils and extracts from herbs from the territory of Serbia, also included the synthesis of biologically active substances, and with several papers from the field of organic polymers. The greatest number of master's theses (23 in total) were done under the directions of Prof. Radoslav Palić, who was the head of several projects which were carried out at the Chemistry Department in the period from 1982 to 2012.

Table 5 Master's theses in organic chemistry and biochemistry

No	Author	Title	Mentor	Year
1	*Milan Nikolić*	Ispitivanje kardiotoničnih glikozida iz biljke *Adonis vernalis* L. Examination of cardiac glycosides from the plant *Adonis vernalis* L.	S. Laišić	1986
2	*Marina Mitić*	Određivanje diferencijalnih proteinskih klarensa kod bubrežnih bolesnika Determination of differential protein clearance in kidney patients	J. Ursić Janković	1987
3	*Nataša Krtolica*	Ispitivanje serumskih proteina zamoraca inficiranih sporama gljive *Aspergillus flavus* Investigation of serum proteins of guinea pigs infected with spores of the fungus *Aspergillus flavus*	J. Ursić Janković	1988
4	*Mirjana Abramović*	Uticaj nekih lekova na elektroforetsko ponašanje serumskih proteina The effect of some drugs on the electrophoretic behavior of serum proteins	J. Ursić Janković	1988
5	*Vesna Jovičić*	Ispitivanje serumskih i lipoproteina lipida zamorčića inficiranih sporama gljive *Aspergillus flavus* Investigation of serum and lipoproteins of lipids of guinea pigs infected with spores of the fungus *Aspergillus flavus*	J. Ursić Janković	1988
6	*Olga Jovanović*	Selektivne transformacije i sinteze u hemiji ugljenih hidrata Selective transformations and syntheses in the chemistry of carbohydrates	Đ. Glišin	1989
7	*Gordana Stojanović*	Sinteza D-dezozamina i njegovog 2-*O*-metil derivata The synthesis of methyl D-desosaminide and its *O*-methyl derivative	Đ. Glišin	1990
8	*Slobodan Anđelković*	Ispitivanje reakcija sinteze furfuriliden i tetrahidrofurfuril hormona u odgovarajućim spiroketalnim jedinjenjima Examination of transformations of furfurilidene and tetrahydrofurfuryl hormones in suitable spiroketal compounds	S. Laijišić	1990
9	*Nebojša Simić*	Analiza etarskog ulja iz iglica munike (*Pinus heldreichii* Chris), (*Pinus peuce* Griseb) i belog bora (*Pinus sylvestris* L.) Analysis of the essential oil from the needles of *Pinus heldreichi* Chris, *Pinus peuce* Griseb and *Pinus sylvestris* L.	R. Palić	1991
10	*Perica Pešić*	Ispitivanje etarskog ulja i masnih kiselina *Salvia sclarea* L. Study of essential oil and fatty acids of *Salvia sclarea* L.	R. Palić	1992

11	*Dragoljub Miladinović*	Ispitivanje korelacije izolovanog kolhicina iz *Colhicum autumnale* L. (mrazovac) sa sadržajem mikroelemenata Mn(II), Zn(II),Cu(II) i Ni(II) u zemljištu i njihova distribucija u biljci Investigation of the correlation of isolated colchicine from *Colchicum autumnale* L. (autumn crocus) with microelements Mn (II), Zn (II), Cu (II) and Ni (II) in the soil and their distributions within the plant	B. Radovanović	1992
12	*Slavica Ilić*	Hemijsko ispitivanje biljnih pigmenata i njihove mikrobiološke aktivnosti iz cveta *Melilotus officinalis* L. Composition and microbial activity of pigments from the flowers of *Melilotus officinalis* L.	S. Miletić	1992
13	*Suzana Samardžija*	Uticaj aktivnih belih punila na kinetiku procesa vulkanizacije i fizičko-mehanička svojstva elastomernih vulkanizata The impact of active white fillers on the kinetics of vulcanization process and physical-mechanical properties of rubber vulcanisates	B. Radovanović	1992
14	*Branislav Gudžić*	Hemijsko ispitivanje biljnih pigmenata i njihove mikrobiološke aktivnosti iz cveta *Hypericum perforatum* L. Composition and microbial activity of pigments from the flowers of *Hypericum perforatum* L.	R. Palić	1993
15	*Gordana Jovanović*	Uticaj različitih aditiva na svojstva gume iz etilen-propilendiena kaučuka i sistema vezivnih sredstava na jačinu guma-metal veza The influence of different additives on the rubber properties from ethylene propylidene India rubber and systems of bound agents on the strength on the bond rubber-metal	B. Radovanović	1993
16	*Ljiljana Sokolić*	Sinteza novih heterocikličnih jedinjenja na bazi 3-cijano-4-hlorkumarina Synthesis of new 3-cyano-4-chlorocoumarins-based heterocyclic compounds	R. Palić	1993
17	*Nada Nikolić*	Transformacije glikoalkaloida *Solanum tuberosum* L. do solanida Transformations of glycoalkaloids of *Solanum tuberosum* L. to solanidine	R. Palić	1993
18	*Dušanka Savić*	Hemijsko ispitivanje etarskog ulja, alkana i masnih kiselina *Satureja adamovicii* Šilić i *Satureja fukarekii* Šilić Chemical analysis of essential oils, alkanes and fatty acids of *Satureja adamovicii* Šilić and *Satureja fukarekii* Šilić	R. Palić	1993
19	*Novica Ristić*	Hemijsko ispitivanje etarskog ulja, masnih kiselina i alkana *Micromeria thymifolia* (Scop.) Fritsch. i *Micromeria albanica* (Grisrb. ex. k. Maly) Šilić Chemical analysis of essential oil, fatty acids, and alkanes of *Micromeria thymifolia* (Scop.) Fritsch. and *Micromeria albanica* (Grisrb. ex. k. Maly) Šilić	R. Palić	1994
20	*Ivan Ivanov*	Izolovanje i karakterizacija produkata katalitičke polimerizacije 1,3-dihidroksibenzena Isolation and characterization of the products of the catalytic polymerization of 1,3-dihydroxybenzene	J. Ursić Janković	1995

21	*Goran Petrović*	Ispitivanje uticaja molekulske strukture nekih Izantin schiff-ovih baza na efikasnost inhibicije korozije gvožđa Investigation of the effect of the molecular structure of some isatin Schiff bases on the effectiveness of the inhibition of corrosion of iron	B. Radovanović	1995
22	*Vesna Milanović*	Hemijsko ispitivanje antocijana iz cvetnih latica biljaka: *Malva sylvestris* L. (Malvaceae), *Delphinium consolida* L. (Ranunculaceae), *Papaver rhoeas* L. (Papaveraceae), *Rosa centifolia* L. (Rosaceae) Chemical analysis of anthocyanins from flower petals of *Malva sylvestris* L. (Malvaceae), *Delphinium consolida* L. (Ranunculaceae), *Papaver rhoeas* L. (Papaveraceae), *Rosa centifolia* L. (Rosaceae)	S. Miletić	1995
23	*Marina Marković*	Određivanje sastava ulja iz semena *Oenothera biennis* L., *Cucurbita pepo* L. i ulja iz klica *Triticum vulgare* L. The composition of seed oils of *Oenothera biennis* L. and *Cucurbita pepo* L. and germ oil of *Triticum vulgare* L.	R. Palić	1995
24	*Agim Šabani*	Sinteza novih heterocikličnih jedinjenja kondenzovanih i ciklizovanih u položaju 3,4-kumarina Synthesis of novel heterocyclic compounds condensed and cyclized in positions 3 and 4 of the coumarin ring	L. Stefanović Kaljaj	1996
25	*Zilha Krijaštorac*	Određivanje aktivnosti i specifične aktivnosti ukupne i prostatične kisele fosfataze u serumu obolelih od adenoma prostate upotrebom različitih koncentracija supstrata Determination of the activity and the specific activity of total and prostatic acid phosphatase in the serum of diseased with prostate adenoma using different substrate concentrations	J. Ursić Janković	1996
26	*Vojislav Jovanović*	Uticaj tipa i masenog udela čađi na gustinu umrežavanja i energiju aktivacije umrežavanja vulkanizata akrilonitril-butadien kaučuka Influence of type and mass fraction of char on the density of crosslinking and the activation energy of crosslinking of vulcanisate of acrylonitrile-butadiene India rubber	B. Radovanović	1997
27	*Jasmina Veličković*	Masne kiseline i alkani iz *Achillea lingulata* L., *Achillea crithmifolia* L. i *Achillea nobilis* L. Fatty acids and alkanes of *Achillea lingulata* L., *Achillea crithmifolia* L., and *Achillea nobilis* L.	R. Palić	1999
28	*Radmila Pavlović*	Produkcija azot-monoksida i metabolizam L-arginina u ranom periodu nakon blage povrede pluća u kunića Production of nitrogen monoxide and L-arginine metabolism in the early period after mild lung injury in rabbits	J. Ursić Janković	1999
29	*Slađana Alagić*	Ispitivanje etarskog ulja i ekstrakta domaćih tipova vrste *Nicotiana tabacum* L. Investigation of essential oil and extracts of domestic types of species *Nicotiana tabacum* L.	R. Palić	2000
30	*Tanja Nasković*	Hemijsko i mikrobiološko ispitivanje *Achillea crithmifolia* W.K., *Achillea lingulata* W.et K. i *Achillea nobilis* L. Chemical and microbiological study of *Achillea crithmifolia* W.K., *Achillea lingulata* W.et K. and *Achillea nobilis* L.	R. Palić	2000
31	*Ivan Palić*	Hemijsko i mikrobiološko ispitivanje *Micromeria albanica* i *Micromeria cristata* Chemical and microbiological study of *Micromeria albanica* and *Micromeria cristata*	J. Ursić Janković	2001

32	*Jasmina Mitrović*	Hemijsko ispitivanje biljne vrste *Artemisia lobelli* All. Chemical analysis of plant species *Artemisia lobelli* All.	R. Palić	2001
33	*Tatjana Jovanović*	Hemijsko i mikrobiološko ispitivanje odabranih biljnih vrsta roda *Acinos Miller* Chemical and microbiological study of selected species of the genus *Acinos Miller*	R. Palić	2002
34	*Olivera Marinković*	Ispitivanje masnih kiselina i alkana iz biljnih vrsta *Hypericum perforatum, Hypericum maculatum i Hypericum olympicum* Alkanes and fatty acids of plant species *Hypericum perforatum, Hypericum maculatum* and *Hypericum olympicum*	R. Palić	2003
35	*Vesna Ranković*	Kvalitet rakija lozovača hibridnih sorti grožđa Lucija i Mediana The quality of grape brandy of hybrid grape varieties Lucia and Mediana	R. Palić	2005
36	*Niko Radulović*	Sekundarni metaboliti biljnih vrsta *Achillea clavennae* L. i *Achillea holosericea* Sibth. et Sm. Secondary metabolites of plant species *Achillea clavennae* L. and *Achillea holosericea* Sibth. et Sm.	G. Stojanović	2005
37	*Jelena Lazarević*	Sekundarni metaboliti biljne vrste *Stachys milanii* Petrović Secondary metabolites of plant species *Stachys milanii* Petrović	R. Palić	2005
38	*Predrag Sibinović*	Ispitivanje stabilnosti ciprofloksacina u gotovim farmaceutskim oblicima Stability testing of ciprofloxacin in finished pharmaceutical forms	R. Palić	2005
39	*Biljana Dekić*	Sinteza,struktura i mikrobiološka aktivnost heterocikličnih dibenzo[*a*,*h*]antracena i ciklopenta[*b*]fenantrena Synthesis, structure and microbiological activity of heterocyclic dibenz[*a*,*h*]anthracene and cyclopenta[*b*]phenanthrene	R. Palić	2006
40	*Vidoslav Dekić*	Sinteza,struktura i mikrobiološka aktivnost kondenzovanih derivata kumarina Synthesis, structure and antimicrobial activity of annelated coumarin derivatives	R. Palić	2006
41	*Polina Blagojević*	Hemijski sastav i mikrobiološka aktivnost etarskih ulja biljnih vrsta *Artemisia absinthium* L. i *Artemisia vulgaris* L. Chemical composition and antimicrobial activity of the essential oils of *Artemisia absinthium* L. and *Artemisia vulgaris* L.	G. Stojanović	2007
42	*Branimirka Vučić*	Sinteza, rendgenska strukturna analiza, antioksidativni kapacitet i mikrobiološka aktivnost 4-supstituisanih kumarina Synthesis, X-ray structural analysis, antioxidant capacity and microbial activity of 4-substituted coumarins	R. Palić	2007
43	*Milan Dekić*	Isparljivi sekundarni metaboliti steno-endemične biljne vrste *Aquilegia pancicii* Degen The volatile secondary metabolites of a steno-endemic plant species *Aquilegia pancicii* Degen	R. Palić	2008
44	*Aleksandra Đorđević*	Identifikacija isparljivih konstituenata cvetova biljnih vrsta *Prunus domestica* L. *i Prunus padus* L. Identification of volatile constituents of flowers of plant species *Prunus domestica* L. and *Prunus padus* L.	R. Palić	2008

45	*Ljiljana Jelenković*	Hemijska analiza i mikrobiološka aktivnost etarskog ulja *Satureja kitaibelii* Wierzb. et Heuff Chemical analysis and microbiological activity of essential oil of *Satureja kitaibelii* Wierzb. et Heuff	R. Palić	2010
46	*Milena Jovanović*	Hemijsko i mikrobiološko ispitivanje etarskih ulja biljnih vrsta *Filipendula vulgaris* Moench *i Filipendula ulmaria* Maxim Chemical and microbiological study of essential oils of plant species *Filipendula vulgaris* Moench and *Filipendula ulmaria* Maxim	N. Radulović	2010
47	*Danijela Ilić*	Azuleni i srodna jedinjenja iz etarskih ulja biljnih vrsta *Achillea millefolium* L. *i Achillea crithmifolia* Waldst. et Kit. Azulens and related compounds from the essential oils of plant species *Achillea millefolium* L. and *Achillea crithmifolia* Waldst. et Kit.	N. Radulović	2010

The distribution of master's theses in a certain scientific field is presented in Fig. 1. Most of the theses were defended in the field of organic chemistry, then in the field of analytical chemistry, inorganic chemistry, chemistry education, and industrial chemistry. In terms of subject matter, these theses are correlated with the scientific research projects realized in the aforementioned period, while the advisors were all staff members of the Chemistry Department. The greatest number of the theses was defended under the guidance of Professors Radosav Palić and Pavle Premović (25 and 14, respectively), who spent more than thirty years working in the field of chemistry.

A total of 110 master's theses were defended. Of them, in the period from 1978 to 1999, 64 masters' theses were defended at the Faculty of Philosophy, and from 2000 to 2010 the rest of the theses were defended at the Faculty of Science and Mathematics. The number of defended theses in five-year periods since the master program was first launched until 2010 is presented in Fig. 2. The number of defended theses was initially small. The master's study program was attended by the teaching assistants working both at the Chemistry Department and at other related Departments and Universities. Following 1990, due to the overall economic and political situation in the country, there was a rapid increase in interest in the master's degree program. The original master's program, as it has existed from the beginning, was terminated in 2005, with the passing of the Law on Higher Education.

Many of the students awarded an MSc in chemistry continued their education at the Chemistry Department, so that most of them went on to earn their PhD. Dozen of students who earned their MSc at the Chemistry Department also found work at the other Faculties of the University of Niš, as well as at the University of Priština (nowadays seated in Kosovska Mitrovica). A number of students who earned their MSc at the Chemistry Department continued their education by attending various PhD programs abroad.

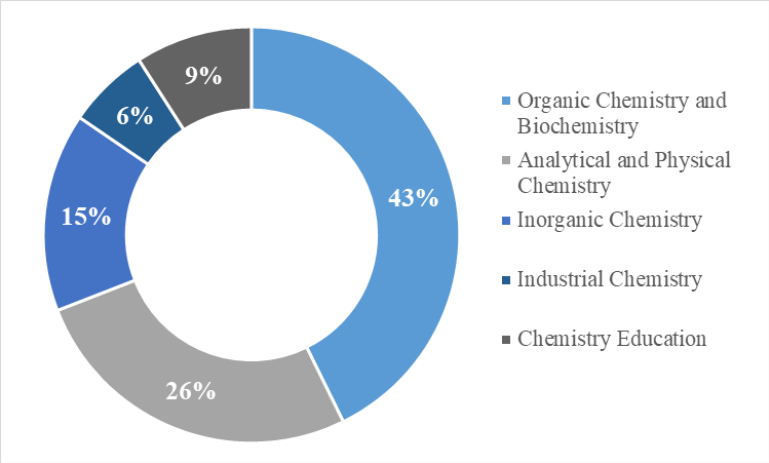

Fig. 1 The distribution of masters' theses among different chemistry fields

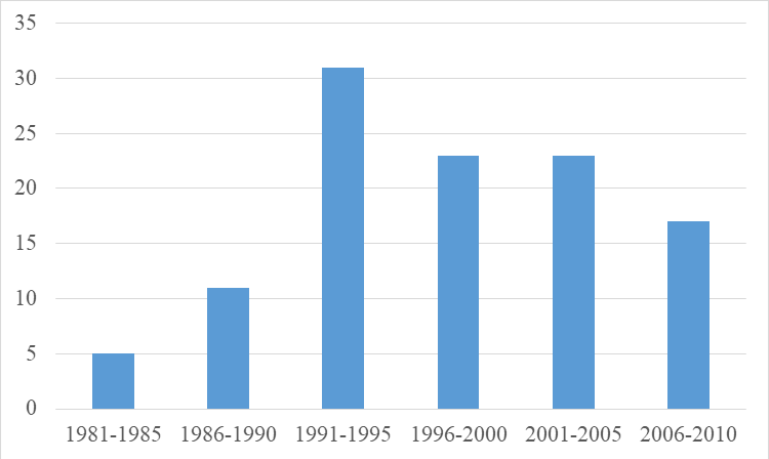

Fig. 2 A chronological overview of the number of defended master's theses

3. An Overview of the Defended PhD Theses

The first PhD thesis in the field of chemistry was defended at the Faculty of Philosophy in 1984. In the period from 1972 to 2017 a total of 105 PhD theses were defended.

In the field of inorganic chemistry, a total of 16 PhD theses were defended (Table 6). Theses supervised by Prof. Pavle Premović dealt with the geochemical analysis of samples of various geochemical origins and were done within the following two projects implemented at the Chair of Inorganic Chemistry:

1. “Balances in complex environments” within the subproject "Study of the nature, structure, and origin of chemical species in natural environments (1995-2000)”, funded by the Ministry of Science and Technological Development of the Republic of Serbia, project leader Prof. Pavle Premović;
2. “Physicochemical characterization of heavy metals in structures of synthetic minerals of clay, natural minerals of clay and clay of industrial and ecological significance from the area of wider Serbia (2000-2005)”, funded by the Ministry of Science and Technological Development of the Republic of Serbia, project leader Prof. Pavle Premović.

The remaining PhD theses were from the field of coordination chemistry and bioelements supervised by Prof. Ružica Nikolić.

Table 6 PhD theses in the field of inorganic chemistry

No	Author	Title	Mentor	Year
1	*Ružica Nikolić*	Geohemijska analiza Cu, Ag i Au u nekim geološkim uzorcima iz Srbije Geochemical analysis of Cu, Ag, and Au in some geological samples from Serbia	P. Premović	1992
2	*Jakov Stamenković*	Pokretljivost jona u polimerima akrilne kiseline The mobility of ions in the polymers of acrylic acid	K. Zumbov	1993
3	*Ljubiša Jovanović*	Termalna stabilnost vanadil porfirinskih jedinjenja u sedimentnim stenama The thermal stability of vanadyl porphyrin compounds in sedimentary rocks	P. Premović	1996
4	*Nikola Nikolić*	Vanadijum i fizičko-hemijski uslovi sedimentacije Vanadium and physico-chemical conditions of sedimentation	P. Premović	1999
5	*Biljana Kaličanin*	Ugrađivanje i izluživanje jona Cu, Zn, Pb i Cd u dentalnim protetičkim materijalima, model protetičkim materijalima i prirodnim zubima Incorporation and secretion of ions Cu, Zn, Pb and Cd in dental prosthetic materials, model prosthetic materials and natural teeth	R. Nikolić	2004
6	*Dragan Đorđević*	Termalna stabilnost vanadil porfirina u sedimentnim kerogenima The thermal stability of vanadyl porphyrins in sedimentary kerogen	P. Premović	2009
7	*Bratislav Todorović*	Geohemijska analiza graničnog sloja krede i tercijara Fish Clay (riblja glina) sa lokaliteta Hojerup (Stevns Klint, Danska) Ni, Co i Zn u crnom laporcu Geochemistry of the Cretaceous-Paleogene boundary clay (Fish Clay) at Hojerup (Stevns Klint, Denmark): Ni, Co, and Zn of the black marl	P. Premović	2009
8	*Žarko Mitić*	Sinteza i spektar strukturne korelacije kompleksa nekih biometala sa dekstranom i pululanom The synthesis and spectrum of structural correlation of complexes of some biometals with dextran and pullulan	M. Cakić	2009
9	*Maja Stanković*	Uporedna geohemijska ispitivanja smektita vulkanskog porekla iz Arizone (SAD) i smektita graničnih sedimenata kreda-paleogena iz Danske The comparative geochemical studies of smectite of volcanic origin from Arizona (USA) and smectite of Cretaceous-Paleogene boundary sediments from Denmark	P. Premović	2010

10	*Miloš Đorđević*	Geohemijska analiza tragova metala riblje gline sa lokaliteta Kirkevig (Stevns Klint, Danska) Geochemical analysis of trace metals in the fish clay from the locality Kirkevig (Stevns Klint, Denmark)	D. Đorđević	2012
11	*Darko Anđelković*	Interakcija i specijacija hroma u model sistemima zemljišta i O-, N- i S-donor liganada prirodnog i antropogenog porekla Interaction and speciation of chromium in soil model systems with O-, N- and S-donor ligands of natural and anthropogenic origin	R. Nikolić	2012
12	*Jasmina Jovanović*	Praćenje efekata hronične intoksikacije teškim metalima (Cd, Pb, Cu) i protektivne uloge suplemenata S-donor liganada preko aktivnosti endonukleaza i sekundarnih produkata lipidne peroksidacije Monitoring the effects of chronic intoxication by heavy metals (Cd, Pb, Cu) and protective roles supplement S-donor ligands by measuring the activity of endonuclease and secondary products of lipid peroxidation	R. Nikolić	2012
13	*Nenad Krstić*	Ispitivanje interakcije M(II)jona biometala u model sistemima sa farmaceutskim preparatima i suplementima tipa kiselina kao potencijalnim ligandima Study of the interaction M(II) biometals ions in model systems with pharmaceutical preparations and supplements type acid as potential ligands	R. Nikolić	2013
14	*Milena Krsmanović*	Uticaj intoksikacije teškim metalima (Cu, Cd i Pb) na aktivnost oksido-reduktaza sa Mo kao mikroelementom Influence of intoxication by heavy metals (Cu, Cd, Pb) on the activity of oxidoreductases with Mo as a trace element	R. Nikolić	2013
15	*Aleksandar Veselinović*	Uticaj dijamagnetnih dvovalentnih jona metala na autooksidaciju vicinalnih trihidroksilnih fenolnih jedinjenja u vodenim rastvorima The influence of divalent diamagnetic metal ions on vicinal trihydroxy phenolic compounds autoxidation in aqueous solutions	G. Nikolić	2014
16	*Nataša Radosavljević Stevanović*	Novi forenzički aspekti primene rezultata analize sistema: zemljište-biometali-biomaterijali New forensic aspects of the application of the results of the analysis of the system: soil-biometals-biomaterials	R. Nikolić	2014

In the field of analytical and physical chemistry, a total of 25 doctoral dissertations were defended (Table 7). Ten of them were supervised by Prof. Snežana Mitić. Until the 2000s most of the work in the field of analytical chemistry was based on the development of a kinetic spectrophotometric method for determination of various elements, pesticides, and drugs in model and real samples, while in recent years the application of other methods (like HPLC and ICP-QES) has started. Most of the research was realized within the projects implemented by teachers and researchers from this Department:

1. "Development of new methods for determining low concentrations of substances in real samples (1995-2000)", funded by the Ministry of Science and Technological Development of the Republic of Serbia;
2. "Development of new analytical methods for analysis of elements in samples of natural and artificial origin in aquatic and non-aquatic environments (1995-2000)", funded by the Ministry of Science and Technological Development of the Republic of Serbia;

3. "Development of new and improvement of existing analytical methods for monitoring the quality of industrial products and the environment (2000-2005)", funded by the Ministry of Science and Technological Development of the Republic of Serbia, project leader Prof. Snežana Mitić;
4. "Development and application of methods for monitoring the quality of industrial products and the environment (2006-2010)", funded by the Ministry of Science and Environment Protection of the Republic of Serbia, project leader Prof. Snežana Mitić.

Table 7 PhD theses in the field of analytical and physical chemistry

No	Author	Title	Mentor	Year
1	*Gordana Miletić*	Nove kinetičke metode za analizu tragova nekih jona u rastvoru New kinetic methods for the analysis of traces of some ions in solution	R. Igov	1984
2	*Todor Pecev*	Prilog homogeno-katalitičkim reakcijama za analizu tragova elemenata u rastvoru Contribution to homogeneous catalytic reactions for the analysis of traces of elements in solution	R. Igov	1984
3	*Snežana Mitić*	Određivanje tragova Cu(II), Fe(III), Cr(VI), Mn(II), Cd(II), Pd(II) i I⁻ jona u rastvoru primenom kinetičke metode analize Determination of traces of Cu (II), Fe (III), Cr (VI), Mn (II), Cd (II), Pd (II) and I⁻ ions in the solution using the kinetic method of analysis	R. Igov	1994
4	*Ranko Simonović*	Nove kinetičke metode hemijske analize za određivanje tragova V(III), Rh(III), Fe(III), In(III) i Al(III) u rastvoru New kinetic methods for the determination of traces of V (III), Rh (III), Fe (III), In (III) and Al (III) in solution	R. Igov	1996
5	*Zora Grahovac*	Ispitivanje produkata spontane reakcije 1,3-dihidroksibenzena u koncentrovanoj perhlornoj kiselini Investigation of the products of the spontaneous reaction of 1,3-dihydroxybenzene in concentrated perchloric acid	M. Obradović	1997
6	*Goran Nikolić*	Ispitivanje uticaja neorganskih soli na ekstrakciju različitih fenola iz vodenih rastvora i bioloških uzoraka Investigation of the effect of inorganic salts on the extraction of different phenols from aqueous solutions and biological samples	J. Perović	2002
7	*Valentina Živanović*	Određivanje tragova aktivnih materija nekih pesticida kinetičkim metodama analize Determination of traces of pesticides by kinetic methods of analysis	S. Mitić	2003
8	*Tatjana Anđelković*	Uticaj kiseoničnih funkcionalnih grupa huminskih kiselina na njihove kiselinsko bazne i kompleksirajuće osobine Oxygen-containing functional groups of humic acid related to its acid-base and complexometric properties	J. Perović	2006
9	*Slavica Sunarić*	Određivanje aminoglikozidnih i tetraciklinskih antibiotika na osnovu njegove degradacije H_2O_2 u prisustvu Cu(II) Determination of aminoglycoside and tetracycline antibiotics on the basis of their degradation with H_2O_2 in the presence of Cu (II)	S. Mitić	2007
10	*Aleksandra Pavlović*	Kinetičko određivanje nekih analgetika i sedativa Kinetic determination of some analgesics and sedatives	S. Mitić	2009

11	*Ružica Micić*	Kinetičko određivanje tragova jona u realnim uzorcima Kinetic determination of traces of ions in real samples	S. Mitić	2009
12	*Snežana Tošić*	Proučavanje sistema: mono i disulfovani produkti hidrohinona-joni metala Study of the system: mono- and disulphonated products of hydroquinone-metal ions	M. Obradović	2009
13	*Dragan Milenović*	Razvoj i validacija HPLC metoda za određivanje rezidua aktivnih komponenti farmaceutskih preparata Development and validation of HPLC methods for the determination of residues of the active components of the pharmaceutical compositions	S. Mitić	2010
14	*Emilija Pecev-Marinković*	Razvoj i primena kinetičkih metoda analize za kvantitativno određivanje pojedinih pesticida Development and application of kinetic methods of analysis for quantitative determination of certain pesticides	Z. Grahovac	2011
15	*Ivana Rašić-Mišić*	Kinetičko-spektrofotometrijsko određivanje pojedinih komponenata u farmaceutskim preparatima Kinetic-spectrophotometric determination of some components in pharmaceutical preparations	G. Miletić	2011
16	*Milan Mitić*	Kinetička degradacija fenolnih jedinjenja hidrokil radikalima Kinetics of degradation of phenolic compounds by hydroxyl radicals	M. Obradović	2012
17	*Dragan Velimirović*	Optimizacija, validacija i primena ICP-QES metoda određivanja sadržaja metala u realnim uzorcima Optimization, validation, and application of the ICP-OES method for metal content determination in real samples	S. Tošić	2013
18	*Milan Stojkovic*	Antioksidativna aktivnost, fenolni i mineralni sastav biljnih vrsta *Geranium macrorrhizum* L., *Allium ursinum* L., *Stachys germanica* L. i *Primula veris* L. Antioxidant activity, phenolic and mineral content of plant species *Geranium macrorrhizum* L., *Allium ursinum* L., *Stachys germanica* L. and *Primula veris* L.	S. Mitić	2014
19	*Budimir Ilić*	Hemometrijska analiza rezultata hemijskih i bioloških istraživanja farmakološki značajnih biljaka Chemometric analysis of chemical and biological studies of pharmacologically important plants	D. Miladinović	2014
20	*Branka Stojanović*	Hemijski sastav i antioksidativna aktivnost metanolnih i acetonskih ekstrakata pulpe i kore domaćih vrsta voća sa područja Jugoistočne Srbije Chemical composition and antioxidant activity of methanol and acetone pulp and peel extracts of selected fruit from Southeast Serbia	S. Mitić	2015
21	*Saša Ranđelović*	Bioakumulacija metala u odabranim vrstama voća i lekovitih biljaka Bioaccumulation of metals in selected types of fruits and medicinal herbs	S. Mitić, D. Kostić	2015
22	*Dušan Paunović*	Hemijski sastav i antioksidativna aktivnost piva i sirovina za proizvodnju piva. Kinetika ekstrakcije Chemical composition and antioxidant activity of beer and raw materials for the production of beer. The kinetics of extraction	S. Mitić	2015
23	*Jovana Krstić*	Mineralni i polifenolni profil zelenog, crnog, biljnih i voćnih filter čajeva i njihov antioksidativni kapacitet The mineral and polyphenol profile of green, black, herbal and fruit bagged teas and their antioxidant capacity	A. Pavlović	2017

24	*Tamara Laketić*	Hemijski i mikrobiološki profil voda iz arteških bunara na teritoriji Semberije: analiza faktora koji utiču na mobilnost hemijskih zagađivača Chemical and microbiological profile of water from artesian wells in the region of Semberia: Analysis of factors that affect the mobility of chemical contaminants	A. Pavlović	2017
25	*Marija Ilić*	Hemijski sastav, antioksidativna, antimikrobna I antiholinesterazna aktivnost biljnih vrsta *Seseli rigidum* i *Seseli pallasii* Chemical composition, antioxidant, antimicrobial and anticholinesterase activity of plant species *Seseli rigidum* and *Seseli pallasii*	V. Stankov Jovanović	2017

In the field of organic chemistry and biochemistry, a total of 41 PhD theses were defended (Table 8). Before 2000, most of the theses dealt with organic synthesis, e.g. synthesis of carbohydrates and carbohydrate-based derivatives, and biochemistry, e.g. investigation of serum proteins, while after 2000 the research interest was mainly in the field of chemistry of natural products. The work mainly focused on the analysis of essential oils and the extracts from the herbs found on the territory of Serbia.

Table 8 PhD theses in the field of organic chemistry and biochemistry

No	Author	Title	Mentor	Year
1	*Đorđe Glišin*	Selektivne reakcije u hemiji heksapiranozida, stereoselektivna sinteza D-dezozamina Selective reactions in the chemistry of hexopyranosides, stereoselective synthesis of D-desosamine	M. Petković	1986
2	*Milan Nikolić*	Izolovanje i ispitivanje bioaktivnih jedinjenja iz biljke *Chelidonium majus* L. (Rusa) Isolation and investigation of bioactive compounds from the plant *Chelidonium majus* L. (Rusa)	R. Palić	1993
3	*Marina Mitić-Zlatanović*	Uticaj biogeohemijskih faktora sredine na neke markere rane disfunkcije ćelije bubrega The influence of biogeochemical factors on some markers of early dysfunction of kidney cells	P. Premović	1995
4	*Gordana Stojanović*	Sinteza laktamskih derivata γ-laktona kao potencijalnih antifungicidnih i antibakterijskih agenasa The synthesis of lactamic derivatives of *gamma*-lactone as potential fungicidal and antibacterial agents	R. Palić	1997
5	*Mirjana Abramović*	Histohemijsko ispitivanje afiniteta elastičnih tkiva za organske boje u komparaciji sa klasičnim metodama Histochemical examination of the affinity of elastic tissues towards organic dyes in comparison with conventional methods	S. Petrović	1998
6	*Nataša Trutić*	Aktivacija gena u jetri pacova podvrgnutih parcijalnoj hepatektomiji i visokom dozama zračenja The activation of genes in the liver of rats exposed to partial hepatectomy and high doses of radiation	J. Ursić Janković	1999
7	*Nebojša Simić*	Hemijsko i mikrobiološko ispitivanje domaćih vrsta roda *Achillea* L. Chemical and microbiological study of domestic species of the genus *Achillea* L.	R. Palić	2000

8	*Danijela Kostić*	Ispitivanje oksidacionog uticaja selena i prirodnih polifenola u feroperoksidnim model sistemima Investigation of the oxidative effects of selenium and natural polyphenols in ferroperoxide model systems	S. Miletić	2002
9	*Mirjana Vukićević*	Acilovanje ferocena The acylation of ferrocene	R. Palić	2003
10	*Andrija Šmelcerović*	Izolovanje i određivanje strukture sekundarnih metabolita iz morskog aktinomiceta B1758 Isolation and structural determination of secondary metabolites from marine actinomycetes B1758	R. Palić	2003
11	*Dušanka Kitić*	Hemijsko i mikrobiološko ispitivanje biljnih vrsta roda *Calamintha miller* Chemical and microbiological investigation of plant species *Calamintha miller*	R. Palić	2003
12	*Branislav Gudžić*	Hemijsko i mikrobiološko ispitivanje etarskog ulja *Hypericum perforatum* L., *Hypericum olumpicum* L. i *Hypericum maculatum* GRANTZ Chemical and microbiological investigation of the essential oil of *Hypericum perforatum* L., *Hypericum olumpicum* L. i *Hypericum maculatum* GRANTZ	R. Palić	2003
13	*Gordana Marković*	Umreženi materijali na bazi hidrosulfonovanog polietilenskog kaučuka Crosslinked materials based on hydrosulphonated polyethylene rubber	B. Radovanović	2004
14	*Slađana Alagić*	Sastav ekstrakta selekcionisanih hibrida duvana tipa *Jaka*, *Prilep* i *Otlja* The composition of extracts of selected hybrid type tobacco *Jaka, Prilep* and *Otlja*	G. Stojanović	2005
15	*Niko Radulović*	Novi azafiloni, steroidi i terfenili iz gljiva *Creosphaeria sassafras, Hypoxylon multiforme i Thelephora terrestris* New azaphilones, steroids and terphenyls from the fungi *Creosphaeria sassafras*, *Hypoxylon multiforme*, and *Thelephora terrestris*	G. Stojanović	2006
16	*Sandra Konstantinović*	Sinteza, struktura i antimikrobna aktivnost koordinacionih jedinjenja izatin schiff-ovih baza Synthesis, structure and antimicrobial activity of coordination compounds of isatin Schiff bases	B. Radovanović	2007
17	*Vesna Milovanović*	Sekundarni metaboliti biljnih vrsta roda *Equisetum* Secondary metabolites of plant species of the genus *Equisetum*	G. Stojanović	2007
18	*Novica Ristić*	Hemijsko, mikrobiološko i antioksidativno ispitivanje sekundarnih metabolita odabranih biljnih vrsta roda *Stachys* Lindley Chemical, microbial and antioxidant study of secondary metabolites of selected plant species from genus *Stachys* Lindley	R. Palić	2007
19	*Ivan Palić*	Hemijska analiza i mikrobiološka aktivnost ekstrakata odabranih biljnih vrsta roda *Micromeria* Bentham Chemical analysis and microbiological activity of extracts of selected plant species from the genus *Micromeria* Bentham	J. Ursić Janković	2009
20	*Olga Jovanović*	Primena dekonvolucije masenog skena u identifikaciji konstituenata etarskih ulja Application of deconvolution mass scan in the identification of the constituents of essential oils	R. Palić	2009

21	*Tatjana Golubović*	Sekundarni metaboliti odabranih biljnih vrsta roda *Acinos* Miller Secondary metabolites of selected plant species from the genus *Acinos* Miller	R. Palić	2010
22	*Biljana Dekić*	Sinteza antibakterijskih i antifungalnih 4-arilamino-3-nitrokumarina Synthesis of antibacterial and antifungal 4-arylamino-3-nitrocoumarins	R. Palić	2010
23	*Polina Blagojević*	Novi pristup poređenju složenih smeša isparljivih jedinjenja prirodnog porekla: veza procentualnog sastava i prinosa etarskog ulja, odnosno sastava i usrednjenog masenog skena ukupnog jonskog hromatograma A new approach to the comparison of complex volatile mixtures of natural origin: a correlation between the essential oil yield and chemical composition, and percentage composition and the average mass scan of the total ion chromatogram	N. Radulović	2010
24	*Predrag Sibinović*	Optimizacija formulacije i stabilnost tableta karvedilola Formulation optimization and stability of carvedilol tablets	R. Palić	2011
25	*Milan Dekić*	Fitohemijsko ispitivanje odabranih biljnih vrsta familija Geraniaceae i Brassicaceae Phytochemical study of selected taxa belonging to Geraniaceae and Brassicaceae plant families	N. Radulović	2011
26	*Jelena Lazarević*	Homotaksonomski značaj konstituenata etarskih ulja, hemometrijski pristup Chemotaxonomic validation of volatile secondary metabolites - chemometric approach	R. Palić	2011
27	*Aleksandra Đorđević*	Hemijski sastav i antimikrobna aktivnost etarskih ulja odabranih biljnih vrsta roda *Hypericum* L. Chemical composition and antimicrobial activity of essential oils of selected plant species of the genus *Hypericum* L.	R. Palić	2011
28	*Vidoslav Dekić*	Potpuna asignacija ^{1}H- i ^{13}C-NMR spektara i kristalografska analiza novih 4-arilamino- i 4-alkilamino-3-nitrokumarina Complete assignment of ^{1}H- and ^{13}C-NMR spectra and crystallographic analysis of the new 4-arylamino- and 4-alkylamino-3-nitrocoumarins	N. Radulović	2011
29	*Goran Petrović*	Kompleksi β-ciklodekstrina i modifikovanih β-ciklodekstrina sa pesticidima i etarskim uljima Complexes of β-cyclodextrin and modified β-cyclodextrin with pesticides and essential oils	G. Stojanović	2011
30	*Katarina Vučićević-Prčetić*	Određivanje aminoglikozidnih antibiotika i njihovih nečistoća primenom tečne hromatogragije sa maseno - masenom spektrofotometrijom Determination of aminoglycoside antibiotics and their impurities by liquid chromatography-tandem mass spectrophotometry	N. Radulović	2012
31	*Nevenka Cakić*	Alkaloidi, fenilpropanoidi, steroidi i terpenoidi iz odabranih biljnih vrsta familije *Apiaceae* Alkaloids, phenylpropanoids, steroids, and terpenoids from selected Apiaceae species	N. Radulović	2012
32	*Jasmina Veličković*	Hemijska analiza i antioksidativna aktivnost ekstrakata odabranih biljnih vrsta bogatih fenolnim jedinjenjima Chemical analysis of the antioxidant activity of extracts of selected plant species rich in phenolic compounds	D. Kostić	2014

33	*Jelena Mladenović*	Ekstrakti povrća *Allium porrum* L., *Daucus carota* L., *Capsicum annuum* L. i *Lycopersicon esculentum* Mill.*:* hemijski sastav, antioksidaciono, antimikrobno i antikancerogeno delovanje i njihova primena Extracts of the vegetable species *Allium porum* L., *Daucus carota* L., *Capsicum annuum* L. and *Lycopersicon esculentum* Mill.: chemical composition, antioxidant, antimicrobial and anticarcinogenic activities, and their applications	B. Radovanović	2014
34	*Danica Dimitrijević*	Analiza hemijskog sastava i antioksidativne aktivnosti ekstrakata duda (*Morus* spp., Moraceae) Analysis of chemical composition and antioxidant activity of mulberry extracts (*Morus* spp., Moraceae)	D. Kostić	2014
35	*Marija Genčić*	Izolovanje, sinteza i biološka aktivnost sekundarnih metabolita odabranih biljnih vrsta *Lycopus* (Laminaceae) i *Inula* (Asteraceae) Isolation, synthesis and biological activity of secondary metabolites from selected plant species from the genera *Lycopus* (Lamiaceae) and *Inula* (Asteraceae)	N. Radulović	2015
36	*Ana Miltojević*	Sekundarni metaboliti biljne vrste *Choisya Ternata* Kunt (Rutaceae): Izolovanje, sinteza, spektralna karakterizacija i biološka aktivnost Secondary metabolites of *Choisya Ternata* Kunt (Rutaceae): Isolation, synthesis, spectral characterization, and biological activity	N. Radulović	2016
37	*Marko Anđelković*	Optimizacija ekstrakcije i krakaterizacije fenolnih jedinjenja i bio ulja iz sorti Vranac i Merlo (*Vitis vinifera* L.) i njihova potencijalna primena Optimization of the extraction and characterization of phenolic compounds and bio-oils from Vranac and Merlot varieties (*Vitis vinifera* L.) and their potential application	B. Radovanović	2016
38	*Ljiljana Jelenković*	Uticaj odabranih monoterpena na aktivnost dijagnostički značajnih enzima u kontrolnom humanom serumu *in vitro* Influence of selected monoterpenes on the activity of diagnostically important enzymes in human serum *in vitro*	V. Stankov Jovanović, I. Palić	2016
39	*Snežana Jovanović*	Sekundarni metaboliti predstavnika roda *Sedum* L. (Crassulaceae) centralnog Balkanskog poluostrva i njihov hemotaksonomijski značaj Secondary metabolites of the *Sedum* L. (Crassulaceae) representatives from the central Balkan Peninsula and their chemotaxonomic significance	G. Stojanović	2016
40	*Ana Milenković Anđelković*	Ekstrakcija, karakterizacija, biološka aktivnost, biološka aktivnost i potencijalna primena fenolnih jedinjenja iz plodova i lišća biljnih vrsta familija Rosaceae, Cornaceae i Grossulariaceae Extraction, characterization, biological activity and potential application of phenolic compounds from fruits and leaves of plants families Rosaceae, Cornaceae, and Grossulariaceae	B. Radovanović	2017
41	*Marko Mladenović*	Kombinatorne biblioteke odabranih prirodnih i sintetskih biološki aktivnih estara Combinatorial libraries of selected natural and synthetic biologically active esters	N. Radulović	2017

In the period from 2002 to the present, the following projects were implemented at the Chair of Organic Chemistry and Biochemistry:

1. "Investigation of chemical composition and bioactivity of secondary metabolites of plants species from genera *Achillea*, *Acinos*, *Artemisia* and *Calamintha* (2002-2005)", funded by the Ministry of Science and Environment Protection of the Republic of Serbia, project leader Prof. Radoslav Palić;
2. "Secondary metabolites: biological and antioxidant Activity (2006-2010)", funded by the Ministry of Science and Environment Protection of the Republic of Serbia, project leader Prof. Radoslav Palić;
3. "Natural products of plants and lichen: isolation, identification, biological activity and application (2011-2017)", funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia, project leader Prof. Gordana Stojanović;
4. "Combination libraries of heterogeneous catalysts, natural products, modified natural products, and their analogs: a pathway to new biologically active agents (2011-2017)", funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia, project leader Prof. Niko Radulović.

Within these projects, modern capital equipment (GC-MS, GC-MS/MS, NMR, HPLC, UV-Vis, etc.) was purchased and funds were provided for the realization of most of the PhD theses.

In the field of industrial chemistry and environmental protection, a total of 20 PhD theses were defended, that mainly dealt with the synthesis of composite materials for the removal of harmful elements and molecules from natural and industrial waters, development and optimization of oxidation processes for degradation of organic pollutants in water, as well as with biodiesel production. Since 2002, PhD theses at the Chair of Applied and Industrial chemistry were mostly realized within the following projects:

1. "Innovation, monitoring, and reconstruction of a technical-technological system for refinement of alkali, cyanide and acidic wastewaters, which contain Cr, Ni, Cu, Zn, Sn and Cd (2002-2005)", funded by Ministry of Science and Technological Development of the Republic of Serbia, project leader Prof. Milovan Purenović;
2. "Improvement of chemical-technological processes and system reconstruction in electronic tubes manufacture– MHT6725 (2005-2008)", by Ministry of Science and Technological Development of the Republic of Serbia, project leader Prof. Milovan Purenović;
3. "Development and characterization of novel biosorbent for natural and wastewater treatment (2011-2017)", funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia, project leader Prof. Aleksandar Bojić.

Alongside the funds for the realization of PhD theses, within these projects, modern equipment of capital value was purchased as well. Beside national projects, teachers and researchers from our Chemistry Department also participated in the implementation of several international projects.

Table 9 PhD theses in the field of applied and industrial chemistry

No	Author	Title	Mentor	Year
1	*Jelica Perović*	Doprinos proučavanju mehanizama hladnog zaptivanja anodno oksidovanog aluminijuma Contribution to the study of the mechanisms of cold sealing of anodically oxidized aluminum	P. Premović	1992
2	*Milena Miljković*	Uticaj organskih i neorganskih kiselina na obojenost i mehanizam bojenja poliestarskih vlakana disperzionim bojama Effect of organic and inorganic acids on the coloring and mechanism of coloring of polyester fibers by dispersion paints	T. Pecev	1994
3	*Dragan Zlatanović*	Doprinos proučavanja procesa oksidacije sulfida nekih prelaznih metala u prisustvu natrijum-hlorida u sistemu "čvrsto-gas-čvrsto" Contribution to the study of the oxidation process of some transition metal sulfides in the presence of sodium chloride in the system "solid-gas-solid"	M. Purenović	1999
4	*Radosav Marković*	Uticaj gasne korozije i strukturnih promena na mehaničke karakteristike nekih visokolegiranih čelika The influence of gas corrosion and structural changes on the mechanical properties of some high-alloyed steels	M. Purenović	2000
5	*Aleksandar Bojić*	Proučavanje mehaničkog delovanja kompozicija na bazi elektrohemijski aktivnog mikrolegiranog Al na mikroorganizme u vodenoj sredini The mechanism of influence of electrochemically active microalloyed aluminum based composite on microorganisms in an aqueous medium	M. Purenović	2002
6	*Novica Stanković*	Uticaj koloidnog SiO_2 i primesa na fizičko-hemijske procese stvaranja kamenca u geotermalnim vodama The effect of colloidal SiO_2 and impurities on the physicochemical processes of the solid deposit formation in geothermal waters	M. Purenović	2010
7	*Marjan Ranđelović*	Interakcija elektrohemijski aktivnih, mikrolegiranih i strukturno modifikovanih kompozita na bazi alumosilikatne matrice sa jonskim i koloidnim vrstama pojedinih štetnih sastojaka u sintetičkim vodama Interaction of electrochemically active, microalloyed and structurally modified composites, based on alumosilicate matrix, with certain ionic and colloidal species of harmful ingredients in synthetic waters	M. Purenović	2012
8	*Milan Momčilović*	Kinetički i ravnotežni parametri adsorpcionih procesa pri uklanjanju pojedinih štetnih katranskih sastojaka iz vodenih rastvora aktivnim ugljevimadobijenih hemijski-termičkom obradom srži ploda divljeg kestena i šišarke crnog bora Kinetic and equilibrium parameters of adsorption processes under removal of certain harmful cationic ingredients from aqueous solutions using activated carbons derived by thermochemical treatment of chestnut kernel and Black pine cones	M. Purenović	2012
9	*Jelena Đorđević*	Membranska ekstakcija pesticida - primena za kvantitativnu analizu u prirodnim vodama i njihovo uklanjanje iz industrijskih voda Membrane extraction of pesticide-application for quantitative analysis in natural waters and their removal from industrial water	M. Purenović	2012

10	*Dragana-Linda Mitić*	Uklanjanje teških metala iz vode biosorbentom na bazi *Lagenaria vulgaris* Removal of heavy metals from water using biosorbent based on *Lagenaria vulgaris*	A. Bojić	2012
11	*Ivana Kostić*	Ispitivanje interakcije M(II)jona metala prelazne serije elemenata sa O-donor vezivnim mestima huminskih kiselina i njihovih model supstanci The interaction between M(II) ions of transition metals with O-donor binding sites of humic acids and humic-like ligands	T. Anđelković	2013
12	*Jelena Mitrović*	Degradacija organskih polutanata u vodi unapređenim oksidacionim procesima: optimizacija parametara procesa i analiza degradacionih proizvoda Degradation of organic pollutants in water with advanced oxidation processes: optimization of operational parameters and analysis of degradation products	A. Bojić	2013
13	*Miloš Kostić*	Sinteza i karakterizacija ksantovanih biosorbenata i njihova primena za uklanjanje katjonskih polutanata iz vodenih rastvora Synthesis and characterization of xanthated biosorbents and their application for removal of cationic pollutants from aqueous solutions	A. Bojić	2014
14	*Jelena Zagorac*	Strukturna karakterizacija $CaMnO_3$ nanoprahova dopiranih itrijumom i teorijsko modelovanje stabilnosti Perovskitske strukture Structural characterization of yttrium doped $CaMnO_3$ nanopowders and theoretical modeling of the Perovskite structure stability	A. Zarubica	2014
15	*Radomir Ljupković*	Sinteza biodizela na aktiviranom katalizatoru na bazi CaO: optimizacija procesnih parametara i efekti korišćenja biodizela Synthesis of biodiesel over activated CaO-based catalyst: optimization of process parameters and effects of using biodiesel	A. Zarubica	2014
16	*Violeta Rakić*	Proučavanje efekta pH na strukturu, boju i spektralne karakteristike cijanidina i cijanidin-3-*O*-glikozida i njihove interakcije sa modelima lipidnih membrana The investigation of pH effects on the structure, color and spectral characteristics of cyanidin and cyanidin 3-*O*-β-glucopyranoside and the examination of their interactions with lipid model membranes	M. Miljković	2015
17	*Milica Petrović*	Sinteza i karakterizacija anoda na bazi tankih slojeva bizmut-oksida i njihova primena za elektrohemijsku oksidativnu degradaciju sintetičkih boja u vodi Synthesis and characterization of the anodes based on thin bismuth oxide films and their application for the electrochemical oxidative degradation of synthetic dyes in water	A. Bojić	2015
18	*Miljana Radović*	Primena homogenih i heterogenih unapređenih oksidacionih procesa za degradaciju tekstilne antrahinonske boje The use of homogeneous and heterogeneous advanced oxidation processes for degradation of textile anthraquinone dye	A. Bojić	2015
19	*Marija Vasić*	Optimizacija i fotokatalitička primena nanostrukturnog TiO_2 Optimization and photocatalytic application of nanostructured TiO_2	A. Zarubica	2017
20	*Nikola Stojković*	Sulfatima i fosfatima modifikovani ZrO_2 kao katalizator u izabranim industrijski značajnim petrohemijskim procesima Sulfated and phosphated zirconia as catalysts in selected industrially significant petrochemical processes	A. Zarubica	2017

In the field of chemistry education, a total of three PhD theses were defended (Table 10). Only few teachers were engaged in the chemical education research. All the PhD theses were realized under the supervision of Prof. Miloje Rakočević. Research projects in the field of chemistry education were not financed by the Republic of Serbia at our faculty.

Table 10 PhD theses in the field of chemistry education

No	Author	Title	Mentor	Year
1	*Dragan Lazarević*	Periodičnost svojstava atomskih konstituenata proteinskih aminokiselina The periodicity of properties of atomic constituents of protein amino acids	M. Rakočević	1995
2	*Anja Jokić*	Specifičnost pozicija bioelemenata u periodnom sistemu D. I. Mendeljejeva Specificity of bioelements position in the periodic table of D. I. Mendeleev	M. Rakočević	1997
3	*Slavoljub Đukić*	Naučni i nastavni aspekti trodimenzionalnosti periodičnog sistema hemijskih elemenata Scientific and educational aspects of three-dimensional periodic system of chemical elements	M. Rakočević	2002

A classification of PhD theses based on the field of study is shown in Fig. 3. Again the greatest number of PhD theses was defended in the field of organic chemistry and biochemistry, then in the fields of analytical, inorganic and industrial chemistry. Under the guidance of Professors who spent more than 30 years working at our Department, Radoslav Palić and Pavle Premović, a total of 14 and 8 PhD theses were defended, respectively.

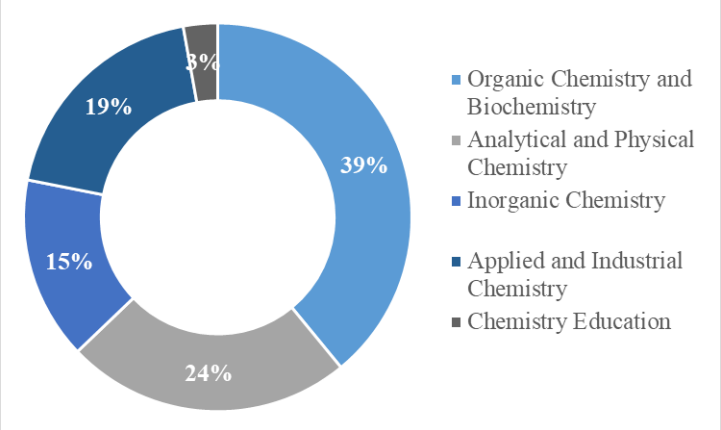

Fig. 3 The distribution of PhD theses among different chemistry fields

A number of defended PhD theses, from 1981 to 2017, during five-year periods, is shown in Fig. 4. The first PhD thesis was defended in 1984. In the period from 1972 to 1999 at the Faculty of Philosophy, a total of 20 PhD theses were defended, while the remaining 85 were defended at the Faculty of Science and Mathematics in the period from 2000 to 2017. During the 2006/2007 school year, the first generation of students was enrolled in the three-year PhD program. Of the overall number of PhD theses, 39 were defended by students attending the new PhD program.

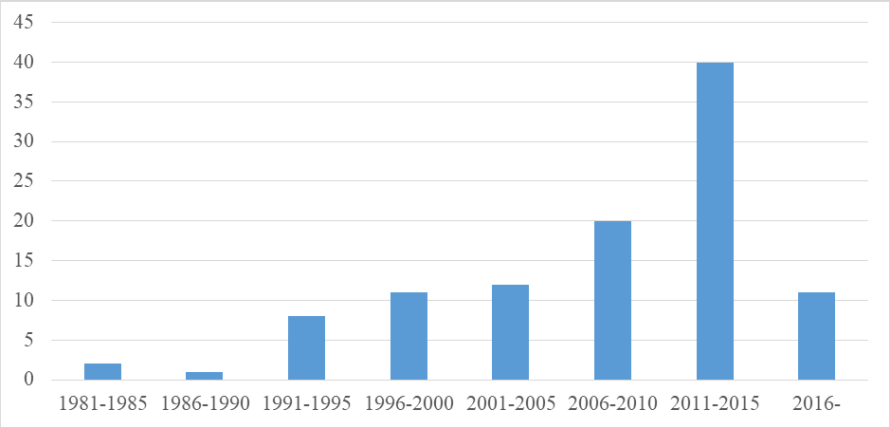

Fig. 4 A chronological overview of the number of defended PhD theses

What greatly contributed to the increase in the number of defended PhD theses, especially after 2010, was the activity of the Ministry of Education, Science and Technological Development of the Republic of Serbia which financed an increasing number of projects headed by researchers from the Chemistry Department. Within them, new capital equipment was procured which improved the quality of the research results and the effectiveness of the work, in addition to improved availability of the scientific information, especially following the introduction of the Kobson service, which allowed online access to research data starting from 2000. Many PhD students were included in the projects as researchers during the completion of their dissertations.

4. CONCLUSION

The first chemistry study program began in 1971 at the Faculty of Philosophy and continued at the Chemistry Department of the Faculty of Science and Mathematics in Niš. In its long history, it gained reputation built by its high-quality undergraduate and graduate students, and by publishing of research papers in renowned scientific journals.

In the field of chemistry, a total of 110 master's and 105 PhD theses were defended during the period 1971-2017. Thirty-nine PhD theses are the result of PhD program introduced 2006. Regarding the field of scientific research, the most widely disseminated are the master's and PhD theses with researched topics in organic chemistry, with more than 40%, then the work in analytical and physical chemistry, industrial chemistry and

inorganic chemistry. There is a correlation in the presence of master's and PhD theses in certain fields of science, most probably because most of the students attending the master's program continued their work in the same field. The subject matter of work was mostly related to that of scientific research projects which were realized at the time.

The Chemistry Department gave a significant contribution in the field of education and science educating a large number of high-quality master's and PhD students who have found positions at the Chemistry Department of the Faculty of Science and Mathematics in Niš and other Serbian and foreign scientific institutions.

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PREGLED NAUČNO-ISTRAŽIVAČKOG RADA NA DEPARTMANU ZA HEMIJU PRIRODNO-MATEMATIČKOG FAKULTETA U NIŠU NA OSNOVU ODBRANJENIH MAGISTARSKIH TEZA I DOKTORSKIH DISETACIJA (1971-2017)

U radu je prikazan naučno-istraživački rad na Depratmanu za hemiju Prirodno-matematičkog fakulteta Univerziteta u Nišu. Naučno-istraživački rad realizovan je u obliku magistarskih teza i doktorskih disertacija, kao i raznih projekata koje finansira Ministarstvo prosvete, nauke i tehnološkog razvoja Republike Srbije. U oblasti hemije, u periodu od 1971. do 2017. godine odbranjeno je ukupno 110 magistarskih teza i 105 doktorskih disertacija. Trideset i devet doktorskih disertacija je rezultat doktorskog programa koji je akreditovan 2006. godine. Departman za hemiju je dao značajan doprinos u oblasti obrazovanja i nauke. Obrazovan je veliki broj kvalitetnih magistara hemije i doktora hemijskih nauka, a neki od njih su zaposleni na Prirodno-matematičkom fakultetu u Nišu i drugim srpskim i inostranim naučnim institucijama.

Ključne reči: *Departman za hemiju, magistarske teze, doktorske disertacije*