





PERSONAL INFORMATION

Mirjana S. Jankulovska



 Solunska glava 3, 1000 Skopje, Republic of Macedonia
 +389 2 6135 900  +389 070 858 045
 jankulovska_m@yahoo.com, jankulovska@zf.ukim.edu.mk

Sex female | Date of birth 05/02/1976 | Nationality macedonian

WORK EXPERIENCE

from 01.07.2013 –

Assistant professor in scientific area of chemistry

“Ss. Cyril and Methodius” University in Skopje, Faculty of Agricultural Sciences and Food, Food Institute, Department of Quality and Food Safety, Blvd. Aleksandar Makedonski bb, 1000 Skopje, Republic of Macedonia

Lectures on the undergraduate studies, subjects: *chemistry* (study programs: fruit production and processing, animal biotechnology, horticulture and floriculture), *packing and packaging of food* (study program: quality and food safety)

Laboratory and numerical exercises on the undergraduate studies, subjects: *chemistry* (all study programs), *analytical chemistry* (study programs: quality and food safety and fruit production and processing), *chemical and physical hazards of food* (study program: quality and food safety) and *packing and packaging of food* (study program: quality and food safety)

Participate in the team that works on the determination of physical and chemical composition of pesticide formulations, development and validation of qualitative and quantitative determination of pesticide residues in samples of food and water by using chromatographic methods (HPLC/UV), as well as, determination of some chemical compounds in agricultural cultures

from 2011 to 2013

Assistant in scientific area of chemistry

“Ss. Cyril and Methodius” University in Skopje, Faculty of Agricultural Sciences and Food, Food Institute, Department of Quality and Food Safety

Laboratory and numerical exercises on the undergraduate studies, subjects: chemistry (all study programs), analytical chemistry (study programs: quality and food safety and fruit production and processing), chemical and physical hazards of food (study program: quality and food safety)

from 2001 to 2011

Demonstrator in scientific area of chemistry

“Ss. Cyril and Methodius” University in Skopje, Faculty of Agricultural Sciences and Food, Food Institute, Department of Quality and Food Safety

Laboratory and numerical exercises on the undergraduate studies, subjects: chemistry, inorganic chemistry, organic chemistry and analytical chemistry, all study programs

from 2003 to 2010

Chemistry teacher in high school

Implementation of curriculum in chemistry, in the following high schools:

DSMU “Dr Pance Karagjozov” in Skopje
 SETUGS “Mihajlo Pupin” in Skopje
 SGUGS “Zdravko Cvetkovski” in Skopje

from 1999 to 2000

Chemistry teacher in primary school

Implementation of curriculum in chemistry, in the following primary schools:

“Braka Miladinovci” in Skopje
 “Kiril Pejčinovik” in Skopje

Business or sector Education

EDUCATION AND TRAINING

2007-2012

PhD in Chemistry

Department of analytical chemistry, Institute of Chemistry, Faculty of Natural Sciences and Mathematics, "Ss. Cyril and Methodius University" in Skopje, Republic of Macedonia

Thesis title: "Investigation of acid-base equilibriums of some newly synthesized arylhydrazones of substituted benzhydrazides"

2000-2006

MSc in Chemistry

Department of analytical chemistry, Institute of Chemistry, Faculty of Natural Sciences and Mathematics, "Ss. Cyril and Methodius University" in Skopje, Republic of Macedonia

Realized syllabus: methodology of a research work, computers in chemistry, spectroscopic and radiochemical analytical methods, modern electroanalytical methods, trace analysis, and chromatographic methods

Thesis title: "Behaviour of newly derivatives of 1,2,4-triazoline-3-thione in different media"

1995-1999

Chemistry teacher

Department of analytical chemistry, Institute of Chemistry, Faculty of Natural Sciences and Mathematics, "Ss. Cyril and Methodius University" in Skopje, Republic of Macedonia

Diploma work title: "Square-wave voltametric method for quantitative determination of aconitic acid"

PERSONAL SKILLS

Mother tongue(s) Macedonian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Spanish	C2	C2	C2	C2	C2

Communication skills

Good communication skills obtained through working with a large number of pupils and students in the realization of the education process.

Effective communication with different audiences acquired from informal and formal public speech at congresses and seminars.

Very communicative person, who loves to travel, explore, collaborate and work with different people (participation in congresses, projects, collaboration with professors from other faculties, joint research and results in the area of chemistry). Want to share the obtained experiences and ideas with students and professors.

Organisational / managerial skills

Good organizational skills acquired from previous work experience as a teacher, participation in team work with students and work colleagues, a member of the symposium secretariat.

Leader and participant in various teams with success and harmony. Ability to organize and implement tasks within the given time, paying attention on details. Working on different tasks at the same time during the work experience. Capability to solve different problems and situations associated with the education and laboratory research work.

Job-related skills	<p>Excellent knowledge and skills acquired as a result of the use of laboratory supplies, equipment and instruments in the chemical laboratory. Ability to use different laboratory techniques and instrumental methods (organic synthesis, purification, square-wave voltametry (SWV), spectroscopy (UV/Vis), chromatography (HPLC), solid-phase extraction (SPE)) for chemical analysis.</p> <p>Skills for using the methods of synthesis of new organic compounds, as well as processing, analysis and interpretation of the results obtained by applying the methods for their identification (elemental analysis, IR, NMR).</p> <p>Ability to use the methods of UV/Vis spectroscopy for studying the acid-base equilibria and determination the ionization constants of weak acids and bases.</p> <p>Knowledge to make calculations for predictions related to the structure of the compounds in the area of theoretical organic chemistry.</p> <p>Skills and knowledge related to the development and validation of new analytical methods for determination of different compounds using chromatographic techniques.</p> <p>Usage of statistical methods for processing the experimental results obtained from different investigations, and their interpretation.</p>
Computer skills	<p>Excellent computer skills acquired using different applications of Microsoft Office (Word, Excel, Power Point). Using programs for image processing, computer programs specialized for requirements of chemistry (ChemWin and HyperChem), statistical package Origin. Access and use of information and services through internet.</p>
Other skills	<p>Ability to transfer the knowledge and work with different groups of pupils and students obtained as a result of realization of a large number of classes working as a chemistry professor. Solid knowledge in all areas of chemistry required for realization of the curriculum in primary and secondary schools.</p>
Driving licence	<p>▪ Category B</p>

ADDITIONAL INFORMATION

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| Publications | <ol style="list-style-type: none"> 1. M. Jankulovska, I. Spirevska, K. Č. Ragenovič, Behaviour of some newly synthesized substituted 1,2,4-triazoline-3-thiones in sulfuric acid media, Bull. Chem. Tehnol. Macedonia, 25(1) 29-37 (2006). 2. M. Jankulovska, I. Spirevska, L. Soptrajanova, Determination of the dissociation constants in sodium hydroxide media of some newly synthesized derivatives of 1,2,4-triazoline-3-thione, Bull. Chem. Tehnol. Macedonia, 25(2) 99-106 (2006). 3. M. Jankukulovska, L. Šoptrajanova, I. Spirevska, K. Čolančeska-Raženovič, S. Ristovski, Investigation of solvent effects on electronic absorption spectra of some substituted 1,2,4-triazoline-3-thiones, Maced. J. Chem. Eng., 29(1), 43-50 (2010), I.F (JCR) = 0.459 4. M. Jankulovska, I. Spirevska, V. Dimova, A UV study of the behavior of some benzaldehyde hydrazones in acid medium, J. Iran. Chem. Soc., 8(2), 502-512 (2011), I.F (JCR) = 1,689 5. M. Jankulovska, I. Spirevska, K. Cholancheska Ragenovikj, Determination of the dissociation constants of some p-substituted aromatic hydrazones, Contributions, Sec. Math. Tech. Sci., MANU, XXXII, 1-2, 23-43 (2011). 6. M. Jankulovska, K. Čolančeska-Raženovič, V. Dimova, I. Spirevska, P. Makreski, Synthesis and characterization of new p-substituted aromatic hydrazones, Org. Chem.:An Ind. J., 8, 326-334 (2012). 7. M. Jankulovska, I. Spirevska, Analysis of acid-base properties of some p-substituted aromatic hydrazones in aqueous perchloric acid by spectrophotometric and semiempirical methods, Maced. J. Chem. Eng., 33(1), 85-96 (2014), I.F (JCR) = 0.821 |
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Teaching materials
(internal scripts)

1. B. Petanovska-Ilievska, L. Velkoska-Markovska, **Mirjana S. Jankulovska**, Chemistry - Diary of laboratory exercises in chemistry for students of all study programs, Faculty of Agricultural Sciences and Food in Skopje, 2014
2. **Mirjana S. Jankulovska** L. Velkoska-Markovska, Packing and food packaging, internal script for students of the study program quality and food safety, Faculty of Agricultural Sciences and Food in Skopje, 2014
3. B. Petanovska-Ilievska, L. Velkoska-Markovska **Mirjana S. Jankulovska**, Chemical and physical hazards in food - Diary of laboratory exercises for students of the study program quality and food safety, Faculty of Agricultural Sciences and Food in Skopje, 2014

Presentations
(Conferences, Congress
Symposia)

1. **M. Jankulovska**, A. Todorovska, N. Goceva, L. Jovevska, "Isolation of monoterpenes from orange peel and caraway seed" 3rd Congress of Pure and Applied Chemistry for the Students of Macedonia with international participation, Book of abstracts, 28-29 May Institute of chemistry, Skopje, Republic of Macedonia, 24-25 (1998).
2. L. Soptrajanova, I. Spirevska, R. Gulaboski, **M. Jankulovska**, „Determination of aconitic acid by square wave voltametry" 16th Congress of chemimists and technologists of Macedonia with international participation, Paper book 2 415, Skopje, Republic of Macedonia (1999).
3. S. Petrovska-Jovanović, V. Pavlova, **M. Jankulovska**, B. Jordanovski, V. Mirčeski, „Square-wave and cyclic voltammetry investigation of electrochemical behaviour of uranium", 2nd Black Sea Basin Conference on Analytical Chemistry, Sile-Istanbul, Turkey, 196 (2003).
4. L. Soptrajanova, **M. Jankulovska**, I. Spirevska, The behavior of aconitic acid in aqueous and non-aqueous solutions of strong acids, Biannual Conference on Chemistry, The Department of Chemistry, Cairo University-Faculty of Science, 1-3 March, Cairo, (2004).
5. **M. Jankulovska**, I. Spirevska, L. Soptrajanova, Determination of the pKa values of aconitic acid in aqueous solutions, XVIII Congress of Chemists and Technologists of Macedonia, 23-25 September, Ohrid, R. Macedonia (2004).
6. **M. Jankulovska**, I. Spirevska, L. Soptrajanova, „Determination of dissociation constants of some newly synthesized derivatives of 1,2,4-triazolin-3-thion" 6th Congress of Pure and Applied Chemistry for Macedonian Students, Abstract communication, Skopje, Republic of Macedonia, 20 (2005).
7. **M. Jankulovska**, I. Spirevska, L. Soptrajanova, Behavior of some newly synthesized derivatives of 1,2,4-triazoline-3-thione in protic and aprotic solvents, 5th International Conference of the Chemical Societies of the South-East European Countries, Ohrid, Republic of Macedonia, (2006).
8. **M. Jankukulovska**, I. Spirevska, K. Čolančeska-Rađenović, V. Dimova, Study of acid-base equilibria of some newly synthesized aromatic hydrazones, XXI Congress of Chemists and Technologist of Macedonia, Ohrid, Republic of Macedonia (2010).
9. **M. Jankukulovska**, K. Čolančeska-Rađenović, I. Spirevska, P. Makreski, Synthesis and characterization of new aromatic hydrazones, XXI Congress of Chemists and Technologist of Macedonia, Ohrid, Republic of Macedonia (2010).
10. V. Dimova, **M. Jankulovska**, I. Jordanov, D. Dimitrovski, Investigation of behavior of some triazoline-3-thione in sulfuric acid solution, XIV YuCorr International Conference, Exchanging experiences in the fields of corrosion, materials and environmental, Proceedings, 17-20 April, Tara, Republic of Serbia, (2012).
11. **M. Jankulovska**, I Spirevska, V. Dimova, Determination of the dissociation constants of some p-substituted aromatic hydrazones, XXII Congress of Chemists and Technologist of Macedonia, Ohrid, Republic of Macedonia (2012).
12. B. Petanovska-Ilievska, L. Velkoska-Markovska, **M. S. Jankulovska**, Development of RP-HPLC method for simultaneous determination of benzoates and sorbates in beverages, International symposium for agriculture and food XXXVII faculty-economy meeting, 12-14 December, Skopje, Republic of Macedonia, (2012).

- Projects**
1. Study of indoles and weak organic acids and development of methods for their determination, financed by the Ministry of Education and sciences, R. Macedonia (1997-2000), participant
 2. Optimization of conditions to establish analytical methods for determination of organic acids and indoles at different samples, financed by the Ministry of Education and sciences, R. Macedonia, (2001-2004), participant

Professional training Short training course: Deepening the knowledge in the field of polymer nanomaterials for food packaging and other potential uses: theory and practice, COST ACTION FA0904 Eco-sustainable food packaging based on polymer nanomaterials, 3-5.11.2011: Skopje, R. Macedonia

- Memberships**
1. Member of the international symposium secretariat for food and agriculture, Faculty of Agricultural Sciences and Food in Skopje, University "Ss. Cyril and Methodius", 2014/15.
 2. Member in the commission for sport and sports activities of the Faculty of Agricultural Sciences and Food, mandate period: 2014-2017.
 3. Member in the commission for evaluation of the themes in the area of organic chemistry at 50th national competition for young researchers, Republic of Macedonia, Narodna tehnika, Skopje, 2014.
 4. Member of the educational and scientific council of the Faculty of Agricultural Sciences and Food in Skopje, 2013-.
 5. Member of the commission for evaluation and defense of doctoral thesis: "Development of HPLC methods for quantitative determination of some herbicides and organophosphorus insecticides in different matrices", 2013.
 6. Member in a working group for the preparation of a monitoring program for the production, processing, storage, distribution, usage, compliance of products for plants protection, as well as their residues in products in primary agricultural production, Ministry of Agriculture Forestry and Water Economy, R. Macedonia, 2012.