

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION



Name **VASILEV, ALEKSEY, ALEKSANDROV**
Address **2, Drujba, A/30, 1582, Sofia, Bulgaria**
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E-mail ohtavv@chem.uni-sofia.bg, alavasilev@gmail.com.
Nationality Bulgarian
Date of birth 27.03.1974

WORK/TEACHING EXPERIENCE

- Dates (from – to) 01.01.2002-present
- Name and address of employer Faculty of Chemistry and Pharmacy, University of Sofia “St. Kliment Ohridski”, Sofia-1164, 1, J. Bauchier blvd.
- Type of business or sector Organic Chemistry, Heterocyclic Chemistry, Chemistry of Dyes and Pigments, Associate Professor
- Occupation or position held Chemistry expert; Researcher;
 - Academic activity: Lectures, seminars and practical exercises within the courses in Organic Chemical Technology, General and Organic Chemistry, Food Chemistry, Design of Functional Dyes, Chemistry of Dyes; Dyes for Cosmetics, tutorials with diploma and PhD students ; organisation and delivery of chemicals, materials, laboratory equipment, etc. for laboratory needs;
 - Scientific activity: perform scientific research, apply different analytical techniques and interpret the results; lead and support master student(s) and PhD students in the organic chemistry research;

- Dates (from – to) 01.01.-30.12.2001
- Name and address of employer Institute for Polymer Research, Bulgarian Academi of Sciences,
- Type of business or sector Research Chemist

EDUCATION AND TRAINING

- Dates (from – to) 01.01.2002-16.06.2006
- Name and type of organization providing education and training Faculty of Chemistry and Pharmacy, University of Sofia “St. Kliment Ohridski”
- Principal subjects/occupational skills covered Speciality: Technology of the fine organic and bioorganic synthesis, synthesis and evaluation the properties of dyes
 - Research interests: chemistry of dyes and pigments
- Title of qualification awarded PhD in Chemistry

- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

01.10.1993-20.06.1999
Faculty of Chemistry, University of Sofia “St. Kliment Ohridski”

Speciality: Organic and Analytical Chemistry

Diploma for master degree

**PERSONAL SKILLS
AND COMPETENCES**

Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.

MOTHER TONGUE

BULGARIAN

OTHER LANGUAGES

ENGLISH

- Reading skills excellent
- Writing skills good
- Verbal skills excellent

RUSSIAN

- Reading skills good
- Writing skills good
- Verbal skills good

SKILLS
AND COMPETENCES

2007-2008 Post – doctoral training at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Klaus Muellen, Mainz, Germany. Synthesis of new dyes for solar cells and NLO (12 months).

2010-2011 Visiting scientist at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Klaus Muellen, Mainz, Germany. Synthesis of new dyes for solar cells, NLO and biolabeling (10 months).

2013 Giner de los Rios Fellowship for visiting researcher at Biological Chemistry Group of Professor Juan-Jose Vaquero, University of Alcalá de Henares, Madrid Spain (3 months).

2014 Visiting scientist at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Klaus Muellen, Mainz, Germany. Synthesis of new dyes for DNA analysis (one month).

2014 Visiting scientist at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Katharina Landfester, Mainz, Germany. Synthesis of styryl dyes for solar energy storage (one month).

2015 Visiting scientist at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Katharina Landfester, Mainz, Germany. Synthesis of perylene dyes for solar energy storage (one month).

2015 Giner de los Rios Fellowship for visiting researcher at Biological Chemistry Group of Professor Juan-Jose Vaquero, University of Alcalá de Henares, Madrid Spain (2 months).

2017 Visiting scientist at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Katharina Landfester, Mainz, Germany. Synthesis of perylene dyes for solar

energy storage (one month).

2017 Visiting scientist at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Katharina Landfester, Mainz, Germany. Synthesis of perylene dyes for solar energy storage (17 days).

2018 Visiting scientist at Max Planck Institute for Polymer Research, Synthetic Chemistry Group of Professor Dr. Katharina Landfester, Mainz, Germany. Synthesis of perylene dyes for solar energy storage (two months).

ORGANISATIONAL SKILLS
AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

Project leadership:

1. Bulgarian Ministry of Education, Fund for Scientific Research.

"Molecular solar thermal systems, enhanced by annihilation upconversion" (SunStore) DFNI E 02/11 14.12.2014-present ;

2. Development of procedures for large scale purification of dyes for optical spectroscopy, medicinal analysis and histochemistry, Emonia Biotech EOOD, Scientific Research Centre (NIS), 2015-2016;

3. Analysis of Food additives, Center of Food Biology, Sofia, Bulgaria, Scientific Research Centre (NIS), 2016-present;

TECHNICAL SKILLS
AND COMPETENCES

- Familiar all kind of laboratory equipment for organic synthesis
- UV-VIS, IR, Fluorescence, NMR, FD-MS measurements

DRIVING LICENCE(S)

Yes, Category B, Clear

ADDITIONAL INFORMATION

[Include here any other information that may be relevant, for example contact persons, references, etc.]

Full name	Full address, phone number and e-mail address	Business or occupation
Katharina Landfester	Director of Max Planck Institute for Polymer Research, Mainz, Germany landfest@mpip-mainz.mpg.de Phone:+49 (0)6131 379-170	Professor Dr.
Stanislav Balouchev	Project Leader Max Planck Institute for Polymer Research, Mainz, Germany balouche@mpip-mainz.mpg.de Phone:+49 (0)6131 379-485	Professor Dr
Benoit Champagne	Laboratoire de Chimie Théorique Facultés Universitaires Notre-Dame de la Paix (FUNDP) Unité Chimie Physique Théorique et Structurale (UGPTA) Rue de Bruxelles, 61, B-5000 NAMUR (Belgium) benoit.champagne@unamur.be Tél. : 32 - (0)81 - 724554	Professor Dr.
Juan J. Vaquero López	C.U. de Química Orgánica Director/a del C.A.I. de "Química Aplicada y Biotecnología" Catedrático de Universidad Química Orgánica y Química Inorgánica juanjose.vaquero@uah.es	Professor Dr.

ANNEXES: [List any attached annexes.]

1. List of publications

▪ Publications

1. Functionalization of poly(oxyethylene phosphonate) under phase-transfer catalyst conditions. K. Kossev, **A. Vassilev**, Y. Popova, K. Troev. *Polymer*, 44, (2003), 1987-1993.
2. Phosphonylmethylaminocyclopentane-1-carboxylic acid. E. Naidenova, **A. Vassilev**, Yu. Popova, K. Troev. *Heteroatom Chemistry*, Vol. 14, Number 3, (2003), 229-230.
3. Homodimeric monomethine cyanine dyes SOSO-1 and TOTO-1-6C- synthesis and fluorescence properties in the presence of nucleic acids. T. Deligeorgiev, I. Timcheva, V. Maximova, N. Gadjev, **A. Vassilev**, Jens-Peter Jacobsen, Karl-Heinz Drexhage. *Dyes and Pigments*, 61, (2004), 79-84.
4. Quaternization of N-heterocycles with Propylene oxide and Epichlorohydrin. **A. Vassilev**, I. Dikova, T. Deligeorgiev, K. H. Drexhage. *Synthetic Communications*, 34(14), (2004), 2539-2547.
5. 1,4-Addition of N,N-dialkylphenylacetamides to methylene substituted 1,3-dihydro-3-methylene-2H-indol-2-ones. Tz. Cholakova, **A. Vasilev**, N. Ninjo, A. Dobrev, S. Simova. *Heterocyclic Communications*, 11(2), (2005), 181-188.
6. Synthesis of novel intermediates for cyanine dyes by the quaternization of N-heterocycles with acrylamide and N-alkyl acrylamides. T. Deligeorgiev, **A. Vasilev**, K. H. Drexhage. *Dyes and Pigments* 67, (2005), 21-26.
7. Synthesis of novel monomeric and homodimeric cyanine dyes based on oxazolo[4,5-b]pyridinium and quinolinium end groups for nucleic acid detection. **A. Vassilev**, T. Deligeorgiev, N. Gadjev, K. H. Drexhage. *Dyes and Pigments* 66, (2005), 135-142.
8. Studies of monomeric and homodimeric oxazolo[4,5-b]pyridinium cyanine dyes as fluorescent probes for nucleic acids visualization. Kovalska, V. B., Tokar, V. P., Losytskyy, M. Yu., Deligeorgiev, T., **Vassilev, A.**, Drexhage, K.-H., Yarmoluk, S. M. *J. Biochem. Biophys. Methods* 68 (2006), 155-165.
9. Synthesis of novel monomeric cyanine dyes containing mercapto and thioacetyl substituents for nucleic acid detection. T. Deligeorgiev, N. Gadjev, **A. Vasilev**, K-H. Drexhage and S.M. Yarmoluk, *Dyes and Pigments* 70(3), (2006), 185-191.
10. Functional Dyes, Sung-Hoon Kim, Chapter 4, T. Deligeorgiev, **A. Vasilev**, "Cyanine dyes as fluorescent non-covalent labels for nucleic acid research", *Elsevier*. (2006), 137-183.
11. Ultrafast excited-state dynamics of DNA fluorescent probes: new insight into the fluorescence enhancement mechanism. A. Fürstenberg, M. Julliard, T. Deligeorgiev, N. Gadjev, **A. Vassilev**, E. Vauthey, *J. Am. Chem. Soc*, 128, (2006) 7661-7669.
12. Evaluation of the Cytotoxic and Pro-Apoptotic Activities of Eu(III) Complexes with Appended DNA Intercalators in a Panel of Human Malignant Cell Lines. Georgi Momekov, Todor Deligeorgiev, **Aleksey Vasilev**, Kalina Peneva, Spiro Konstantinov, Margarita Karaivanova. *Medicinal Chemistry*, 2(5), 439-445, (2006).

13. Ultrafast Dynamics of Fluorescent DNA Intercalators, Alexandre Fürstenberg, Marc Julliard, Todor Deligeorgiev, Nikolai Gadjev, **Aleksey Vassilev**, Eric Vauthey, Femthochemistry VII, Fundamental Ultrafast Processes in Chemistry, Physics, and Biology, A. W. Castelman, M. L. Kimble. Elsevier (2006), 391-395.
14. Synthesis of novel monomeric and homodimeric cyanine dyes with thioacetyl substituents for nucleic acid detection. T. Deligeorgiev, N. Gadjev, **A. Vasilev**, K-H. Drexhage and S.M. Yarmoluk, *Dyes and Pigments* 72(1), (2007), 28-32.
15. Fluorescence study of protein-lipid complexes with a new symmetric squarylium probe. Valeriya M. Ioffe, Galyna P. Gorbenko, Todor Deligeorgiev, Nikolai Gadjev, **Aleksey Vasilev**, *Biophysical Chemistry* 128, (2007), 75-78.
16. T. Deligeorgiev, **A. Vasilev**, K-H. Drexhage *Synthesis of novel monomeric cyanine dyes containing 2-hydroxypropyl and 3-chloro-2-hydroxypropyl substituents – noncovalent labels for nucleic acid. Dyes and Pigments* 73(1), (2007), 69.
17. T. Deligeorgiev, N. Gadjev, **A. Vasilev**, K-H. Drexhage and S.M. Yarmoluk. Synthesis of novel monomeric and homodimeric cyanine dyes with thioacetyl substituents for nucleic acid detection. *Dyes and Pigments* 72(1), (2007), 28-32.
18. Todor G. Deligeorgiev, Nikolai I. Gadjev, **Aleksey A. Vasilev**, Vera A. Maximova, Iliana I. Timcheva, Haralambos E. Katerinopoulos, George K. Tsikalas. Synthesis and properties of novel asymmetric monomethine cyanine dyes as non-covalent labels for nucleic acids. *Dyes and Pigments* 75 (2007) 466.
19. Todor Deligeorgiev, **Aleksey Vasilev**, Teodora Tsvetkova and Karl-Heinz Drexhage. Synthesis of novel monomeric asymmetric tri- and tetracationic monomethine cyanine dyes as fluorescent noncovalent nucleic acid labels. *Dyes and Pigments* 75 (2007) 658.
20. Todor Deligeorgiev, **Aleksey Vasilev**, Juan J. Vaquero, Julio Alvarez-Builla. A Green Synthesis of Isatoic Anhydrides from Isatins with Urea-Hydrogen Peroxide Complex and Ultrasound. *Ultrasonics Sonochemistry*, 14, (2007), 497.
21. Alexandre Fürstenberg, Todor Deligeorgiev, Nikolai Gadjev, **Aleksey Vassilev**, Eric Vauthey. Structure-Fluorescence Contrasts Relationship in Cyanine DNA Intercalators: Toward Rational Dye Design. *Chem. A. Eur. J.* (2007), 13, 8600.
22. Valeriya M. Ioffe, Galyna P. Gorbenko, Todor Deligeorgiev, Nikolai Gadjev, **Aleksey Vasilev**. Fluorescence study of protein-lipid complexes with a new symmetric squarylium probe. *Biophysical Chemistry* 128, (2007), 75.
23. A. Popova, M. Christov and **A. Vasilev**. Inhibitive properties of quaternary ammonium bromides of N-containing heterocycles on acid mild steel corrosion. Part I: Gravimetric and voltammetric results. *Corrosion Science*, (2007) 49 3276.
24. A. Popova, M. Christov and **A. Vasilev**. Inhibitive properties of quaternary ammonium bromides of N-containing heterocycles on acid mild steel corrosion. Part II: EIS results *Corrosion Science*, 49, (2007), 3290.

25. A.V.Yudintsev, V.M.Trusova, G.P.Gorbenko, T.Deligeorgiev, **A.Vasilev**. Partitioning of Eu(III) Coordination Complexes Into Lipid Bilayer. *Biophysical Bulletin* 19 (2), (2007), 65.
26. Andrey Yudintsev, Valeriya Trusova, Galyna Gorbenko, Todor Deligeorgiev, **Aleksey Vasilev**, Nikolai Gadjev. Lipid bilayer interactions of Eu(III) tris-b-diketonato coordination complex *Chemical Physics Letters* 457 (2008) 417.
27. R. Tomova, P. Petrova, R. Stoycheva-Topalova, A. Buroff, **A. Vassilev**, T. Deligeorgiev. Zn Complexes as Emitters in Organic Light Emitting Diodes, *Nanoscience and Nanotechnology*, 8 (2008) 130.
28. **Aleksey Vasilev**, Todor Deligeorgiev, Nikolai Gadjev, Stefka Kaloyanova, Juan J. Vaquero, Julio Alvarez-Builla, Alejandro G. Baeza. Novel environmentally benign procedures for the synthesis of styryl dyes *Dyes and Pigments* 77 (2008) 550.
29. M. Christov, A. Popova, **A. Vasilev**, A. Djambova, Corrosion protection of steel with quaternary ammonium salts, *J. Techn. Univ. Sofia, branch Plovdiv*, Vol. 14 (2009) 503-508, International Conference TECHSYS 2009, May Plovdiv.
30. S.Stanimirov, **A. Vasilev**, E. Haupt, I. Petkov, T. Deligeorgiev. Synthesis and spectral properties of novel fluorescent poly(oxyethylene phosphate) tris(β -diketonate) europium (III) complexes. *J Fluoresc* 19 (2009), 85.
31. Valeriya M. Trusova, Galyna P. Gorbenko, Todor Deligeorgiev, Nikolai Gadjev, **Aleksey Vasilev**. A Novel Squarylium Dye for Monitoring Oxidative Processes in Lipid Membranes. *J Fluoresc* (2009) 19:1017.
32. O.K. Kutsenko, V.M. Trusova, G.P. Gorbenko, L.A. Limanskaya, T. Deligeorgiev, **A. Vasilev**, S. Kaloyanova, N. Lesev, Fluorimetric study of interaction between Europium coordination complexes and DNA, *Biophys. Bull.*, 23(2), (2009), 40.
33. T. Deligeorgiev, N. Gadjev, **A. Vasilev**, S. Kaloyanova, J.J. Vaquero and J. Alvarez-Builla, "Green Chemistry in Organic Synthesis", *Mini-Rev. Org. Chem.*, 7(1), (2010), 44.
34. T. G. Deligeorgiev, S. Kaloyanova, **Al. Vasilev**, J-J. Vaquero, J. Alvarez-Builla Novel environmentally benign procedure for synthesis of 2-substituted-4(3H)-quinazolinones, *Color. Technol.*, 126, (2010), 24.
35. T. Deligeorgiev, **A. Vasilev**, S. Kaloyanova, J. J. Vaquero, Styryl dyes – synthesis and applications during the last 15 years, *Color. Technol.*, 126, (2010), 55.
36. Galyna Gorbenko, Valeriya Trusova, Elena Kirilova, Georgiy Kirilov, Inta Kalnina, **Aleksey Vasilev**, Stefka Kaloyanova, Todor Deligeorgiev. New fluorescent probes for detection and characterization of amyloid fibrils *Chemical Physics Letters* 495 (2010) 275.
37. T. G. Deligeorgiev, S. Kaloyanova, **A. Vasilev**, J.J. Vaquero. Novel Green Procedure for the Synthesis of 2-Arylbenzothiazoles under Microwave Irradiation in PEG 200 or PEG 400, *Phosphorus Sulfur*, 185 (11), (2010), 2292.
38. L.A. Limanskaya, A.V. Yudintsev, V.M. Trusova, G.P. Gorbenko, T. Deligeorgiev, **A.Vasilev**, S. Kaloyanova, N. Lesev, "Partitioning of Europium chelate into lipid bilayer as

- revealed by *p*-Terphenyl and pyrene” *Biophysical Bulletin*, 24 (1), 70 (2010).
39. A. Yudintsev, V. Trusova, G. Gorbenko, T. Deligeorgiev, **A. Vasilev**, S. Kaloianova, N. Lesev, “Fluorescence study of interactions between a europium coordination complex and model membranes”, *J. Biol. Phys. Chem.* 10, 55–62 (2010).
 40. B. Todorov, **A. Vasilev**, T. Deligeorgiev, R. Djingova, A method for extraction of bioavailable americium based on new complex of americium-241 with a fluorinated tris- β -diketone, *Asian Chemistry Letters*, 14(3), (2010), 25-31.
 41. **A. Vasilev**, T. Deligeorgiev, S. Kaloyanova, S. Stoyanov, V. Maximova, J. J. Vaquero, J. Alvarez-Builla, Synthesis of novel tetracationic asymmetric monomeric monomethine cyanine dyes – highly fluorescent dsDNA probes, *Color. Technol.*, 127(1), 69-74 (2011)
 42. A. Popova, M. Christov, **A. Vasilev**, A. Djambova, New environment friendly inhibitors of steel corrosion in acid media, *Journal of Technical University Sofia, branch Plovdiv*, Vol.16 (2011) 65-68, International Conference TECHSYS (2011), May Plovdiv.
 43. T. Deligeorgiev, S. Kaloyanova, **A. Vasilev**, A novel general method for preparation of neutral monomethine cyanine dyes, *Dyes Pigments*, 90(2), 170-176 (2011).
 44. O. K. Kutsenko, V. M. Trusova, G.P. Gorbenko, T. G. Deligeorgiev, **A. A. Vasilev**, S. Kaloianova, N. Y. Lesev, Fluorescence Study of Lipid Bilayer Interactions of Eu(III) Coordination Complexes, *J Fluoresc.*, 21(4), 1689-1695 (2011).
 45. T. Deligeorgiev, N. Gadjev, **A. Vasilev**, S. Kaloyanova, N. Lesev, A. Alexiev, Green Chemistry, *Khimiya*, 20, 289- (2011).
 46. I.A. Boldyrev, G.P. Gaenko, E.V. Moiseeva, T. Deligeorgiev, S. Kaloyanova, N. Lesev, **A. Vasilev**, J.G. Molotkovsky, “Europium complexes of 1,10-phenanthrolines: Their inclusion in liposomes and cytotoxicity, *Russ. J. Bioorgan. Chem.*, 37(3), (2011) 364.
 47. A. Popova, M. Christov, **A. Vasilev**, A. Zvetanova. Mono- and dicationic benzothiazolic quaternary ammonium bromides as mild steel corrosion inhibitors. Part I: Gravimetric and voltammetric results. *Corrosion Science* 53 (2011) 679.
 48. A. Popova, M. Christov, **A. Vasilev**, Mono- and dicationic benzothiazolic quaternary ammonium bromides as mild steel corrosion inhibitors. Part II: and polarization resistance results, *Corrosion Science* 53 (2011) 1770-1777.
 49. J. Gorenflot, A. Sperlich, A. Baumann, D. Rauh, **A. Vasilev**, C. Li, M. Baumgarten, C. Deibel, V. Dyakonov. Detailed study of N,N'-(diisopropylphenyl)-terrylene-3,4:11,12-bis(dicarboximide) as electron acceptor for solar cells application. *Synthetic Metals*, 161(23–24), (2012), 2669.
 50. Lidija Tumir, Ivo Crnolatac, Todor Deligeorgiev, **Aleksey Vasilev**, Stefka Kaloyanova, Marina Grabar, Sanja Tomić, Katarina Mišković, Ljubica Glavaš-Obrovac, Ivo Piantanida, “Kinetic Differentiation between Homo- and Alternating AT DNA by Sterically Restricted Phosphonium Dyes”, *Chem. Eur. J.*, 18 (2012) 3859 – 3864.
 51. . T. T. Deligeorgiev, N. Gadjev, S. Kaloyanova, N. Lesev, **A. Vasilev**, A. Alexiev, A novel general method for fast and easy preparation of cationic, neutral dimethinehemicyanine

and dimethine dyes by uncatalysed Knoevenagel condensation, *Color. Technol.*, accepted (2012).

52. Shahin Ahmadi, T. G. Deligeorgiev, **A. Vasilev**, and M. Kubista. *Russian Journal of Physical Chemistry A*, (2012), Vol. 86, No. 13, pp. 1974–1981.
53. **A. A. Vasilev**, Kurt De Mey, Inge Asselberghs, Koen Clays, Benoît Champagne, Silvia E. Angelova, Milena I. Spassova, Chen Li, and Klaus Müllen. *J. Phys. Chem. C* (2012), 116, 22711 – 22719.
54. Zarkov A., **Vasilev A.**, Deligeorgiev T., Stoyanov S., Nedelcheva-Veleva M., Novel fluorescent dyes for single DNA molecule techniques, *Molecular Imaging* 12 (2013) 90-99
55. Todorov B., **Vasilev, A.**, Tosheva Z., Deligeorgiev T., Djingova R. On the determination of Am³⁺ in natural water based on extraction of Am-241 complexes with fluorinated tris-beta-diketone. *Compt. Rendus De L Academie Bulg. Des Sciences.* (2013), 66(5), 685-690.
56. Nikolova K., Kaloyanova S., Mihaylova N., Stoitsova S., Chausheva S., **Vasilev A.**, Lesev N., Dimitrova P., Deligeorgiev T., Tchorbanov A, New fluorogenic dyes for analysis of cellular processes by flow cytometry and confocal microscopy, *Journal of Photochemistry and Photobiology, B: Biology* 129 (2013) 125-134
57. Kutsenko O., Trusova V., Gorbenko G., Lipovaya A., Slobozhanina E., Lukyanenko L., Deligeorgiev T., **Vasilev, A.** Fluorescence Study of the Membrane Effects of Aggregated Lysozyme, *Journal of Fluorescence* 23 (2013) 1229-1237
58. Crnolatac I., Tumir L., Lesev N., **Vasilev A.**, Deligeorgiev T., Miskovic K., Glavas-Obrovac L., Vugrek O., Piantanida I., Probing the Structural Properties of DNA/RNA Grooves with Sterically Restricted Phosphonium Dyes: Screening of Dye Cytotoxicity and Uptake, *ChemMedChem* 8 (2013) 1093-1103.
59. A.Popova, M.Christov, **A.Vasilev**, A.Djambova, T.Deligeorgiev, Impedance study of quaternary ammonium dibromides as acid corrosion inhibitors, *Journal of Technical University Sofia, branch Plovdiv, Vol.19* (2013) 41-44, International Conference TECHSYS 2011, May 30,Plovdiv.
60. Kitova S., Stoyanova D., Dikova J., **Vasilev A.**, Kandinska M., Angelova S. Optical properties of thin films of new croconium dye for application in organic solar cells, *Nanoscience and Nanotechnology* 14 (2014) 14-16.
61. Kitova S., Stoyanova D., Dikova J., Kandinska M., **Vasilev A.**, Angelova S. Optical modeling of bulk-heterojunction organic solar cells based on squaraine dye as electron donor. *Journal of Physics Conference Series.* (2014) 558, 012052.
62. J. Dikova, S. Kitova, D. Stoyanova, **A. Vasilev**, T. Deligeorgiev, S. Angelova. Optical properties of thin merocyanine dye layers for photovoltaic application. *Journal of Physics Conference Series.* (2014) 514, 012019.
63. Popova A., Christov M., **Vasilev A.**, Deligeorgiev T., Djambova A., Impedance spectroscopy study of inhibitive properties of quaternary ammonium salts, *J. Chem. Technol. and Metallurgy* 49 (2014) 275-279.

64. **Vasilev A. A.**, Lesev N., Dimitrova S., Nedelcheva-Veleva M., Stoyno Stoyanov S., Angelova S. Bright fluorescent dsDNA probes: novel polycationic asymmetric monomethine cyanine dyes based on thiazolopyridine-quinolinium chromophore *Color. Technol.*, 94–103, 131 (2015).
65. **Vasilev A. A.**, Balushev S., Cheshmedzhieva D., Ilieva S., Obis D. Castanio O. D. , Vaquero J. J., Angelova S. E., Landfester. Assembly of New Merocyanine Chromophores with a 1,8-Naphthalimide Core by a New Method for the Synthesis of the Methine Function. *Austr. J. Chem.*, 1399–1408, 68, (2015).
66. D Stoyanova, S Kitova, J Dikova, M Kandinska, **A Vasilev**, I Zhivkov and A Kovalenko. The impact of active layer nanomorphology on the efficiency of organic solar cells based on a squaraine dye electron donor. *Journal of Physics: Conference Series* 700 (2016) 012052.
67. S. Kitova, D. Stoyanova, J. Dikova, M. Kandinska, **A. Vasilev**, V. Mankov. Design of organic solar cells based on a squaraine dye as electron donor. *Bulg. Chem. Comm.* (2016) 48(G), 219-224.
68. M. Spassova, S. Angelova, M. Kandinska, **A. Vasilev**, S. Kitova, J. Dikova. *Bulg. Chem. Comm.* Molecular design of electron-donor materials for fullerene-based organic solar cells. (2017), 49 (G), 166-171.
69. **A. Vasilev**, M. Kandinska, S. Stoyanov, S. Yordanova, D. Sucunza, J. Vaquero, O. Castaño, S. Balushev, S. Angelova. Halogen-containing thiazole orange analogues – new fluorogenic DNA stains. *Beilstein J. Org. Chem.* (2017), 13, 2902–2914.
70. M. I. Kandinska, **A. A. Vasilev**, V. S. Videva, S. E. Angelova. A novel monomeric asymmetric tricationic monomethine cyanine dye - Thiazole Orange (TO) analog: synthesis, photophysical and dsDNA binding properties. *Bulg. Chem. Commun.* (2018), 50 (J), *In press*.
71. **A. A. Vasilev**, M. I. Kandinska, Y. Zagranjarski, D. Sucunza, J. J. Vaquero, O. D. Castaño, S. E. Angelova. Novel asymmetric azaquinolinium monomethine cyanine dyes versus a Thiazole Orange analog: a comparison of photophysical and dsDNA binding properties *Bulg. Chem. Commun.* (2018), 50 (J), *In press*.

2. Participation in simposiums

- S1. EMBL meeting "Chemistry meets Biology" – Heidelberg, Germany 2004 – poster.
- S2. Femtochemistry VII – Washington, DC, USA 2005 - poster.
- S3. Ioffe V.M., Gorbenko G.P., Deligeorgiev T., Vasilev A., Gadjev N., A new squarylium probe for biomedical applications // International Symposium on Organic Chemistry, 2006, Sofia, Bulgaria, p. 84.
- S4. Ioffe V.M., Gorbenko G.P., Deligeorgiev T., Vasilev A., Gadjev N., Fluorescence anisotropy studies of lysozyme-lipid interactions // IV Ukrainian Biophysical Congress, 2006, Donetsk, Ukraine, p. 297.
- S5. Yuditsev A.V., Trusova V.M., Gorbenko G.P., Deligeorgiev T., Vasilev A., Gadjev N. Lanthanide effect on structural state of model membranes // Proc. III International Sci.-

Pract. Conf. "Science and education without limits", Sofia, Bulgaria, 2007, p. 68.

S6. Yudintsev A.V., Trusova V.M., Gorbenko G.P., Deligeorgiev T., Vasilev A., Gadjev N. Effect of Eu(III) coordination complexes on the hydration of model membranes // Proc. I Internat. Conf. "Water state in biological and model systems", Tver, Russia, 2007, p. 54.

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S8. Yudintsev A.V., Trusova V.M., Gorbenko G.P., Deligeorgiev T., Vasilev A., Gadjev N., Pre-formulation studies of potential anticancer drug - Eu (III) coordination complex // Proc. IV International Sci.-Pract. Conf. "European science of XXI century", Praha, Czech Republic, 2008, p. 40-42

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