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I. CAREER GOAL

Position for interdisciplinary research accompanied with organic synthesis.

II. EDUCATION AND QUALIFICATION

2009	Candidate of Sciences in Organic Chemistry
2006	Master Degree in Organic Chemistry
2001-2006	Chelyabinsk State University, Department of Chemistry

III. PROFESSIONAL APPOINTMENTS:

01.2012 – until now	Research associate in Emmanuel Akala research group at School of Pharmacy, Howard University
01.2010 – 01.2012	Adjunct Associate Chemistry in Katritzky Research Group, University of Florida
10.2009-01.2010	Research engineer P&M-invest, 28, Vavilova str., Moscow, 119991, Russia
2006-2009	Junior Research Associate, N.D. Zelinsky Institute for Organic Chemistry, RAS, Moscow

IV. RESEARCH INTEREST AND SPECIALTIES:

Chemistry of Heterocyclic Compounds

Sulfur-Nitrogen and Polysulfur Heterocycles

Fluorine Chemistry

Functionalized aminoacids. Peptide synthesis (incl. SPPS) and modification.

Nanoparticle synthesis. Surface modification of nanoparticles.

My 7-year synthetic experience at Industrial and Academic research areas provides versatile tools for non-trivial challenges either for independent or collaborative studies.

V. TECHNICAL SKILLS

Profound experience in multi-step organic synthesis. Qualified in optimization of reaction conditions and scale up of processes. Competent in purification techniques as well as in analytical methods, most of which are done by self: TLC, NMR (Both ^1H and ^{13}C), IR, UV, HPLC (Analytical and Preparative), MS: MALDI, ESI). Skilled in use of Chemistry Related software: ChemDraw, ACD Labs, MestRenova, XCalibur. Well versed with Cross-Fire (Beilstein) and SciFinder databases. Language skills: native Russian, fluent English.

VI. PUBLICATIONS

Total number of publications - 15, including papers and abstracts.

SCIENTIFIC PUBLICATIONS

I. L. S. Konstantinova, **O. I. Bol'shakov**, N. V. Obruchnikova, H. Laborie, A. Tonga, V. Sopéna, I. Lanneluc, L. Picot, S. Sablé, V. Thiéry, O. A. Rakitin "One-pot synthesis of 5-phenylimino, 5-thione and 5-one-1,2,3-dithiazoles and evaluation of their antimicrobial and antitumor activity" *Bioorg. Med. Chem. Lett.*, 2009, 19(1), 136-141.

2. L. S. Konstantinova, **O. I. Bol'shakov**, N. V. Obruchnikova, S. P. Golova, Y. V. Nelyubina, K. A. Lyssenko, O. A. Rakitin "Reactions of 4-substituted -5*H*-1,2,3-dithiazole-5-thiones and 5-ones with primary amines: novel synthesis of 1,2,5-thiadiazole-3(2*H*)-thiones and -ones" *Mendeleev Commun.*, 2009, 2, 84-86.
3. V. V. Popov, **O. I. Bolshakov**, L. S. Konstantinova, O. A. Rakitin "One-pot synthesis and chemistry of 4-substituted-5*H*-1,2,3-dithiazole-5-ylidenes" *Izv. Akad. Nauk, Ser. Khim.*, 2009, # 2, 429-432.
4. Lidia S. Konstantinova, **Oleg I. Bol'shakov**, Natalia V. Obruchnikova, Svetlana P. Golova, Yulia V. Nelyubina, Konstantin A. Lyssenko, Oleg A. Rakitin "Reactions of 4-substituted 5*H*-1,2,3-dithiazoles with primary and secondary amines: fast and convenient synthesis of 1,2,5-thiadiazoles, 2-iminothioacetamides and 2-oxoacetamides" *Tetrahedron.*, 2010, 66, 4330-4338.
5. **Oleg I. Bol'shakov**, Lidia S. Konstantinova, Rinat Aysin, Natalia V. Obruchnikova, Elena D. Lubuzh and Oleg A. Rakitin "Unexpected formation of 5,5-diethoxy-5*H*-1,2,3-dithiazoles from 5*H*-1,2,3-dithiazole-5-thiones" *Mendeleev Commun.*, 2010, 20, 212-214.
6. Katritzky, A. R.; El Khatib, M.; **Bol'shakov, O.**; Khelashvili, L.; Steel, P. J. "Benzotriazol-1-yl-sulfonyl Azide for Diazotransfer and Preparation of Azidoacylbenzotriazoles" *J. Org. Chem.* **2010**, 75, 6532-6539.
7. El Khatib M., Elagawany M., Jabeen F., Todadze E., **Bol'shakov O.**, Oliferenko A., Khelashvili L., El-Feky S., Asirie A. and Katritzky A. "Traceless chemical ligations from Oacyl serine sites" - *Org. Biomol. Chem.*, 2012, 10, 4836.
8. **Bol'shakov, O.**; Lebedyeva, I.; Katritzky, A. "17 α -ethynylestradiol peptide labeling by "click" chemistry" - *Synthesis* 2012, 44(18), 2926-2932
9. **Bol'shakov O.**, Kovacs J., Chahar M., Khelashvili L. and Katritzky, A. R , *S*- to *N*-Acyl transfer in *S*-acylcysteine isopeptides via 9-, 10-, 12-, and 13-membered cyclic transition states - *J. Pept. Sci.* 2012, 18(11) 704-709.

ABSTRACTS AND PRESENTATIONS

1. L. S. Konstantinova, **O. I. Bol'shakov**, N. V. Obruchnikiova, O. A. Rakitin " One-pot synthesis of 4-substituted 5*H*-1,2,3-dithiazoles" Abstracts of X Russian Conference of Organic Chemistry Among Young Scientists, November 26-30, 2007, Ufa.

2. L. S. Konstantinova, **O. I. Bol'shakov**, O. A. Rakitin "Bi-1,2,3-dithiazoles and their rearrangement to isothiazolo[5,4-*d*]isothiazoles" Abstracts of the 23rd International Symposium on the Organic Chemistry of Sulfur, Moscow, Russia, 2008, June 29 – July 4, P 93.
4. **O. I. Bol'shakov**, L. S. Konstantinova, Rakitin O. A. "One-pot synthesis of 4-substituted 5*H*-1,2,3-dithiazoles and their chemistry" Abstracts of III Conference Among Young Scientists IOC RAS, April 23 – 24, 2009, Moscow, p. 10-12.
5. L. S. Konstantinova, **O. I. Bol'shakov**, N. V. Obruchnikova, O. A. Rakitin, H. Laborie, A. Tonga, V. Sopéna, I. Lanneluc, S. Sablé, V. Thiéry "One-pot synthesis of 5-phenylimino, 5-thieno or 5-oxo-1,2,3-dithiazoles and evaluation of their antimicrobial activity" Abstracts of the 10th Annual Florida Heterocyclic and Synthetic IUPAC-Sponsored Conference, Florida, USA, 2009, March 8 – 11, p. 75.
6. L. S. Konstantinova, **O. I. Bol'shakov**, N. V. Obruchnikova, S. P. Golova, O. A. Rakitin «Reaction of recyclisation of 4-substituted 5*H*-1,2,3-dithiazole -5-ones and 5-thiones with primary amines treatment» Abstracts of I International conference "New Routes in Chemistry of Heterocyclic Compounds" May 3-8, 2009 , Kislovodsk, p. 349.
7. **Oleg Bol'shakov**, Mirna El Khatib, Levan Khelashvili "Reaction of N-(*α*-Azidoacyl)benzotriazoles with C-, N-, O- and S- Nucleophiles" Abstracts of the 11th Annual Florida Heterocyclic and Synthetic IUPAC-Sponsored Conference, Florida, USA, 2011, March 6 – 9, p. 125.

REFERENCES

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