

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) STEFAN VASILEV KOTOV
 Address(es) 54 LIUBEN KARAVELOV ST, 8000 BOURGAS, BULGARIA
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 Nationality Bulgarian
 Date of birth 19.02.1945
 Gender male

Work experience

Dates **October 1995 - Present**
Occupation or position held Associate Professor in Organic Chemistry;
 Vice-Dean of the Faculty of Natural Sciences (2000 – 2003);
 Vice-Dean of the Faculty of Organic Chemical Technologies (1998 – 2000)
Main activities and responsibilities Teaching the basic course of organic chemistry for undergraduate students with organic chemical technology and biotechnology majors. Thesis advisor of four MSc, one BSc and two PhD students at the Department of Organic Chemistry. Field of research: synthesis of transition metal complexes and their application as homogeneous and heterogeneous (polymeric) catalysts in the organic reactions; synthesis of squaric acid derivatives; evaluation and prediction of metabolic reactions and pathways of xenobiotic chemicals in mammals. Working also as a consultant on organic, bioorganic and environmental organic chemistry at the Laboratory of Mathematical Chemistry in the University (as from August 2000). Responsibilities as former Vice-Dean for the administration of both the educational and research activities of the Faculty of Natural Sciences and the Faculty of Organic Chemical Technologies.
Name and address of employer University "Prof. Dr. Asen Zlatarov", 1 Prof. Yakimov Blvd, 8010 Bourgas, Bulgaria
Type of business or sector Higher education; research

Dates **September 1992 - July 1995**
Occupation or position held Postdoctoral Associate
Main activities and responsibilities Work as experimental organic chemist on a major research project associated with synthesis and application of functional fluoropolymers. Initiated the polymer chemistry aspects of the research on organofluorine chemistry in the laboratory headed by Prof. Donald J. Burton (Carver/Shriner Professor of Chemistry). Field of research: synthesis of functional fluoropolymers and their processing and utilization as ion-exchange membranes. Experience acquired in the emulsion/solution polymerization, preparation of polymer films by hot pressing, chemical modification of polymers, polymer characterization (FT-IR, TGA, DSC, etc.)
Name and address of employer The University of Iowa, Iowa City IA 52242, USA
Type of business or sector Higher education; research

Dates	August 1985 – June 1992
Occupation or position held	Research Associate; Senior Research Associate (from May 1990)
Main activities and responsibilities	Work as experimental organic chemist on different research projects. Principal fields of research: synthesis of perfluorinated functional monomers and polymers with hydrophilic and ion-exchange properties. Six months research fellowship supported by MAAE on the radiation-induced graft copolymerization for preparation of ion-exchange materials as polymer supports, completed at the Department of Colour Chemistry, the University of Leeds, UK (March – September 1986). Experience gained in the synthesis of functional fluoropolymers, starting from tetrafluoroethylene and hexafluoropropene. Thesis advisor of one Ph.D. and four M.Sc. degree recipients.
Name and address of employer	Higher Institute of Chemical Technology “Prof. Dr. As. Zlatarov”, Research Department, 1 Prof. Yakimov Blvd 8010 Bourgas, Bulgaria
Type of business or sector	Higher education; research
Dates	June 1972 – August 1985
Occupation or position held	Chemist; Post-Graduate (PhD) student; Research Associate
Main activities and responsibilities	Involved in implementation of research projects based on the application of some polymers as catalysts in the organic synthesis. Experience in liquid-phase reactions with use of ethylene oxide, epoxidation of alkenes by organic hydroperoxides, ethoxylation of alkylphenols and ethanolamines, etc. in the presence of polymeric catalysts, mainly, ion exchange resins modified by complexes of transition metals. Thesis advisor of three M.Sc. degree recipients.
Name and address of employer	Higher Institute of Chemical Technology “Prof. Dr. As. Zlatarov”, Research Department, 1 Prof. Yakimov Blvd 8010 Bourgas, Bulgaria
Type of business or sector	Higher education; research
Dates	October 1970 – April 1972
Main activities and responsibilities	Regular military service
Dates	May 1969 – October 1970
Occupation or position held	Chemical Engineer-Technologist
Main activities and responsibilities	Responsible for supervision of operations, associated with the preparation of plastic/rubber compositions and their processing into cable and wire insulation.
Name and address of employer	Cable and Wire Insulation Plant “Vasil Kolarov”, Bourgas, Bulgaria
Type of business or sector	Industry

Education and training

Dates	March 1974 – April 1978
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	Preparative organic chemistry, organic synthesis, organic catalysis
Name and type of organisation providing education and training	Higher Institute of Chemical Technology “Prof. Dr. As. Zlatarov”, Bourgas, Bulgaria
Dates	September 1963 – March 1969
Title of qualification awarded	Chemical Engineer with the major of Technology of Organic Synthesis and Rubber
Principal subjects/occupational skills covered	Basic subjects studied: Applied Mathematics, Inorganic Chemistry, Analytical Chemistry, Physical Chemistry, Organic Chemistry, Chemical Engineering, General Chemical Technology, Technology of Organic Synthesis, Synthesis and Processing of Elastomers, etc.
Name and type of organisation providing education and training	Higher Institute of Chemical Technology, Sofia, Bulgaria

Personal skills and competences

Mother tongue(s) Bulgarian

Other language(s) English, Russian

Self-assessment

European level (*)

English

Russian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
Independent user	Proficient user	Proficient user	Proficient user	Proficient user
Independent user	Proficient user	Basic user	Basic user	Independent user

Social skills and competences

ABILITY TO LIVE, WORK AND COMMUNICATE IN MULTICULTURAL ENVIRONMENTS, ACQUIRED DURING THE RESEARCH VISITS TO ENGLAND (1986) AND USA (1992 – 1995). ADDITIONAL SOCIAL SKILLS ACQUIRED DURING THE WORK AS UNIVERSITY TEACHER AND PARTICIPANT IN A TEAM OF SCIENTISTS WORKING ON VARIOUS RESEARCH PROJECTS.

Organisational skills and competences

SOME ADMINISTRATIVE EXPERIENCE ACQUIRED DURING THE WORK AS VICE DEAN, MAINLY, COORDINATING THE WORK AND STUDIES OF UNIVERSITY TEACHERS, STUDENTS, ETC.

Computer skills and competences

Basic computer skills, including work with the Microsoft Office software (Word, Excell, PowerPoint, etc.), ChemWindow, and specific software associated with modeling the metabolic reactions of xenobiotic chemicals. Skills acquired in the course of the research and teaching activities.

Artistic skills and competences

None

Other skills and competences

Translation and interpretation skills, associated with knowledge of English.

Driving licence

Yes

Date: 6.01.2012

Signature:
(Dr. St. Kotov)

Annexes

List of Selected Recent Publications (2003 – 2011)

1. Mekenyan, O., G. Patlewicz, G. Dimitrova, C. Kuseva, M. Todorov, S. Stoeva, **S. Kotov**, E. M. Donner, Use of Genotoxicity Information in the Development of Integrated Testing Strategies (ITS) for Skin Sensitization, *Chem. Res. Toxicol.* 23(10), 2010, 1519 – 1540.
2. Patlewicz, G., O. Mekenyan, G. Dimitrova, C. Kuseva, M. Todorov, **S. Kotov**, S. Stoeva, E. M. Donner, Can Mutagenicity Information Be Useful in an Integrated Testing Strategy (ITS) for Skin Sensitization?, *SAR and QSAR in Environ. Res.* 21(7 – 8), 2010, 619 – 656.
3. Koleva, B. B., Ts. Kolev, Ts. Tsanev, **St. Kotov**, H. M.-Figge, M. Spiteller, W. S. Sheldrick, Crystal Structure and Spectroscopic Elucidation of 3-Phenylpyridinium Hydrogensquarate, *Spectrochem. Acta Part A: Mol. Biomol. Spectrosc.* 75(1), 2010, 172 – 176.
4. Kolev, T., T. Tsanev, **S. Kotov**, H. Mayer-Figge, M. Spiteller, W.S. Sheldrick, B. Koleva, Anyles of 4-Benzoylpyridine – Crystal Structure and Spectroscopic Properties, *Dyes and Pigments* 82, 2009, 95 – 101.
5. Balbolov, E. H., **St. V. Kotov**, Ts. M. Kolev, M. G. Topuzova, Kinetics and Mechanism of the Catalytic Epoxidation of Cyclohexene with Tert-Butyl Hydroperoxide in the Presence of Molybdenum-Squarate Complex, *React. Kinet. Catal. Lett.* 97, 2009, 51 – 57.

6. Koleva, B. B., T. Kolev, T. Tsanev, **St. Kotov**, H. Mayer-Figge, R.W. Seidel, W.S. Sheldrick, 3,4-Diaminopyridine Bis(Perchlorate): Structural and Spectroscopic Elucidation, *Struct. Chem.* 19(1) 2008, 13 - 20.
7. Koleva, B. B., T. Kolev, T. Tsanev, **St. Kotov**, H. Mayer-Figge, R.W. Seidel, W.S. Sheldrick, Spectroscopic and Structural Elucidation of 3,4-Diaminopyridine and Its Hydrogentartarate Salt. Crystal Structure of 3,4-Diaminopyridinium Hydrogentartarate Dihydrate, *J. Mol. Struct.* 881 (2008) 146 -155.
8. Serafimova, R., M. Todorov, **S. Kotov**, E. Jacob, N. Aptula, O. Mekenyan, Identification of the Structural Requirements for Mutagenicity, by Incorporating Molecular Flexibility and Metabolic Activation of Chemicals II. General Ames Mutagenicity Model, *Chem. Res. Toxicol.*, 20 (4) 2007, 662 -676.
9. Mekenyan, O., S. Dimitrov, N. Dimitrova, G. Dimitrova, T. Pavlov, G. Chankov, **S. Kotov**, K. Vasilev, R. Vasilev, Metabolic Activation of Chemicals: In-Silico Simulation, SAR and QSAR in Environmental Research 17 (1), 2006, 107 – 120.
10. Topuzova, M. G., **St. V. Kotov**, Ts. M. Kolev, Epoxidation of Alkenes in the Presence of Molybdenum-Squarate Complexes as Catalysts, *Appl. Catal. A: General* 281, 2005, 157 – 166.
11. Mekenyan, O. G., S. Dimitrov, R. Serafimova, E. Thompson, **S. Kotov**, N. Dimitrova, J. Walker, Identification of the Structural Requirements for Mutagenicity by Incorporating Molecular Flexibility and Metabolic Activation of Chemicals. TA100 Model, *Chem. Res. Toxicol.* 17 (6), 2004, 753 - 766.
12. **Kotov, St. V.**, M. G. Georgieva, Ts. M. Kolev, Preparation and Use of Novel Molybdenum-Containing Organic Complexes as Catalysts in the Epoxidation of Cyclohexene. II. Synthesis and Applicability of Molybdenum Complexes Based on Squaric Acid, 1-Phenyl-1-Ethanamine and 1,3-Diamino-2-Propanol, *J. Mol. Cat. A:Chemical* 207, 2004, 5 - 13.
13. **Kotov, St. V.**, Ts. M. Kolev, and M. G. Georgieva. Preparation and Use of Novel Molybdenum-Containing Organic Complexes as Catalysts in the Epoxidation of Cyclohexene, *J. Mol. Cat. A:Chemical* 195, 2003, 83 - 94.
14. Mekenyan, O., P. Petkov, **S. Kotov**, S. Stoeva, V. Kamenska, S. Dimitrov, M. Honma, M. Haya-shi, R. Benigni, M. Donner, G. Patlewicz, Investigating the Relationship Between In vitro – In vivo Genotoxicity: Derivation of Mechanistic QSAR Models for In Vivo Liver Genotoxicity and In Vivo Bone Marrow Micronucleus Formation which Encompass Metabolism, *Chemical Research in Toxicology*, December 25(2), 2012, 277 – 296.