NICOLAY VASILEV TSAREVSKY

Address

Work: Southern Methodist University

Department of Chemistry 3215 Daniel Avenue, Rm. 305 Dallas, TX 75275, USA

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Education

2000-2005 Carnegie Mellon University, Pittsburgh, PA, USA, Department of Chemistry

Ph.D., Chemistry, May 2005

Thesis: "Synthesis of Well-Defined Polymeric Materials with Polar Functional Groups by Atom Transfer

Radical Polymerization"

Advisor: Krzysztof Matyjaszewski

1994-1999 University of Sofia, Sofia, Bulgaria, Department of Chemistry

M.S., Chemistry (Chemical Physics and Theoretical Chemistry), Maxima cum laude, July 1999

Thesis: "Hypervalent Iodine Compounds as Initiators of Polymerization Processes"

Advisors: George S. Georgiev and Elena B. Kamenska

Professional Experience

2016-	Associate Professor of Chemistry (tenured), Department of Chemistry, Southern Methodist University (SMU),
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Dallas, TX

2010-2016 Assistant Professor of Chemistry, Department of Chemistry, SMU, Dallas, TX

2007-2010 Chief Science Officer, ATRP Solutions, Inc., Pittsburgh, PA

2007 Associate Director, Controlled Radical Polymerization Consortium, Carnegie Mellon University

2005-2006 Visiting Assistant Professor, Department of Chemistry, Carnegie Mellon University

2000-2005 Graduate Research Assistant, Carnegie Mellon University. Supervised 11 undergraduate students. One of

them won the Pfizer award for 2002. Six of them won Undergraduate Research Awards and/or grants from the

Howard Hughes Medical Institute.

2000 Teaching Assistant, Department of Chemistry, Carnegie Mellon University

Professional Service

2019-2020 Editor, Polymers for Advanced Technologies (Wiley)

2018 2014 Program chair, Division of the History of Chemistry (HIST), American Chemical Society (ACS)
 Member of the Master of Liberal Studies Academic Council, Simmons School of Education, SMU

2014- Board of directors, Dallas Regional Science and Engineering Fair

2008-2010 Chair-elect (2008), chair (2009), and immediate past chair (2010), Pittsburgh Section of the ACS

2006 Chair, Polymer Group, Pittsburgh Section of the ACS
 2005 Secretary, Polymer Group, Pittsburgh Section of the ACS

2001-2005 Member of the Graduate Student Advisory Committee, Department of Chemistry, Carnegie Mellon University

Editorial board member

Journal of Polymer Science (Wiley, 2020-)
PLOS ONE (Public Library of Science; 2018-)

Polymers (MDPI; **2018-**) *Sci* (MDPI; **2018-**)

Journal of Chemical Technology and Metallurgy (University of Chemical Technology and Metallurgy (Bulgaria); 2016-) Editor of journal special issues

Polymer (Elsevier): guest-editor of a special issue on "Macromolecular Engineering", published in August **2015** (http://www.sciencedirect.com/science/journal/00323861/72)

Polymers (MDPI): guest-editor of a special issue on "Controlled/Living Radical Polymerization", published in 2016 (http://www.mdpi.com/journal/polymers/special issues/control-living-radic-polym)

Reviewer for journals

Acc. Chem. Res.; ACS Macro Lett.; ACS Symp. Ser.; Adv. Drug Delivery Rev.; Adv. Polym. Technol.; ARKIVOC; Biomacromolecules; Chem. Commun.; Chem. Eur. J.; Chem. Mater.; Chem. Sci.; ChemCatChem; Cogent Chemistry; Coll. Surf. A; e-Polymers; Eur. Polym. J.; Fullerenes Nanotubes Carbon Nanostruct.; Ind. Eng. Chem. Res.; Inorg. Chem.; J. Am. Chem. Soc.; J. Appl. Polym. Sci.; J. Biomater. Sci.: Polym. Ed.; J. Chem. Educ.; J. Chem. Technol. Metallurgy; J. Org. Chem.; J. Polym. Sci.: Part A: Polym. Chem.; Langmuir, Macromol. Chem. Phys.; Macromol. Rapid Commun.;

Macromol. React. Eng.; Macromolecules; Magn. Reson. Chem.; Nanoscale; New. J. Chem.; Polymer; Polym. Bull.; Polym. Chem.; Polym. Int.; Polym. J.; Polym. Rev.; Polymers; Prog. Polym. Sci.; React. Funct. Polym.; Soft Matter; Synlett; WIREs: Nanomed. Nanobiotechnol.

Reviewer for funding agencies

(USA agencies): ACS-PRF; NSF (proposal and panel reviewer)

(International agencies): A-STAR (Singapore); National Research, Development and Innovation Office (NKFIH, Hungary); Natural Sciences and Engineering Research Council (NSERC, Canada); Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO, Belgium); Swiss National Science Foundation (Switzerland)

Research Interests and Areas of Expertise

- 1. Controlled polymerization and synthesis of polymers with well-defined molecular architecture and functionality
- 2. Nanostructured materials for biomedical or optoelectronic applications
- 3. Transition metal catalyzed polymerizations
- 4. Development of "green" synthetic methodologies
- 5. Science education and history of chemistry

Membership in Professional Societies

- American Chemical Society (ACS)
- Society for the History of Alchemy and Chemistry
- History of Science Society
- Society of Iodine Science (Japan)

Awards and Honors

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2015	NSF CAREER award
2015	IUPAC Young Observer Fellowship
2014	Dean's Research Council Grant (Dedman College of Humanities and Sciences, SMU)
2008	National Starch and Chemical Award for Outstanding Graduate Research in Polymer Chemistry (ACS,
	Division of Polymer Chemistry and Division of Polymeric Materials: Science and Engineering)
2004	Excellence in Graduate Polymer Research (ACS, Division of Polymer Chemistry)
2004-2005	Harrison Legacy Dissertation Fellowship (Carnegie Mellon University)
2004	Pittsburgh Section's Polymer Group Student Award (ACS, Division of Polymer Chemistry)
2003	Kenneth G. Hancock Memorial Award in Green Chemistry (ACS, Division of Environmental Chemistry)
1998	A. Wessels' Award (Stiftung Bulgarische Hochschulforderung)
1996	Rector's Prize for Most Accomplished Student from the University (University of Sofia)
1994-1996	"Talents" Scholarship (Evrika Foundation)
1994	26th International Chemistry Olympiad (for high school students), Oslo, Norway
1994	27th National Chemistry Olympiad (for high school students), Varna, Bulgaria, bronze medal

Courses Taught

- 1. To Be Human: Science and Society (HUMN 7396): Fall 2016-2018 and Spring 2019-2020
- 2. Inorganic Synthesis Lab (CHEM-5192): Fall **2016-2019** (co-taught)
- 3. Science on the Stage (FNAR 7368): Spring 2014 (co-taught)
- 4. Chemical Communications (CHEM-6110): Spring 2013-2020 (co-taught)
- 5. Introduction to Polymer Chemistry (CHEM 5333): Spring 2013, 2015-2017, and 2020
- 6. Chemistry and Technology in Art (FNAR 6307): Spring 2012-2013
- 7. Advanced Polymer Chemistry (CHEM 6333): Spring 2012, 2014, and 2018
- 8. General Chemistry (CHEM 1303): Fall 2011-2015, and 2017, May term 2015-2019

Invited Guest Lectures

- 1. Guest lectures on "Materials Chemistry of Clay, Ceramics, and Porcelain" (October 5, **2017**) and "Materials Chemistry of Vellum, Papyrus, and Paper" (October 10, **2017**) as part of the class Archeological Science (COLQ 3040-01), offered at Tulane University, New Orleans, LA, Fall **2017**
- 2. Controlled Radical Polymerization, invited 1-week (24-lecture hours) undergraduate/graduate course at the Department of Polymer Engineering, University of Chemical Technology and Metallurgy, Sofia, Bulgaria, April 4-8, 2011

Productivity Summary

Author or coauthor of 99 peer-reviewed journal articles and book chapters, 42 conference proceedings and preprints, 1 textbook, 11 patents or patent applications. Co-editor of 7 books. Coauthor of 2 scripts for science education programs for

children (shown on national TV in Bulgaria in 2004 as part of a program named "Everything is Chemistry"). Over 8,300 citations with an *h*-index of 36 (ISI Web of Science, March **2020**). Over 190 seminars and conference presentations.

List of Publications

Peer-reviewed journal research papers

- 1. Kumar, R., Sayala, K. D., Cao, Y., Tsarevsky, N. V., "Functionalization of Cis-1,4-Polyisoprene Using Hypervalent Iodine Compounds with Tetrazole Ligands", *J. Polym. Sci.*, **2020**, 58, 172-80 (dx.doi.org/10.1002/pola.29500)
- 2. Vaish, A., Sayala, K. D., Tsarevsky, N. V., "N-heterocycle (Tetrazole)-Stabilized Pseudocyclic λ³-Iodane: Synthesis and Reactivity", *Tetrahedron Lett.*, **2019**, 60, 150995 (dx.doi.org/10.1016/j.tetlet.2019.150995)
- 3. Vaish, A., Tsarevsky, N. V., "Hypervalent Iodine-Based Dynamic and Self-Healing Network Polymers", *Polym. Chem.*, **2019**, 10, 3943-50; featured on the inside cover of the issue (dx.doi.org/10.1039/C9PY00664H)
- 4. Han, H., Kumar, R., Tsarevsky, N. V., "Responsive and Degradable Highly Branched Polymers with Hypervalent Iodine(III) Groups at the Branching Points", *Macromol. Rapid Commun.*, **2019**, 40, 1900073, 1-8 (dx.doi.org/10.1002/marc.201900073)
- 5. Cao, Y., Kumar, R., Tsarevsky, N. V., "Employing Heterocyclic Hypervalent Iodine Compounds with I-Cl Bonds as Initiators and Chain Transfer Agents in the Synthesis of Branched Polymers", *Macromol. Chem. Phys.*, **2019**, 220, 1800471, 1-10 (dx.doi.org/10.1002/macp.201800471)
- 6. Wang, Z., Seger, S., Tsarevsky, N. V., "Impact of Branching Unit Structure on the Cloud Point of Highly Branched Polymers with Lower Critical Solution Temperature Behavior", *Eur. Polym. J.*, **2019**, 111, 63-8 (dx.doi.org/10.1016/j.eurpolymj.2018.12.007)
- 7. Kumar, R., Vaish, A., Runcevski, T., Tsarevsky, N. V., "Hypervalent Iodine Compounds with Tetrazole Ligands", *J. Org. Chem.*, **2018**, 83, 12496-506 (dx.doi.org/10.1021/acs.joc.8b01715)
- 8. Kumar, R., Cao, Y., Tsarevsky, N. V., "Iodosylbenzene-Pseudohalide-Based Initiators for Radical Polymerization", *J. Org. Chem.*, **2017**, 82, 11806-15 (dx.doi.org/10.1021/acs.joc.7b01945)
- 9. Follit, C. A., Woodruff, S. R., Vogel, P. D., Wise, J. G., Tsarevsky, N. V., "Cationic Branched Polymers for Cellular Delivery of Negatively Charged Cargo", *J. Drug Delivery Sci. Technol.*, **2017**, 39, 324-33 (dx.doi.org/10.1016/j.jddst.2017.04.013)
- 10. Wang, Z., Tsarevsky, N. V., "Well-Defined Polymers Containing High Density of Pendant Viologen Groups", *J. Polym. Sci., Part A: Polym. Chem.*, **2017**, 55, 1173-82 (dx.doi.org/10.1002/pola.28474)
- 11. Garcia, M. E., Woodruff, S. R., Hellemann, E., Tsarevsky, N. V., Gil, R. R., "Di(ethylene glycol) Methyl Ether Methacrylate (DEGMEMA)-Derived Gels Align Small Organic Molecules in Methanol", *Magn. Reson. Chem.*, **2017**, 55, 206-209 (dx.doi.org/10.1002/mrc.4400)
- 12. Tang, H., Tsarevsky, N. V., "Preparation and Functionalization of Linear and Reductively Degradable Highly Branched Cyanoacrylate-Based Polymers", *J. Polym. Sci., Part A: Polym. Chem.*, **2016**, 54, 3683-93; featured on the cover of the issue (dx.doi.org/10.1002/pola.28261)
- 13. McLeod, D. C., Tsarevsky, N. V., "Reversible Deactivation Radical Polymerization of Monomers Containing Activated Aziridine Groups", *Macromol. Rapid Commun.*, **2016**, 37, 1694-700 (dx.doi.org/10.1002/marc.201600354)
- 14. Wang, Z., Tsarevsky, N. V., "Well-Defined Polymers Containing a Single Mid-Chain Viologen Group: Synthesis, Environment-Sensitive Fluorescence, and Redox Activity", *Polym. Chem.*, **2016**, 7, 4402-10 (dx.doi.org/10.1039/c6py00628k)
- 15. McLeod, D. C., Tsarevsky, N. V., "4-Vinylphenyl Glycidyl Ether: Synthesis, RAFT Polymerization, and Post-Polymerization Modifications with Alcohols", *Macromolecules*, **2016**, 49, 1135-42 (dx.doi.org/10.1021/acs.macromol.5b02437)
- 16. McLeod, D. C., Tsarevsky, N. V., "Well-Defined Epoxide-Containing Styrenic Polymers and Their Functionalization with Alcohols", *J. Polym. Sci., Part A: Polym. Chem.*, **2016**, 54, 1132-44 (dx.doi.org/10.1002/pola.27952)
- 17. Tang, H., Tsarevsky, N. V., "Lipoates as Buliding Blocks of Sulfur-Containing Branched Macromolecules", *Polym. Chem.*, **2015**, 6, 6936-45; featured on the inside cover of the issue (dx.doi.org/10.1039/C5PY01005E)
- 18. Han, H., Tsarevsky, N. V., "Employing Exchange Reactions Involving Hypervalent Iodine Compounds for the Direct Synthesis of Azide-Containing Linear and Branched Polymers", *Chem. Sci.*, **2014**, 5, 4599-609 (dx.doi.org/10.1039/c4sc02254h)
- 19. Teo, V. L., Davis, B. J., Tsarevsky, N. V., Zetterlund, P. B., "Successful Miniemulsion ATRP Using an Anionic Surfactant: Minimization of Deactivator Loss by Addition of a Halide Salt", *Macromolecules*, **2014**, 47, 6230-7 (dx.doi.org/10.1021/ma501379q)
- 20. Matyjaszewski, K., Tsarevsky, N. V., "Macromolecular Engineering by Atom Transfer Radical Polymerization (ATRP)", *J. Am. Chem. Soc.*, **2014**, 136, 6513-33 (dx.doi.org/10.1021/ja408069v)
- 21. McLeod, D. C., Tsarevsky, N. V., "Atom Transfer Radical Polymerization of an Epoxide-Containing Monomer, 4-Vinylphenyloxirane, Employing Low Concentration of Catalyst: Synthesis of Linear and Star-Shaped Macromolecules", *Polym. Int.*, **2014**, 63, 868-75 (dx.doi.org/10.1002/pi.4711)
- 22. Woodruff, S. R., Davis, B. J., Tsarevsky, N. V., "Epoxides as Reducing Agents for Low-Catalyst-Concentration Atom Transfer Radical Polymerization", *Macromol. Rapid Commun.*, **2014**, 35, 186-92 (dx.doi.org/10.1002/marc.201300696)

- 23. Borguet, Y. P., Tsarevsky, N. V., "Controlled Radical Polymerization of a Styrenic Sulfonium Monomer and Post-Polymerization Modifications", *Polym. Chem.*, **2013**, 4, 2115-24 (dx.doi.org/10.1039/c2py21106h)
- 24. Snider, J. D., Troche-Pesqueira, E., Woodruff, S. R., Gayathri, C., Tsarevsky, N. V., Gil, R. R., "New Strategy for RDC-Assisted Diastereotopic Proton Assignment Using a Combination of J-Scaled BIRD HSQC and J-Scaled BIRD HMQC/HSQC", *Magn. Reson. Chem.*, **2012**, 50, S86-S91 (dx.doi.org/10.1002/mrc.3895)
- 25. Borguet, Y. P., Tsarevsky, N. V., "Low-catalyst concentration atom transfer radical polymerization of a phosphonium salt-type monomer", *Polym. Chem.*, **2012**, 3, 2487-94 (dx.doi.org/10.1039/c2py20303k)
- 26. Han, H., Tsarevsky, N. V., "Carboxylic acids as latent initiators of radical polymerization carried out in the presence of hypervalent iodine compounds: Synthesis of branched and transiently crosslinked polymers", *Polym. Chem.*, **2012**, 3, 1910-7 (dx.doi.org/10.1039/c1py00495f)
- 27. Popescu, D.-L., Tsarevsky, N. V., "Multibrominated Hyperbranched Polymers: Synthesis and Further Functionalizations by ARGET ATRP or Click Chemistry", *Macromol. Rapid Commun.*, **2012**, 33, 869-75 (dx.doi.org/10.1002/marc.201200065)
- 28. Tsarevsky, N. V., "Catalytic Activity and Performance of Copper-Based Complexes Mediating Atom Transfer Radical Polymerization", *Isr. J. Chem.*, **2012**, 52, 276-87 (dx.doi.org/10.1002/ijch.201100158)
- 29. Popescu, D.-L., Tsarevsky, N. V., "Synthesis, Functionalization, and Reductive Degradation of Multibrominated Disulfide-Containing Hyperbranched Polymers", *Aust. J. Chem.*, **2012**, 65, 28-34 (dx.doi.org/10.1071/CH11376)
- 30. Riveira, M. J., Gayathri, C., Navarro-Vazquez, A., Tsarevsky, N. V., Gil, R. R., Mischne, M. P., "Unprecedented stereoselective synthesis of cyclopenta[*b*]benzofuran derivatives and their characterisation assisted by aligned media NMR and ¹³C chemical shift *ab-initio* predictions", *Org. Biomol. Chem.*, **2011**, 9, 3170-5 (dx.doi.org/10.1039/c1ob05109a)
- 31. Tsarevsky, N. V., Jakubowski, W., "Atom Transfer Radical Polymerization of Functional Monomers Employing Cu-Based Catalysts at Low Concentration: Polymerization of Glycidyl Methacrylate", *J. Polym. Sci.: Part A: Polym. Chem.*, **2011**, 49, 918-25 (dx.doi.org/10.1002/pola.24503)
- 32. Pietrasik, J., Tsarevsky, N. V., "Synthesis of Basic Molecular Brushes: ATRP of 4-Vinylpyridine in Organic Media", *Eur. Polym. J.*, **2010**, 46, 2333-40 (dx.doi.org/10.1016/j.eurpolymj.2010.09.043)
- 33. Gayathri, C., Tsarevsky, N. V., Gil, R. R., "RDCs Analysis of Small Molecules Made Easy: Fast and Tuneable Alignment by Reversible Compression / Relaxation of Reusable PMMA Gels", *Chem. Eur. J.*, **2010**, 16, 3622-6 (dx.doi.org/10.1002/chem.200903378)
- 34. Tsarevsky, N. V., "Hypervalent Iodine-Mediated Direct Azidation of Polystyrene and Consecutive Click-Type Functionalization", *J. Polym. Sci.: Part A: Polym. Chem.*, **2010**, 48, 966-74 (dx.doi.org/10.1002/pola.23854)
- 35. Tsarevsky, N. V., Huang, J., Matyjaszewski, K., "Synthesis of Hyperbranched Degradable Polymers by Atom Transfer Radical (Co)Polymerization of Inimers with Ester or Disulfide Groups", *J. Polym. Sci.: Part A: Polym. Chem.*, **2009**, 47, 6839-51 (dx.doi.org/10.1002/pola.23723)
- 36. Braunecker, W. A., Tsarevsky, N. V., Gennaro, A., Matyjaszewski, K., "Thermodynamic Components of the Atom Transfer Radical Polymerization Equilibrium: Quantifying Solvent Effects", *Macromolecules*, **2009**, 42, 6348-60 (dx.doi.org/10.1021/ma901094s)
- 37. Matyjaszewski, K., Tsarevsky, N. V., "Nanostructured Functional Materials Prepared by Atom Transfer Radical Polymerization", *Nature Chemistry*, **2009**, 1, 276-88 (dx.doi.org/10.1038/nchem.257)
- 38. Tang, W., Kwak, Y., Braunecker, W., Tsarevsky, N. V., Coote, M. L., Matyjaszewski, K., "Understanding Atom Transfer Radical Polymerization: Effect of Ligand and Initiator Structures on the Equilibrium Constants", *J. Am. Chem. Soc.*, **2008**, 130, 10702-13 (dx.doi.org/10.1021/ja802290a)
- 39. Golas, P. L., Tsarevsky, N. V., Matyjaszewski, K., "Structure-Reactivity Correlation in "Click" Chemistry: Substituent Effect on Azide Reactivity", *Macromol. Rapid Commun.*, **2008**, 29, 1167-71 (dx.doi.org/10.1002/marc.200800118)
- 40. Jakubowski, W., Tsarevsky, N. V., Higashihara, T., Faust, R., Matyjaszewski, K., "Allyl Halide (Macro)Initiators in ATRP: Synthesis of Block Copolymers with Polyisobutylene Segments", *Macromolecules*, **2008**, 41, 2318-23 (dx.doi.org/10.1021/ma7027837)
- 41. Gil, R. R., Gayathri, C., Tsarevsky, N. V., Matyjaszewski, K., "Stretched Poly(methyl methacrylate) Gel Aligns Small Organic Molecules in Chloroform. Stereochemical Analysis and Diasterotopic Proton NMR Assignment in Ludartin Using Residual Dipolar Couplings and ³J Coupling Constant Analysis.", *J. Org. Chem.*, **2008**, 73, 840-8 (dx.doi.org/10.1021/jo701871g)
- 42. Wu, W., Tsarevsky, N. V., Hudson, J. L., Tour, J. M., Matyjaszewski, K., Kowalewski, T., ""Hairy" Single-Walled Carbon Nanotubes Prepared by Atom Transfer Radical Polymerization", *Small*, **2007**, 3, 1803-10 (dx.doi.org/10.1002/smll.200600688)
- 43. Matyjaszewski, K., Tsarevsky, N. V., Braunecker, W. A., Dong, H., Huang, J., Jakubowski, W., Kwak, Y., Nicolay, R., Tang, W., Yoon, J. A., "Role of Cu⁰ in Controlled / "Living" Radical Polymerization", *Macromolecules*, **2007**, 40, 7795-806 (dx.doi.org/10.1021/ma0717800)
- 44. Tsarevsky, N. V., Bencherif, S. A., Matyjaszewski, K., "Graft Copolymers by a Combination of ATRP and Two Different Consecutive Click Reactions", Macromolecules, **2007**, 40, 4439-45 (dx.doi.org/10.1021/ma070705m)
- 45. Golas, P. L., Tsarevsky, N. V., Sumerlin, B. S., Walker, L. M., Matyjaszewski, K., "Multisegmented Block Copolymers by "Click" Coupling of Polymers Prepared by ATRP", *Aust. J. Chem.*, **2007**, 60, 400-4 (dx.doi.org/10.1071/CH07073)

- 46. Tsarevsky, N. V., Braunecker, W. A., Matyjaszewski, K., "Electron Transfer Reactions Relevant to Atom Transfer Radical Polymerization", *J. Organometal. Chem.*, **2007**, 692, 3212-22 (dx.doi.org/10.1016/j.jorganchem.2007.01.051)
- 47. Tsarevsky, N. V., Matyjaszewski, K., ""Green" Atom Transfer Radical Polymerization: From Process Design to Preparation of Well-Defined Environmentally-Friendly Polymeric Materials", *Chem. Rev.*, **2007**, 107, 2270-99 (dx.doi.org/10.1021/cr050947p)
- 48. McCarthy, P., Chattopadhyay, M., Millhauser, G. L., Tsarevsky, N. V., Bombalski, L., Matyjaszewski, K., Shimmin, D., Avdalovic, N., Pohl, C., "Nanoengineered Analytical Immobilized Metal Affinity Chromatography Stationary Phase by ATRP: Separation Prion Peptides", *Anal. Biochem.*, **2007**, 366, 1-8 (dx.doi.org/10.1016/j.ab.2007.03.008)
- 49. Tsarevsky, N. V., Braunecker, W. A., Vacca, A., Gans, P., Matyjaszewski, K., "Competitive Equilibria in Atom Transfer Radical Polymerization", *Macromol. Symp.*, **2007**, 248, 60-70
- 50. Tang, H., Arulsamy, N., Radosz, M., Shen, Y., Tsarevsky, N. V., Braunecker, W. A., Tang, W., Matyjaszewski, K., "Highly Active Copper-Based Catalyst for Atom Transfer Radical Polymerization", *J. Am. Chem. Soc.*, **2006**, 128, 16277-85 (dx.doi.org/10.1021/ja0653369)
- 51. Matyjaszewski, K., Jakubowski, W., Min, K., Tang, W., Huang, J., Braunecker, W. A., Tsarevsky, N. V., "Diminishing Catalyst Concentration in Atom Transfer Radical Polymerization with Reducing Agents", *Proc. Natl. Acad. Sci. USA*, **2006**, 103, 15309-14 (dx.doi.org/10.1073/pnas.0602675103)
- 52. Tsarevsky, N. V., Braunecker, W. A., Tang, W., Brooks, S. J., Matyjaszewski, K., Weisman, G. R., Wong, E. H., "Copper-Based ATRP Catalysts of Very High Activity Derived from Dimethyl Cross-Bridged Cyclam", *J. Mol. Catal. A: Chem.*, **2006**, 257, 132-40
- 53. Tsarevsky, N. V., Braunecker, W. A., Brooks, S. J., Matyjaszewski, K., "Rational Selection of Initiating/Catalytic Systems for the Copper-Mediated Atom Transfer Radical Polymerization of Basic Monomers in Protic Media: ATRP of 4-Vinylpyridine", *Macromolecules*, **2006**, 39, 6817-24 (dx.doi.org/10.1021/ma0609937)
- 54. Golas, P. L., Tsarevsky, N. V., Sumerlin, B. S., Matyjaszewski, K., "Catalyst Performance in "Click" Coupling Reactions of Polymers Prepared by ATRP: Ligand and Metal Effects", *Macromolecules*, **2006**, 39, 6451-7
- 55. Shach-Caplan, M., Silverstein, M. S., Bianco-Peled, H., Tsarevsky, N. V., Cooper, B. M., Matyjaszewski, K., "Nanoscale Structure of SAN-PEO-SAN Triblock Copolymers Synthesized by Atom Transfer Radical Polymerization", *Polymer*, **2006**, 47, 6673-83
- 56. Tsarevsky, N. V., Matyjaszewski, K., "Environmentally Benign Atom Transfer Radical Polymerization: Towards "Green" Processes and Materials", *J. Polym. Chem.: Part A: Polym. Chem.*, **2006**, 44, 5098-112
- 57. Oh, J. K., Tang, C., Gao, H., Tsarevsky, N. V., Matyjaszewski, K., "Inverse Miniemulsion ATRP: A New Method for Synthesis and Functionalization of Well-Defined Water-Soluble Cross-Linked Polymeric Particles", *J. Am. Chem. Soc.*, **2006**, 128, 5578-84 (dx.doi.org/10.1021/ja060586a)
- 58. Tang, W., Tsarevsky, N. V., Matyjaszewski, K., "Determination of Equilibrium Constants for ATRP", *J. Am. Chem. Soc.*, **2006**, 128, 1598-1604 (dx.doi.org/10.1021/ja05)
- 59. Sumerlin, B. S., Tsarevsky, N. V., Louche, G., Lee, R. Y., Matyjaszewski, K., "Highly Efficient "Click" Functionalization of Poly(3-azidopropyl methacrylate) Prepared by ATRP", *Macromolecules*, **2005**, 38(18), 7540-5 (dx.doi.org/10.1021/ma0511245)
- 60. Gao, H., Tsarevsky, N. V., Matyjaszewski, K., "Synthesis of Degradable Miktoarm Star Copolymers via Atom Transfer Radical Polymerization", *Macromolecules*, **2005**, 38(14), 5995-6004 (dx.doi.org/10.1021/ma0503099)
- Braunecker, W. A., Tsarevsky, N. V., Pintauer, T., Gil, R. R., Matyjaszewski, K., "Quantifying Vinyl Monomer Coordination to Cu^I in Solution and the Effect of Coordination on Monomer Reactivity in Radical Copolymerization", Macromolecules, 2005, 38(10), 4081-8
- 62. Tsarevsky, N. V., Sumerlin, B. S., Matyjaszewski, K., "Step Growth "Click" Coupling of Telechelic Polymers Prepared by Atom Transfer Radical Polymerization", *Macromolecules*, **2005**, 38(9), 3558-61 (dx.doi.org/10.1021/ma050370d)
- 63. Tsarevsky, N. V., Matyjaszewski, K., "Combining Atom Transfer Radical Polymerization and Disulfide / Thiol Redox Chemistry: A Route to Well-Defined (Bio)degradable Polymeric Materials", *Macromolecules*, **2005**, 38(8), 3087-92 (dx.doi.org/10.1021/ma050020r)
- 64. Braunecker, W. A., Pintauer, T., Tsarevsky, N. V., Kickelbick, G., Matyjaszewski, K., "Towards Understanding Monomer Coordination in Atom Transfer Radical Polymerization: Synthesis of [Cu^I(PMDETA)(π-M)][BPh₄] (M = Methyl Acrylate, Styrene, 1-Octene, and Methyl Methacrylate) and Structural Studies by FT-IR and ¹H NMR Spectroscopy and X-ray Crystallography", *J. Organometal. Chem.*, **2005**, 690, 916-24
- 65. Tsarevsky, N. V., Pintauer, T., Matyjaszewski, K., "Deactivation Efficiency and Degree of Control Over Polymerization in ATRP in Protic Solvents", *Macromolecules*, **2004**, 37(26), 9768-78 (dx.doi.org/10.1021/ma048438x)
- 66. Tsarevsky, N. V., Bernaerts, K. V., Dufour, B., Du Prez, F. E., Matyjaszewski, K., "Well-defined (Co)polymers with 5-Vinyltetrazole Units via Combination of Atom Transfer Radical (Co)polymerization of Acrylonitrile and "Click Chemistry"-Type Postpolymerization Modification", *Macromolecules*, 2004, 37(25), 9308-13 (dx.doi.org/10.1021/ma048207q)
- 67. Tsarevsky, N. V., Matyjaszewski, K., "Reversible Redox Cleavage/Coupling of Polystyrene with Disulfide or Thiol Groups Prepared by Atom Transfer Radical Polymerization", *Macromolecules*, **2002**, 35(24), 9009-14

- 68. Kowalewski, T., Tsarevsky, N. V., Matyjaszewski, K., "Nanostructured Carbon Arrays from Block Copolymers of Polyacrylonitrile", *J. Am. Chem. Soc.*, **2002**, 124(36), 10632-3
- 69. Tsarevsky, N. V., Sarbu, T., Goebelt, B., Matyjaszewski, K., "Synthesis of Styrene-Acrylonitrile Copolymers and Related Block Copolymers by Atom Transfer Radical Polymerization", *Macromolecules*, **2002**, 35(16), 6142-8
- 70. Georgiev, G., Kamenska, E., Tsarevsky, N., Christov, L., Koseva, N., Proynov, D., "(Diacetoxyiodo)benzene as Thermoinitiator of "Living" Radical Polymerization", *Ann. Univ. de Sofia* "St. Kliment Ohridski", **2002**, 95, 27-37
- 71. Georgiev, G. S., Kamenska, E. B., Tsarevsky, N. V., Christov, L. K., "Radical Thermo- and Sonopolymerization of Methyl Methacrylate Initiated by Iodobenzene I,I-diacetate", *Polym. Int.*, **2001**, 50, 313-8
- 72. Matyjaszewski, K., Qiu, J., Tsarevsky, N. V., Charleux, B., "Atom Transfer Radical Polymerization of n-Butyl Methacrylate in an Aqueous Dispersed System: A Miniemulsion Approach", *J. Polym. Sci.: Part A: Polym. Chem.*, **2000**, 38, 4724-34

Peer-reviewed journal articles on education and history of science

- 73. Tsarevsky, N. V., Woodruff, S. R., Wisian-Neilson, P. J., "An Undergraduate Chemistry Laboratory: Synthesis of Well-Defined Polymers by Low-Catalyst-Concentration ATRP and Post-Polymerization Modification to Fluorescent Materials", *J. Chem. Educ.*, **2016**, 93, 1452-9 (dx.doi.org/10.1021/acs.jchemed.5b00738)
- 74. Tsarevsky, N. V., "Education and Curricula in Early Universities: Some Documentary Evidence", *Chemistry: Bulg. J. Chem. Educ.*, **2005**, 14(5), 499-508
- 75. Tsarevsky, N. V., "The Influence of the Value of Equilibrium Constant on the Concentration Distribution of Reacting Species in Reversible Reactions", *Chemistry: Bulg. J. Chem. Educ.*, **2004**, 13(6), 437-48
- 76. Tsarevsky, N. V., "Some Suggestions for Increasing the Efficiency of Education in Chemistry", *Chemistry: Bulg. J. Chem. Educ.*, **2002**, 11(2), 139-52
- 77. Tsarevsky, N. V., "Development of the Main Techniques in Chemistry. I. Evolution of Apparatuses for Distillation", *Chemistry: Bulg. J. Chem. Educ.*, **2000**, 9(1), 39-49
- 78. Tsarevsky, N. V., Slaveykova, V., Manev, S., Lazarov, D., "The Onium Compounds", J. Chem. Educ., 1997, 74(6), 734-6
- 79. Tsarevsky, N., Manev, S., "Onium Salts and Crown Compounds in Phase-Transfer Catalysis", Priroda, 1997, (3-4), 58-67
- 80. Tsarevsky, N. V., Manev, S. G., "Chemical Problems in Bulgarian Textbooks from the End of XIXth and the Beginning of XXth Century", *Chemistry: Bulg. J. Chem. Educ.*, **1997**, (5-6), 56-62
- 81. Tsarevsky, N. V., "Alchemical Names and Symbols", Chemistry: Bulg. J. Chem. Educ., 1997, (3-4), 1-9
- 82. Tsarevsky, N. V., "Onium Cations and Onium Salts", Chemistry: Bulg. J. Chem. Educ., 1997, (1-2), 10
- 83. Tsarevsky, N. V., "On the Trivial Nomenclature of Chemical Compounds and the Origin of Trivial Names", *Chemistry: Bulg. J. Chem. Educ.*, **1996**, (2), 3-14; reprinted, with changes in *Leteratura*, **2001**, (27/28), 37-46
- 84. Maney, S. G., Tsarevsky, N. V., "Scanning Microscopes", Chemistry: Bulg. J. Chem. Educ., 1996, (1), 1-10
- 85. Tsarevsky, N., "History of Creation of the Chemical Nomenclature", Chemistry: Bulg. J. Chem. Educ., 1995, (6), 47-54

Peer-reviewed book chapters

- 1. McLeod, D. C., Sayala, K. D., Tsarevsky, N. V., "Insights into the Reactivity of Epoxides as Reducing Agents in Low-Catalyst-Concentration ATRP Reactions", in *Reversible Deactivation Radical Polymerization: Mechanisms and Synthetic Methodologies (ACS Symposium Series 1284)*, Matyjaszewski, K., Gao, H., Sumerlin, B. S., Tsarevsky, N. V., Eds., Washington, D.C., **2018**, Ch. 8, pp. 191-203 (dx.doi.org/10.1021/bk-2018-1284.ch008)
- Vaish, A., Tsarevsky, N. V., "Hypervalent Iodine Compounds in Polymer Science and Technology", in *Main Group Strategies towards Functional Hybrid Materials*, Baumgartner, T., Jaekle, F., Eds., Wiley, 2018, Ch. 19, pp. 483-514 (dx.doi.org/10.1002/9781119235941.ch19)
- 3. Woodruff, S. R., Tsarevsky, N. V., "Synthesis of (Bio)degradable Polymers by Controlled/"Living" Radical Polymerization", in *Polymers for Biomedicine: Synthesis, Characterization, and Applications*, Scholz, C., Ed., Wiley, **2017**, Ch. 11, pp. 315-54 (dx.doi.org/10.1002/9781118967904.ch11)
- Woodruff, S. R., Tsarevsky, N. V., "Synthesis of Star Polymers with Epoxide-Containing Highly Branched Cores by Low-Catalyst Concentration Atom Transfer Radical Polymerization and Post-Polymerization Modifications", in *Controlled Radical Polymerization: Materials (ACS Symposium Series 1188)*, Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Chiefari, J., Eds., Washington, D.C., 2015, Ch. 11, pp. 149-67 (dx.doi.org/10.1021/bk-2015-1188.ch011)
- Tsarevsky, N. V., Matyjaszewski, K., "Atom Transfer Radical Polymerization (ATRP)", in Fundamentals of Controlled/"Living" Radical Polymerization (RSC Polymer Chemistry Series No. 4), Tsarevsky, N. V., Sumerlin, B. S., Eds., RSC, 2013, Ch. 8, pp. 287-357
- 6. Woodruff, S. R., Davis, B., Tsarevsky, N. V., "Selecting the Optimal Reaction Conditions for Copper-Mediated Atom Transfer Radical Polymerization at Low Catalyst Concentration", in *Progress in Controlled Radical Polymerization: Mechanisms and Techniques (ACS Symposium Series 1100)*, Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Eds., Washington, D.C., **2012**, Ch. 7, pp. 99-113 (dx.doi.org/10.1021/bk-2012-1100.ch007)
- 7. Tsarevsky, N. V., "Degradable and Biodegradable Polymers by Controlled / Living Radical Polymerization: From Synthesis to Application", in *Green Polymerization Methods. Renewable Starting Materials, Catalysis and Waste Reduction*, Mathers, R. T., Meier, M., Eds., Wiley-VCH, **2011**, Ch. 11, pp. 235-61

- 8. Tsarevsky, N. V., Braunecker, W. A., Tang, W., Matyjaszewski, K., "The Atom Transfer Radical Polymerization Equilibrium: Structural and Medium Effects", in *Controlled/Living Radical Polymerization: Progress in ATRP (ACS Symposium Series 1023)*, Matyjaszewski, K., Ed., Washington, D.C., **2009**, Ch. 6, pp. 85-96
- 9. Jakubowski, W., Tsarevsky, N. V., McCarthy, P., "Systematic Polymeric Libraries via Atom Transfer Radical Polymerization", in *Controlled/Living Radical Polymerization: Progress in ATRP (ACS Symposium Series 1023)*, Matyjaszewski, K., Ed., Washington, D.C., **2009**, Ch. 23, pp. 343-55
- 10. Tsarevsky, N. V., Tang, W., Brooks, S. J., Matyjaszewski, K., "Factors Determining the Performance of Copper-Based ATRP Catalysts", in *Controlled/Living Radical Polymerization: From Synthesis to Materials (ACS Symposium Series 944)*, Matyjaszewski, K., Ed., Washington, D.C., **2006**, Ch. 5, pp. 56-70
- 11. Sumerlin, B. S., Tsarevsky, N. V., Louche, G., Gao, H., Golas, P. L., Matyjaszewski, K., "Click Chemistry Functionalization of Polymers Prepared by Atom Transfer Radical Polymerization", in *Controlled/Living Radical Polymerization: From Synthesis to Materials (ACS Symposium Series 944)*, Matyjaszewski, K., Ed., Washington, D.C., **2006**, Ch. 11, pp. 140-52
- 12. McCarthy, P., Tsarevsky, N. V., Bombalski, L., Matyjaszewski, K., Pohl, C., "Grafting Chromatographic Stationary Phase Substrates by Atom Transfer Radical Polymerization", in *Controlled/Living Radical Polymerization: From Synthesis to Materials (ACS Symposium Series 944)*, Matyjaszewski, K., Ed., Washington, D.C., **2006**, Ch. 18, pp. 252-68
- 13. Tsarevsky, N. V., Min, K., Jahed, N. M., Gao, H., Matyjaszewski, K., "Functional Degradable Polymeric Materials Prepared by Atom Transfer Radical Polymerization", in *Degradable Polymers and Materials: Principles and Practice (ACS Symposium Series 939)*, Khemani, K., Scholz, C., Eds., Washington, D.C., **2006**, Ch. 12, pp. 184-200; Updated: "Functional Degradable Polymeric Materials Prepared by Atom Transfer Radical Polymerization (ATRP)", in *Degradable Polymers and Materials: Principles and Practice (2nd Edition) (ACS Symposium Series 1114)*, Khemani, K., Scholz, C., Eds., Washington, D.C., **2012**, Ch. 19, pp. 325-38
- 14. Tsarevsky, N. V., Matyjaszewski, K., "Controlled Synthesis of Polymers with Ionic or Ionizable Groups Using Atom Transfer Radical Polymerization", in *Polyelectrolytes and Polyzwitterions: Synthesis, Properties, and Applications (ACS Symposium Series 937)*, McCormick, C. L., Lowe, A. B., Eds., Washington, D.C., **2006**, Ch. 5, pp. 79-94

Conference proceedings and preprints and other non-peer-reviewed articles

- 1. Tsarevsky, N. V., "ATRP Employing Very Low Amounts of Copper-Based Catalysts: Selecting the Right Conditions", *Polym. Prepr.*, **2011**, 52(2), 538-9
- 2. Popescu, D.-L., Tsarevsky, N. V., "Synthesis of Redox-Active Well-Defined Polymers with Viologen Units by Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2011**, 52(2), 667-8
- 3. Woodruff, S. R., Tsarevsky, N. V., "Synthesis of Well-Defined Polymers with Epoxide Groups by Atom Transfer Radical Polymerization and Their Use as Precursors of Functional Materials", *Polym. Prepr.*, **2011**, 52(2), 671-2
- 4. Jakubowski, W., Tsarevsky, N. V., McCarthy, P., Matyjaszewski, K., "ATRP for Everyone: Ligands and Initiators for the Clean Synthesis of Functional Polymers", *Material Matters*, **2010**, 5(1), 16-20
- 5. Tsarevsky, N. V., McCarthy, P., Jakubowski, W., Spanswick, J., Matyjaszewski, K., "Atom Transfer Radical Polymerization (ATRP) as a Tool for the Synthesis of Well-Defined Functional Polymeric Materials", NSTI Nanotech, Nanotechnology Conference and Trade Show, Technical Proceedings, 2008, 2, 665-8
- 6. Jakubowski, W., Tsarevsky, N. V., Matyjaszewski, K., McCarthy, P., "Universal Platform for Preparation of Functional Block Copolymers", NSTI Nanotech, Nanotechnology Conference and Trade Show, Technical Proceedings, 2008, 2, 723-6
- 7. Tsarevsky, N. V., "Synthesis of Well-Defined Functional Polymers by ATRP: From Mechanism to Materials", *PMSE Preprints*, **2008**, 99, 184
- 8. Tsarevsky, N. V., Braunecker, W. A., Tang, W., Kwak, Y., Matyjaszewski, K., "Catalyst Performance in Atom Transfer Radical Polymerization: A Closer Look", *Polym. Prepr.*, **2008**, 49(2), 44-5
- 9. Golas, P. L., Tsarevsky, N. V., Matyjaszewski, K., "Clicking with ATRP: Preparation of Functional Materials and Structure-Activity Correlations", *Polym. Prepr.*, **2008**, 49(2), 50-1
- 10. Jakubowski, W., Tsarevsky, N. V., McCarthy, P., Matyjaszewski, K., "Tailor-Made Polymeric Systematic Libraries via Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2008**, 49(2), 369-70
- 11. Braunecker, W. A., Tsarevsky, N. V., Gennaro, A., Matyjaszewski, K., "Understanding Solvent Effects on Thermodynamic Equilibria in Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2008**, 49(2), 376-7
- 12. Tsarevsky, N. V., Golas, P. L., Matyjaszewski, K., "ATRP and Click-Type Chemical Transformations: Towards Novel Functional Well-Defined Polymers", *Polym. Prepr.*, **2008**, 49(1), 141-2
- 13. Golas, P. L., Tsarevsky, N. V., Matyjaszewski, K., "Substituent Effect on Azide Reactivity in "Click" Reaction Kinetics", *Polym. Prepr.*, **2008**, 49(1), 206-7
- 14. Golas, P. L., Tsarevsky, N. V., Matyjaszewski, K., ""Click" Coupling of Block Copolymers Prepared by ATRP", *Polym. Prepr.*, **2007**, 48(2), 264-5
- 15. Tang, W., Kwak, Y., Tsarevsky, N. V., Matyjaszewski, K., "Effect of Ligand and Initiator Structures on the Equilibrium Constants in ATRP", *Polym. Prepr.*, **2007**, 48(1), 392-3

- 16. Tsarevsky, N. V., Min, K., Matyjaszewski, K., "Synthesis of Degradable Functional Polymers with Various Molecular Architectures by Combination of ATRP and Nature-Inspired Reversible Reactions", *Polym. Prepr.*, **2006**, 47(2), 186-7
- 17. Golas, P. L., Tsarevsky, N. V., Sumerlin, B. S., Matyjaszewski, K., "Tuning the Efficiency of Click Reactions Using Polymers Prepared by Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2006**, 47(2), 737-8
- 18. Oh, J. K., Tang, C., Gao, H., Tsarevsky, N. V., Siegwart, D. J., Sherwood, G., Peteanu, L., Matyjaszewski, K., "Synthesis and Functionalization of Degradable Nanogel Particles Prepared by Inverse Miniemulsion AGET ATRP", *Polym. Prepr.*, **2006**, 47(2), 945-6
- 19. McCarthy, P., Bombalski, L., Tsarevsky, N. V., Thayer, J. R., Shimmin, D., Matyjaszewski, K., Avdalovic, N., Pohl, C., "Chromatographic Stationary Phases by ATRP: Biomolecule Separations on a pDMAEMA Phase Made by Surface Initiation", *Polym. Prepr.*, **2005**, 46(2), 177-8
- 20. Tsarevsky, N. V., Sumerlin, B. S., Golas, P. L., Matyjaszewski, K., ""Click" Coupling of Azide- and Alkyne-Functionalized Well-Defined Polymers Prepared by Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2005**, 46(2), 179-80
- 21. Sumerlin, B. S., Tsarevsky, N. V., Louche, G., Gao, H., Matyjaszewski, K., "Click Functionalization of Well-Defined (Co)polymers Prepared by Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2005**, 46(2), 181-2
- 22. Braunecker, W. A., Tsarevsky, N. V., Pintauer, T., Gil, R. R., Matyjaszewski, K., "Exploring the Consequences of Monomer Coordination in Radical Polymerization", *Polym. Prepr.*, **2005**, 46(2), 237-8
- 23. Tsarevsky, N. V., Cooper, B. M., Wojtyna, O. J., Jahed, N. M., Gao, H., Matyjaszewski, K., "Halogen Exchange in Atom Transfer Radical Polymerization as a Route to Well-Defined Block Copolymers", *Polym. Prepr.*, **2005**, 46(2), 249-50
- 24. Silverstein, M. S., Shach-Caplan, M., Bianco-Peled, H., Tsarevsky, N. V., Cooper, B. M., Matyjaszewski, K., "Nanoscale Structure of SAN-PEO-SAN Copolymers Synthesized by ATRP", *Polym. Prepr.*, **2005**, 46(2), 301-2
- 25. Gao, H., Tsarevsky, N. V., Matyjaszewski, K., "Preparation of Degradable Miktoarm Star Copolymers via ATRP by "In-Out" Method", *Polym. Prepr.*, **2005**, 46(2), 349-50
- 26. Tsarevsky, N. V., McKenzie, B., Tang, W., Matyjaszewski, K., "Tuning the Activity and Performance of the Catalyst in Atom Transfer Radical Polymerization and General Rules for Catalyst Selection", *Polym. Prepr.*, **2005**, 46(2), 482-3
- 27. Tsarevsky, N. V., Wu, W., Hudson, J. L., Kowalewski, T., Tour, J. M., Matyjaszewski, K., "Grafting of Well-defined Polymers from the Surface of Functionalized Single-Walled Carbon Nanotubes via Atom Transfer Radical Polymerization and Visualization of the Polymer-Nanotube Hybrids by Atomic Force Microscopy", *Polym. Prepr.*, **2005**, 46(1), 203-4
- 28. Tsarevsky, N. V., Matyjaszewski, K., "Synthesis of Well-defined (Bio)degradable Polymeric Materials with Disulfide Bonds by Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2005**, 46(1), 339-40
- 29. Tsarevsky, N. V., Matyjaszewski, K., "Rational Design of the Catalyst for Atom Transfer Radical Polymerization in Aqueous Media", *Polym. Prepr.*, **2004**, 45(2), 89-90
- 30. Tsarevsky, N. V., Matyjaszewski, K., "Synthesis of Well-defined (Co)polymers with Ionic or Ionizable Groups by Atom Transfer Radical Polymerization in Aqueous Media", *Polym. Prepr.*, **2004**, 45(2), 288-9
- 31. Shach-Caplan, M., Bianco-Peled, H., Tsarevsky, N. V., Cooper, B. M., Matyjaszewski, K., Silverstein, M. S., "Nanoscale Structure of Amorphous/Crystalline/Amorphous Triblock Copolymers", *PMSE*, **2004**, 91, 843-4
- 32. Tang, C., Qi, K., Tsarevsky, N. V., Jia, S., Dufour, B., Bombalski, L., Legeleiter, J., Wooley, K., Matyjaszewski, K., Kowalewski, T., "Synthesis and Characterization of Novel Nanostructured Carbons Prepared by Pyrolysis of Self-assembled or Pre-assembled Polyacrylonitrile-based Copolymer Precursors", *Polym. Prepr.*, **2004**, 45(1), 745-6
- 33. Tsarevsky, N. V., Dufour, B., Matyjaszewski, K., "Synthesis of Well-defined Homo- and Copolymers Containing Tetrazole Units by Combining Atom Transfer Radical Polymerization and "Click" Chemistry", *Polym. Prepr.*, **2004**, 45(1), 1065-6
- 34. Tsarevsky, N. V., Pintauer, T., Matyjaszewski, K., "The Rate of Deactivation in Atom Transfer Radical Polymerization in Protic and Aqueous Media", *Polym. Prepr.*, **2004**, 45(1), 1067-8
- 35. Tsarevsky, N. V., Pintauer, T., Glogowski, E., Matyjaszewski, K., "Atom Transfer Radical Polymerization of 2-Hydroxyethyl Methacrylate and 2-(N,N-dimethylamino)ethyl Methacrylate in Aqueous Homogeneous Media: Synthesis and Mechanistic Studies", *Polym. Prepr.*, **2002**, 43(2), 201-2
- 36. Tsarevsky, N. V., Pintauer, T., Matyjaszewski, K., "Atom transfer Radical Polymerization of Ionic Monomers in Aqueous Solution: Mechanistic Studies and Synthesis", *Polym. Prepr.*, **2002**, 43(2), 203-4
- 37. Tsarevsky, N. V., Matyjaszewski, K., "Preparation of Polymers with Disulfide and Thiol Groups by Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2002**, 43(2), 205-6
- 38. Tsarevsky, N. V., Jia, S., Tang, C., Kowalewski, T., Matyjaszewski, K., "Synthesis of Block Copolymers of Acrylonitrile and n-Butyl Acrylate by Atom Transfer Radical Polymerization. Morphological Studies by Atomic Force Microscopy", *Polym. Prepr.*, **2002**, 43(2), 207-8
- 39. Tsarevsky, N. V., Sarbu, T., Goebelt, B., Hahn, L. G., Matyjaszewski, K., "Synthesis of Block Copolymers with SAN Segments by Atom Transfer Radical Polymerization", *Polym. Prepr.*, **2002**, 43(2), 209-10
- 40. Pintauer, T., Tsarevsky, N. V., Kickelbick, G., Matyjaszewski, K., "Synthesis, Characterization and Polymerization Activity in ATRP of $[Cu^{I}(PMDETA)(\pi-CH_{2}CH(COOCH_{3}))][BPh_{4}]$, *Polym. Prepr.*, **2002**, 43(2), 221-2
- 41. Jia, S., Tsarevsky, N. V., Tang, C., Kowalewski, T., Matyjaszewski, K., "Nanopatterned Carbon Films from Pyrolysis of Thin Films of Well-defined Block Copolymers of Acrylonitrile and n-Butyl Acrylate", *Polym. Prepr.*, **2002**, 43(2), 436-7

42. Georgiev, G. S., Tsarevsky, N. V., Kamenska, E. B., Christov, L. K., "Hypervalent Iodine Iniferters", *Polym. Prepr.*, **1999**, 40(2), 385-6

Authored Books

1. Dimitrova, V., Tsarevsky, N., Manev, S., "Problems in Chemistry: Methods, Practice, Examples", Neofit Rilsky University Press, Blagoevgrad, 2000, ISBN 954-680-1623

Edited Books

- 1. Reversible Deactivation Radical Polymerization: Mechanisms and Synthetic Methodologies (ACS Symposium Series 1284), Matyjaszewski, K., Gao, H., Sumerlin, B. S., Tsarevsky, N. V., Eds., ACS, Washington, DC, 2018, x + 407 pp., ISBN13: 978-084123-3188 (dx.doi.org/10.1021/bk-2018-1284)
- 2. Reversible Deactivation Radical Polymerization: Materials and Applications (ACS Symposium Series 1285), Matyjaszewski, K., Gao, H., Sumerlin, B. S., Tsarevsky, N. V., Eds., ACS, Washington, DC, **2018**, x + 307 pp., ISBN13: 978-084123-3232 (dx.doi.org/10.1021/bk-2018-1285)
- 3. Controlled Radical Polymerization: Mechanisms (ACS Symposium Series 1187), Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Chiefari, J., Eds., ACS, Washington, DC, **2015**, x + 339 pp., ISBN13: 978-084123-0484 (dx.doi.org/10.1021/bk-2015-1187)
- 4. Controlled Radical Polymerization: Materials (ACS Symposium Series 1188), Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Chiefari, J., Eds., ACS, Washington, DC, 2015, xii + 361 pp., ISBN13: 978-084123-0507 (dx.doi.org/10.1021/bk-2015-1188)
- 5. Fundamentals of Controlled/"Living" Radical Polymerization (RSC Polymer Chemistry Series No. 4), Tsarevsky, N. V., Sumerlin, B. S., Eds., RSC, Cambridge, **2013**, xiv + 364 pp., ISBN 1849734259 (dx.doi.org/10.1039/9781849734257)
- Progress in Controlled Radical Polymerization: Mechanisms and Techniques (ACS Symposium Series 1100), Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Eds., ACS, Washington, DC, 2012, xii + 345 pp., ISBN13: 978-084122-6999
- 7. Progress in Controlled Radical Polymerization: Materials and Applications (ACS Symposium Series 1101), Matyjaszewski, K., Sumerlin, B. S., Tsarevsky, N. V., Eds., ACS, Washington, DC, **2012**, xii + 327 pp., ISBN13: 978-084122-7576

Patents and Patent Applications

- 1. Jakubowski, W., McCarthy, P., Tsarevsky, N. V., Spanswick, J., "Star Macromolecules for Personal and Home Care", US application 20101027 (2010), 47 pp.
- 2. Jakubowski, W., McCarthy, P., Tsarevsky, N. V., Spanswick, J., "Well-Defined Stars with Segmented Arms and Their Preparation", WO application 20100423 (2010), 45 pp.
- 3. Tsarevsky, N. V., "Functionalization of Polymers", US application 20090731 (2009), 13 pp.
- 4. Matyjaszewski, K., Spanswick, J., Min, K., Tsarevsky, N. V., Oh, J. K., "Preparation of functional gel particles with a dual crosslink network", WO 20071009 (2008), 77 pp.
- 5. Huang, J., Russell, A. J., Tsarevsky, N. V., Matyjaszewski, K., "Modification of Surfaces with Polymers", WO 2008021500 (2008), 77 pp.
- 6. Kowalewski, T., Lambeth, D. N., Matyjaszewski, K., Spanswick, J., Tsarevsky, N. V., "Process for the Preparation of Nanostructured Materials", US 7,056,455 (2006), 50 pp.
- 7. Matyjaszewski, K., Bombalski, L., Jakubowski, W., Min, K., Spanswick, J., Tsarevsky, N., "Atom Transfer Radical Polymerization in the Presence of a Reducing Agent", WO 2005087819 (2005), 96 pp.
- 8. Matyjaszewski, K., Sumerlin, B., Tsarevsky, N., Spanswick, J., "Preparation of Tetrazole Polymers with Controlled Functionality for Pharmaceutical Use", WO 2005087818 (2005), 50 pp.
- 9. Matyjaszewski, K., Chung, I. S., Huang, J., Sarbu, T., Siegwart, D. J., Spanswick, J., Tsarevsky, N. V., "Hydrodegradable, Photodegradable, and Biodegradable Polymers", WO 2004087777 (2004), 90 pp.
- 10. Matyjaszewski, K., Tsarevsky, N. V., "Stabilization of Transition Metal Complexes for Catalysis in Diverse Environments", US 2004122189 (2004), 41 pp.
- 11. Matyjaszewski, K., Tsarevsky, N., "Atom Transfer Radical Polymerization Process for Ionic Monomers", PCT Intl. Appl. WO 0228913 (2002), 64 pp.

Organized Conferences

- 1. Southwest and Rocky Mountain Regional Meeting of the ACS, November 13-16, **2019**, El Paso, TX: Co-organizer (with M. C. Stefan) and session chair of a Symposium on "Functional Polymers: Synthetic Methodologies and Uses" (November 13, **2019**)
- 2. Southwest and Rocky Mountain Regional Meeting of the ACS, November 13-16, **2019**, El Paso, TX: Co-organizer (with C. Hahn) and session chair of a Symposium on "Celebrating the Elements and Their Discoverers" (November 15, **2019**)
- 3. 258th ACS National Meeting, August 25-29, **2019**, San Diego, CA: Co-organizer (with D. E. Lewis) and session chair of a HIST Symposium "150 Years of the Publication of the 1st Issue of Zhurnal Russkogo Fiziko-Himicheskogo Obshtestva"

- 4. 254th ACS National Meeting, August 20-24, **2017**, Washington, DC: Co-organizer (with H. Gao, K. Matyjaszewski, and B. S. Sumerlin) of the "8th Symposium on Controlled Radical Polymerization" (POLY Division of the ACS)
- 5. 253rd ACS National Meeting, April 2-6, **2017**, San Francisco, CA: Co-organizer (with D. Rabinovich) and session chair of a HIST Symposium on "Chemistry through the Eyes of Non-Chemists: Evolution of the Public Perception of Chemistry"
- 6. 72nd Southwest Regional Meeting of the ACS, November 10-13, **2016**, Galveston, TX: Co-organizer (with M. Stefan) and session chair of a Symposium on "Functional Polymers"
- 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem 2015), Honolulu, Hawaii, December 15-20,
 2015, Co-organizer (with D. Keddie, G. Moad, and S. Yamago) and session chair of a symposium "Advances in Precision Polymer Synthesis Using Reversible Deactivation Radical Polymerization (#401)" (December 17-18, 2015)
- 8. "Macromolecular Engineering: A Symposium Honoring the Impact and 65th Birthday of Krzysztof Matyjaszewski", March 28, **2015**, Carnegie Mellon University, Pittsburgh, PA: Symposium co-organizer (with R. Freeland)
- 9. 70th Southwest Regional Meeting of the ACS, November 19-22, **2014**, Fort Worth, TX: Co-organizer (with P. Wisian-Neilson) and session chair of a Symposium on "Functional Polymers: Synthesis, Characterization, and Applications" (November 21, **2014**)
- 10. 248th ACS National Meeting, August 10-14, **2014**, San Francisco, CA: Co-organizer (with K. Matyjaszewski, B. S. Sumerlin, and J. Chiefari) of a POLY Symposium "Controlled Radical Polymerization". Presided over two sessions on "Functionality and Architectural Control"
- 11. 247th ACS National Meeting, March 16-20, **2014**, Dallas, TX: Organizer and chair of a HIST Symposium on "Bringing Chemistry to the Public: A Historical Look at the Popularization of Chemistry" (March 17, **2014**)
- 12. 67th Southwest Regional Meeting of the ACS, November 9-12, **2011**, Austin, TX: Co-organizer (with E. Simanek and B. S. Sumerlin) and session chair of a Symposium on "Supramolecular and Dynamic-Covalent Materials"
- 13. 242nd ACS National Meeting, August 28 September 1, 2011, Denver, CO: Co-organizer (with K. Matyjaszewski and B. S. Sumerlin) of a POLY Symposium "International Year of Chemistry Symposium: Controlled Radical Polymerization". Presided over a session on "Mechanisms"
- 14. Meetings of the Polymer Group, Pittsburgh Section of ACS, during 2005-2006: Organizer and chair

Chaired Sessions at Conferences (other than organized conferences)

- World Polymer Congress MACRO 2018, Cairns, Australia, July 1-5, 2018: Chaired a session on "Recent Developments in Polymer Design"
- 2. 252nd ACS National Meeting, Philadelphia, PA, August 21-25, **2016**: Chaired a POLY session of a symposium on "Advances in Functional Polymers with Sophisticated Branched Structures"
- 3. 251st ACS National Meeting, San Diego, CA, March 13-17, 2016: Chaired a HIST session "Tutorial and General Papers"
- 4. 3rd US-Mexico Symposium on Advances in Polymer Science (Macromex 2014), Nuevo Vallarta, Mexico, December 3-6, **2014**: Chaired a session of a symposium on "Precision Polymer Synthesis"
- 5. 235th ACS National Meeting, New Orleans, LA, April 6-10, **2008**: Chaired a POLY session on "Efficient Chemical Transformations in Polymer Chemistry: Click Chemistry and Beyond"
- 1st Young Polymer Scientists Conference and 5th Short Course on Block Copolymer-Based Nanomaterials, Santiago de Compostela, Spain, March 25-29, 2007: Session chair
- 7. 1st European Chemistry Congress, Budapest, Hungary, August 27-31, 2006: Session chair

Conferences and Symposia: Research Lectures and Seminars (presented by N. V. Tsarevsky)

- 1. Tsarevsky, N. V., "Functional Macromolecules with Controlled Architectures", Workshop on "Polymeric Drug Delivery at the Interface of Chemistry and Manufacturing", Department of Chemistry and Biochemistry, University of Texas at Dallas, Richardson, TX, February 8, 2020, invited talk
- 2. Tsarevsky, N. V., "Functional Branched Polymers: Synthesis and Applications", School of Physical and Mathematical Sciences, College of Science, Division of Chemistry and Biological Chemistry, Nanyang Technological University, Singapore, December 13, **2019**, invited seminar
- 3. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional, Dynamic, and Self-healing Polymers with Complex Macromolecular Architectures", 16th Pacific Polymer Conference, Singapore, December 8-12, **2019**, invited talk PPC16-A-0619
- 4. Tsarevsky, N. V., "Elemental Ads: Learning about the Elements from Newspaper and Magazine Advertising Materials", Southwest and Rocky Mountain Regional Meeting of the ACS, November 13-16, **2019**, El Paso, TX, oral presentation 351
- 5. Tsarevsky, N. V., "Two Siblings Born of the Sea: The Stories of Elements 53 and 35", Southwest and Rocky Mountain Regional Meeting of the ACS, November 13-16, **2019**, El Paso, TX, oral presentation 320
- Tsarevsky, N. V., Cao, Y., Han, H., Kumar, R., Sayala, K. D., Vaish, A., "Functionalization Reactions Involving Hypervalent Iodine Compounds with Applications in Materials Science", Southwest and Rocky Mountain Regional Meeting of the ACS, November 13-16, 2019, El Paso, TX, oral presentation 14
- 7. Tsarevsky, N. V., Raeisi, M., Tang, H., "Lipoates as Building Blocks of Polymers", Southwest and Rocky Mountain Regional Meeting of the ACS, November 13-16, **2019**, El Paso, TX, oral presentation 10

- 8. Tsarevsky, N. V., "Functional Branched Polymers: Synthesis and Applications", Department of Chemistry, University of Alabama in Huntsville, Huntsville, AL, October 4, 2019, invited seminar
- 9. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional and Dynamic Polymers", 19th National Symposium Polymers 2019 Open to International Participation, Pomorie, Bulgaria, September 9-12, **2019**, invited plenary lecture
- Tsarevsky, N. V., "Synthesis and Applications of Branched Functional Polymers", 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 21), Constanta – Mamaia, Romania, September 4-7, 2019, invited plenary lecture
- 11. Tsarevsky, N. V., "Foundation and Early Activities of the Russian Chemical Society", 258th ACS National Meeting, August 25-29, **2019**, San Diego, CA, talk HIST 39
- 12. Tsarevsky, N. V., "Exploring the Reactivity of Halogen Compounds: Gustavson's Contributions to Chemistry", 258th ACS National Meeting, August 25-29, **2019**, San Diego, CA, talk HIST 44
- 13. Tsarevsky, N. V., "Functional Branched Polymers: Synthesis and Applications", Department of Chemistry, University of Delhi, Delhi, India, July 9, 2019, invited seminar
- 14. Tsarevsky, N. V., Han, H., Kumar, R., Sayala, K. D., Vaish, A., "Hypervalent Iodine Compounds in the Synthesis of Functional and Dynamic Polymers", Symposium on Polymer Science 2019, Society of Polymer Science of India, Centre for Advanced Functional Materials, Indian Institute of Science Education and Research Kolkata, Mohanpur, India, July 5-6, 2019, invited plenary lecture
- 15. Tsarevsky, N. V., "Reversible Deactivation Radical Polymerization of Monomers Bearing Reactive Functional Groups: Possibilities and Limitations", Department of Chemistry, Indian Institute of Technology Kharagpur, Kharagpur, India, July 4, 2019, invited seminar
- 16. Tsarevsky, N. V., "Highly Branched Functional Polymers: Synthesis and Applications", School of Applied and Interdisciplinary Sciences, Indian Association for the Cultivation of Science, Kolkata, India, July 3, 2019, invited seminar
- 17. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional and Dynamic Polymers", Department of Polymer Science and Technology, University of Calcutta, Kolkata, India, July 2, **2019**, invited seminar
- 18. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional Polymers", Faculty of Chemistry and Pharmacy, University of Sofia, Sofia, Bulgaria, June 14, **2019**, invited lecture
- 19. Tsarevsky, N. V., "Applications of Hypervalent Iodine Compounds in the Synthesis of Functional Polymers", Department of Polymer Engineering, University of Chemical Technology and Metallurgy, Sofia, Bulgaria, June 10, **2019**, invited lecture
- 20. Tsarevsky, N. V., "Functional Hyperbranched Polymers: Synthesis and Applications", 10th Scientific Session "Young Scientists in the World of Polymers", Institute of Polymers, Bulgarian Academy of Sciences, Sofia, Bulgaria, June 6, 2019, invited opening lecture
- 21. Tsarevsky, N. V., "Hypervalent Iodine Reagents with (Pseudo)halide, Carboxylate, or Tetrazolate Ligands in the Synthesis of Functional Polymers", 257th ACS National Meeting, March 31 April 4, **2019**, Orlando, FL, ACS Award in the Chemistry of Materials in Honor of Krzysztof Matyjaszewski, talk POLY 167, invited
- 22. Tsarevsky, N. V., "Analysis of Plant-Derived Materials: The Early Years", 257th ACS National Meeting, March 31 April 4, **2019**, Orlando, FL, talk HIST 3
- 23. Tsarevsky, N. V., "Synthesis and Applications of Highly Branched Functional Polymers", Department of Chemistry, Wichita State University, Wichita, KS, March 6, 2019, invited seminar
- 24. Tsarevsky, N. V., "Mikhail Vasilyevich Lomonosov (1711-1765): A Russian Polymath and Chemist", 256th ACS National Meeting, August 19-23, **2018**, Boston, MA, talk HIST 28
- 25. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional and Dynamic Polymers", World Polymer Congress MACRO 2018, Cairns, Australia, July 1-5, **2018**, invited speaker
- 26. Tsarevsky, N. V., "Synthetic Approaches to and Applications of Highly Branched Functional Polymers", CAMD pre-MACRO Polymer Symposium, Centre for Advanced Macromolecular Design, School of Chemical Engineering, University of New South Wales, Sydney, Australia, June 29, 2018, invited talk
- 27. Tsarevsky, N. V., "Applications of Hypervalent Iodine(III) Compounds in Polymer Synthesis", Fusion Conferences: 4th Functional Polymeric Materials Conference, Nassau, Bahamas, June 5-8, **2018**, invited
- 28. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional and Dynamic Polymers", Department of Chemistry, Case Western Reserve University, Cleveland, OH, March 29, **2018**, invited seminar
- 29. Tsarevsky, N. V., "Synthesis of Highly Branched Functional Polymers by Radical (Co)Polymerization of Crosslinkers or Inimers", 255th ACS National Meeting, March 18-22, **2018**, New Orleans, LA, talk PMSE 172, invited
- 30. Tsarevsky, N. V., "Solving Crime Mysteries Using Chemistry: The Early Days of Forensic Science", 255th ACS National Meeting, March 18-22, 2018, New Orleans, LA, talk HIST 4
- 31. Tsarevsky, N. V., "Iodine and Its Fascinating History", Department of Chemistry, Texas A&M University Kingsville, Kingsville, TX, February 28, **2018**, invited lecture at the "Periodic Table" meeting
- 32. Tsarevsky, N. V., "Hypervalent Iodine Compounds in Polymer Synthesis", Department of Chemistry, Texas A&M University Kingsville, Kingsville, TX, February 28, **2018**, invited seminar

- 33. Tsarevsky, N. V., Han, H., Kumar, R., Vaish, A., Cao, Y., "Applications of Hypervalent Iodine Compounds in the Synthesis of Functional Polymers", 4th US-Mexico Symposium on Advances in Polymer Science (Macromex 2017), December 3-7, **2017**, Los Cabos, BC, Mexico, invited presentation
- 34. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional Macromolecules with Complex Architectures", Department of Chemistry, Tulane University, New Orleans, LA, October 9, **2017**, invited seminar
- 35. Tsarevsky, N. V., "Hypervalent Iodine Compounds in Polymer and Materials Science", 20th Symposium of the Society of Iodine Science, Chiba University, Chiba, Japan, September 8, **2017**, invited lecture
- 36. Tsarevsky, N. V., McLeod, D. C., Wang, Z., Borguet, Y., Woodruff, S. R., "Reversible Deactivation Radical Polymerization (RDRP) of Monomers Bearing Reactive Functional Groups: Possibilities and Limitations", 254th ACS National Meeting, August 20-24, 2017, Washington, DC, talk POLY 261
- 37. Tsarevsky, N. V., "Iodine and Its Fascinating History", 254th ACS National Meeting, August 20-24, **2017**, Washington, DC, talk HIST 2
- 38. Tsarevsky, N. V., Vaish, A., Han, H., Seger, S., "Dynamic and Self-Healing Polymers Containing Hypervalent Iodine(III) and Bismuth(V) Atoms as Structural Elements", 254th ACS National Meeting, August 20-24, **2017**, Washington, DC, talk PMSE 68, invited
- 39. Tsarevsky, N. V., "(Bio)Degradable Branched Polymers: From Synthesis to Applications", GPC2017: The Polymer and Biomacromolecular Applications and Characterization Conference, July 18-20, 2017, Atlanta, GA, invited lecture
- 40. Tsarevsky, N. V., Woodruff, S. R., Wisian-Neilson, P., "Low-Catalyst Concentration Atom Transfer Radical Polymerization in the Undergraduate Laboratory: Synthesis of Well-Defined Epoxide-Containing Polymers and Their Postpolymerization Modification to Fluorescent Materials", 253rd ACS National Meeting, April 2-6, 2017, San Francisco, CA, talk CHED 2112, invited
- 41. Tsarevsky, N. V., "The Image of Chemistry in Newspaper and Magazine Ads", 253rd ACS National Meeting, April 2-6, 2017, San Francisco, CA, talk HIST 15
- 42. Tsarevsky, N. V., "Functional Branched Polymers: From Synthesis to Applications", Department of Chemistry, Portland State University, Portland, OR, February 10, 2017, invited seminar
- 43. Tsarevsky, N. V., Han, H., Kumar, R., Tang, H., "Hypervalent Iodine(III) Compounds in the Synthesis of Highly Branched Polymers", 72nd Southwest Regional Meeting of the ACS, November 10-13, **2016**, Galveston, TX, oral presentation 10
- 44. Tsarevsky, N. V., "Dynamic and Redox-Responsive Branched Polymers", Institute of Materials Science, University of Connecticut, Storrs, CT, October 14, 2016, invited seminar
- 45. Tsarevsky, N. V., "Asen Zlatarov (1885-1936): Bulgarian Chemist, Educator, and Writer", 252nd ACS National Meeting, August 21-25, **2016**, Philadelphia, PA, talk HIST 35
- 46. Tsarevsky, N. V., "Methodologies for the Synthesis of Highly Branched Polymers Involving Transfer and Exchange Reactions", 252nd ACS National Meeting, August 21-25, **2016**, Philadelphia, PA, talk POLY 293, invited
- 47. Tsarevsky, N. V., "Hypervalent Iodine Compounds in Polymer Synthesis", 5th Texas Soft Matter Meeting, Department of Chemistry and Biochemistry, University of Texas at Dallas, Richardson, TX, August 12, **2016**, invited talk
- 48. Tsarevsky, N. V., "Branched Polymers with Redox-Active Functional Groups: Synthesis, Properties, and Applications", Department of Chemistry and Biochemistry, California Polytechnic State University, San Luis Obispo, CA, July 15, **2016**, invited seminar
- 49. Tsarevsky, N. V., Han, H., Kumar, R., Tang, H., Vaish, A., "Hypervalent Iodine(III) Compounds in the Synthesis of Functional and Dynamic Polymers with Complex Macromolecular Architectures", 5th International Conference of Hypervalent Iodine Chemistry (ICHIC 2016), Les Diablerets, Switzerland, July 3-6, **2016**, invited newcomer lecture NC-6
- 50. Tsarevsky, N. V., Han, H., Tang, H., Wang, Z., Woodruff, S. R., "Synthesis and Applications of Redox-Responsive Highly Branched Polymers", 251st ACS National Meeting, March 13-17, **2016**, San Diego, CA, talk POLY 33
- 51. Tsarevsky, N. V., "Applications of Hypervalent Iodine(III) Compounds in the Synthesis of Functional and Dynamic Polymers", FloHet-2016 Florida Heterocyclioc and Synthetic Conference, Gainesville, FL, February 28 March 2, 2016, invited lecture
- 52. Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP): From Mechanistic Studies to Materials Synthesis", Brewer Science, Inc., Rolla, MO, January 6, **2016**, invited seminar
- 53. Tsarevsky, N. V., Han, H., "Hypervalent Iodine(III) Compounds in the Synthesis of Dynamic Polymers with Controlled Macromolecular Architectures", 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem 2015), Honolulu, Hawaii, December 15-20, 2015, talk MACR 1598
- 54. Tsarevsky, N. V., "Controlled/living Radical Polymerization Techniques in the Synthesis of Well-Defined Polymers Containing Reactive Functional Groups", 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem 2015), Honolulu, Hawaii, December 15-20, **2015**, talk MACR 1070
- 55. Tsarevsky, N. V., "The Fascinating Story of Cobalt", Department of Chemistry, Texas A&M University Kingsville, Kingsville, TX, November 18, **2015**, invited lecture at the "Periodic Table Table" meeting
- 56. Tsarevsky, N. V., "Polymers with Redox-Active Functional Groups: From Synthesis to Applications", Department of Chemistry, Texas A&M University Kingsville, Kingsville, TX, November 18, **2015**, invited seminar

- 57. Tsarevsky, N. V., "Highly Branched Functional Macromolecules", Department of Chemistry and Biochemistry, University of Minnesota Duluth, Duluth, MN, October 9, 2015, invited seminar
- 58. Tsarevsky, N. V., "Synthetic Approaches to and Uses of Highly Branched Functional Macromolecules", Department of Chemistry, University of North Carolina at Charlotte, Charlotte, NC, October 1, **2015**, invited seminar
- 59. Tsarevsky, N. V., "Highly Branched Functional Macromolecules: Synthetic Methodologies and Applications", Department of Chemistry and Biochemistry, University of Texas at Dallas, Richardson, TX, August 28, 2015, invited seminar
- 60. Tsarevsky, N. V., "Polymers with Redox-Active Functional Groups: Synthetic Methodologies, Properties, and Applications", 250th ACS National Meeting, August 16-20, **2015**, Boston, MA, talk POLY 377, part of the "Charles Overberger Award Symposium in Honor of Krzysztof Matyjaszewski", invited
- 61. Tsarevsky, N. V., "Hypervalent Iodine(III) Compounds in the Synthesis of Functional and Dynamic Macromolecules", Department of Chemistry, University of Ulsan, Ulsan, Korea, August 13, **2015**, invited seminar
- 62. Tsarevsky, N. V., Han, H., "Hypervalent Iodine(III) Compounds in the Synthesis of Functional and Dynamic Polymers with Controlled Macromolecular Architectures", 48th General Assembly and 45th World Chemistry Congress of the International Iunion of Pure and Applied Chemistry (IUPAC-2015), August 6-14, **2015**, Busan, Korea, invited talk MT01-I1-MON
- 63. Tsarevsky, N. V., "Bringing Science to the Public through Liberal Education: Why and How", Inaugural Texas Graduate Liberal Studies Symposium, Rice University, Houston, TX, June 27, 2015, keynote lecture
- 64. Tsarevsky, N. V., "The Multifaceted Applications of Hypervalent Iodine(III) Compounds in the Synthesis of Functional and Dynamic Polymers with Controlled Macromolecular Architectures", Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN, April 22, 2015, organic division invited seminar
- 65. Tsarevsky, N. V., "The Chemistry of Hypervalent Iodine and Polymer Synthesis: The Story of a Happy Union", delivered at "Macromolecular Engineering: A Symposium Honoring the Impact and 65th Birthday of Krzysztof Matyjaszewski", March 28, **2015**, Carnegie Mellon University, Pittsburgh, PA
- 66. Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP): A Powerful Tool for the Synthesis of Well-Defined Functional Polymers", Department of Chemistry and Biochemistry, Texas State University, San Marcos, TX, February 23, 2015, invited seminar
- 67. Tsarevsky, N. V., "Highly Branched Multi(functional) Macromolecules: Synthetic Approaches and Applications", University of Texas Southwestern Medical Center, Dallas, TX, February 10, 2015, invited seminar
- 68. Tsarevsky, N. V., Borguet, Y., McLeod, D., Woodruff, S., Wang, Z., "Well-Defined Polymers Containing Reactive Functional Groups: Synthesis by Controlled/Living Radical Polymerization, Postpolymerization Modifications, and Applications", 3rd US-Mexico Symposium on Advances in Polymer Science (Macromex 2014), December 3-6, 2014, Nuevo Vallarta, Mexico, lecture SPS-04 ID-20, invited
- 69. Tsarevsky, N. V., Han, H., "Applications of Hypervalent Iodine(III) Compounds in the Synthesis of Functional Polymers", 70th Southwest Regional Meeting of the ACS, November 19-22, **2014**, Forth Worth, TX, oral presentation 197
- 70. Tsarevsky, N. V., "Hypervalent Iodine Compounds in the Synthesis of Functional and Dynamic Polymers with Controlled Macromolecular Architecture", Department of Chemistry, Rutgers University, Newark, NJ, October 31, **2014**, invited seminar
- 71. Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP): How It Works and What It Can Do", Department of Chemistry, Tulane University, New Orleans, LA, October 21, **2014**, invited lecture
- 72. Tsarevsky, N. V., "Transfer and Exchange Reactions in the Synthesis of Branched Functional Macromolecules", Department of Chemistry, Tulane University, New Orleans, LA, October 20, **2014**, invited seminar
- 73. Tsarevsky, N. V., Borguet, Y. P., McLeod, D. C., Woodruff, S. R., "Low-Catalyst-Concentration Atom Transfer Radical Polymerization (ATRP) of Monomers Bearing Reactive Functional Groups and Post-Polymerization Modifications of the Produced Polymers", 248th ACS National Meeting, August 10-14, **2014**, San Francisco, CA, talk POLY 275
- 74. Tsarevsky, N. V., Han, H., Celii, B., "Hypervalent Iodine(III) Compounds in Poylmer Synthesis", 248th ACS National Meeting, August 10-14, **2014**, San Francisco, CA, talk PMSE 83, part of the "Journal of Polymer Science Award: Symposium in Honor of Brent Sumerlin", invited
- 75. Tsarevsky, N. V., "Responsive Polymers with Controlled Molecular Weight and Architecture: Synthesis and Applications", Faculty of Chemistry and Pharmacy, University of Sofia, Sofia, Bulgaria, June 13, **2014**, invited seminar, part of "Beyond Everest" project sponsored by FP7
- 76. Tsarevsky, N. V., "Synthesis of Functional Biodegradable Polymers for Controlled Drug Delivery", Chemistry and Biochemistry Society, University of Texas at Arlington, March 31, **2014**, Arlington, TX, invited lecture
- 77. Tsarevsky, N. V., "The (Un)expected Behavior of Dyes and Pigments: No Mystery, All Chemistry", Meadows Museum, Dallas, TX, March 28, 2014, invited lecture
- 78. Han, H., Celii, B., Tsarevsky, N. V., "Utilizing Exchange Reactions at Hypervalent Iodine Centers for the Preparation of Dynamic Polymers", 247th ACS National Meeting, March 16-20, **2014**, Dallas, TX, talk PMSE 393, invited
- 79. Tsarevsky, N. V., "Historical Overview of Popular Chemistry Books: From the Early Days to Mid XXth Century", 247th ACS National Meeting, March 16-20, **2014**, Dallas, TX, talk HIST 6

- 80. Tsarevsky, N. V., "Functional Branched Polymers: From Synthesis to Applications", DFW Young Investigator's Symposium (ACS DFW January Meeting), Department of Chemistry and Biochemistry, University of Texas at Arlington, January 25, **2014**, Arlington, TX, invited speaker
- 81. Tsarevsky, N. V., "Utilizing Transfer and Exchange Reactions Involving Halogen Compounds in the Synthesis of Functional Polymers", Department of Chemistry, Louisiana State University, Baton Rouge, LA, September 6, 2013, invited seminar
- 82. Tsarevsky, N. V., "Applications of Transfer and Exchange Reactions for the Synthesis of Functional Polymers with Controlled Molecular Architectures", Queensland Polymer Group Symposium, Queensland University of Technology and The University of Queensland, July 4-5, **2013**, Brisbane, Australia, invited speaker
- 83. Tsarevsky, N. V., "Synthesis of Multifunctional (Hyper)branched Polymers for Delivery and Imaging Applications", 4th International Nanomedicine Conference, July 1-3, **2013**, Sydney, Australia, invited speaker
- 84. Tsarevsky, N. V., "Transfer and Exchange Reactions in Polymer Synthesis", Department of Chemistry, University of New Hampshire, Durham, NH, April 16, **2013**, invited seminar
- 85. Tsarevsky, N. V., "Early (pre-XIXth-century) treatises describing the qualitative and quantitative analysis of mineral waters", 245th ACS National Meeting, April 7-11, **2013**, New Orleans, LA, talk HIST 7
- 86. Tsarevsky, N. V., "Functional Macromolecules with Controlled Architectures: Preparation and Uses", Department of Chemistry and Center for Drug Discovery, Design, and Delivery at Dedman College, Southern Methodist University, Dallas, TX, February 8, 2013
- 87. Tsarevsky, N. V., "Employing Transfer and Exchange Reactions in Polymer Synthesis", Department of Chemistry, Carnegie Mellon University, Pittsburgh, PA, January 17, **2013**, invited seminar
- 88. Tsarevsky, N. V., "Branched and Crosslinked Polymers with Redox-Responsive Chemical Bonds: Synthesis and Applications", Department of Chemistry, Texas Christian University, Fort Worth, TX, October 25, 2012, invited seminar
- 89. Tsarevsky, N. V., Han, H., Le, K. D., Popescu, D.-L., "Hyperbranched Polymers with Precisely Placed Functional Groups via ATRP and Conventional Radical Polymerization in the Presence of Efficient Chain Transfer Agents: Synthesis and Applications", Macro Group UK International Conference on Polymer Synthesis & UKPCF International Conference on Polymer Colloids, Warwick, UK, July 9-12, 2012, invited lecture I73
- 90. Tsarevsky, N. V., "Highly Branched Polymers: Synthesis and Applications", Department of Polymer Engineering, University of Chemical Technology and Metallurgy, Sofia, Bulgaria, June 11, **2012**, invited seminar
- 91. Tsarevsky, N. V., "Polymers with Controlled Size, Molecular Architecture, and Functionality: From Synthesis to Applications", Faculty of Chemistry and Pharmacy, University of Sofia, Sofia, Bulgaria, June 5, **2012**, invited seminar, part of "Beyond Everest" project sponsored by FP7
- 92. Tsarevsky, N. V., "Synthesis of Branched Polymers with Precisely Placed Functional Groups", 243rd ACS National Meeting, March 25-29, **2012**, San Diego, CA, talk POLY 166
- 93. Tsarevsky, N. V., "Controlling Molecular Architecture and Placement of Functional Groups in Polymer Synthesis: From Synthesis to Applications", Department of Chemistry and Biochemistry, University of Texas at Arlington, December 2, 2011, Arlington, TX, invited seminar
- 94. Han, H., Tsarevsky, N. V., "Utilizing Ligand Exchange Reactions at Hypervalent Iodine Centers for the Synthesis of Polymeric Materials", 67th Southwest Regional Meeting of the ACS, November 9-12, **2011**, Austin, TX, oral presentation 168
- 95. Tsarevsky, N. V., "ATRP Employing Very Low Amounts of Copper-Based Catalysts: Selecting the Right Conditions", 242nd ACS National Meeting, August 28 September 1, **2011**, Denver, CO, talk POLY 75
- 96. Tsarevsky, N. V., "Understanding Catalyst Performance in Atom Transfer Radical Polymerization (ATRP)", Key Centre for Polymers and Colloids, School of Chemistry, The University of Sydney, July 19, **2011**, invited lecture
- 97. Tsarevsky, N. V., "Functionalization of Polymers Using Efficient ("Click"-Type) Chemical Reactions", Centre for Advanced Macromolecular Design, Faculty of Engineering, University of New South Wales, Sydney, Australia, July 18, 2011, invited seminar
- 98. Tsarevsky, N. V., "Functional (Bio)degradable Polymers with Disulfide Groups for Drug Delivery", 2nd International Nanomedicine Conference, July 14-16, **2011**, Coogee Beach, Sydney, Australia, early career invited speaker
- 99. Popescu, D.-L., Le, K. D., Tsarevsky, N. V., "Redox-Active Polymers Containing Disulfide or Viologen Groups", Gordon Research Conference on Polymers, June 12-17, **2011**, Mount Holyoke College, South Hadley, MA, poster, conf. 1128509
- 100. Tsarevsky, N. V., "Relationship between Controlled/"Living" Radical Polymerization, Coordination and Organometallic Chemistry, Faculty of Chemistry, University of Sofia, Sofia, Bulgaria, April 11, **2011**, invited lecture
- 101. Tsarevsky, N. V., "Development of Initiation Techniques in Atom Transfer Radical Polymerization: From Mechanism to Well-Defined Functional Materials", BASF, Basel, Switzerland, November 10, **2010**, invited lecture
- 102. Tsarevsky, N. V., "Functional and Biodegradable Polymers with Controlled Architecture by Atom Transfer Radical Polymerization", Department of Chemistry, University of Fribourg, Fribourg, Switzerland, November 9, **2010**, invited lecture
- 103.Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP) as a Route to Well-Defined Functional Macromolecules", 3rd International Symposium on Organic Chemistry with Satellite Meeting on NMR in Life Sciences, Sofia, Bulgaria, October 30 November 2, **2010**, plenary lecture

- 104. Tsarevsky, N. V., "Understanding the Role of the Catalyst in Atom Transfer Radical Polymerization", BASF, Ludwigshafen, Germany, April 22, **2010**, invited lecture
- 105.Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP): A Powerful Tool for the Synthesis of Well-Defined Functional Polymers with Controlled Molecular Architectures", 12th Dresden Polymer Discussion: New Developments in Polymer Synthesis: Control of Structure and Functionality, Meissen, Germany, April 18-21, **2010**, invited lecture
- 106. Tsarevsky, N. V., "Factors Determining the ATRP Catalyst Performance and Rules for Rational Catalyst Selection", Department of Organic Chemistry, Universiteit Gent, Gent, Belgium, April 16, **2010**, invited lecture
- 107. Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP): A Powerful Tool for the Synthesis of Well-Defined Functional Polymers with Controlled Molecular Architecture", Chemistry Department, Juniata College, Huntingdon, PA, March 31, 2010, invited lecture
- 108. Tsarevsky, N. V., "Functional Polymers with Controlled Molecular Architectures by ATRP", Department of Chemistry, Washington and Lee University, Lexington, VA, September 25, 2009, invited lecture
- 109. Tsarevsky, N. V., "Mechanism of Atom Transfer Radical Polymerization (ATRP): Thermodynamic Components of the Overall Equilibrium", Institute of Polymers, Bulgarian Academy of Sciences, Sofia, Bulgaria, June 12, **2009**, invited lecture
- 110.Tsarevsky, N. V., "Synthesis of Functional Well-Defined Polymers", The Organic Chemistry Club at the Faculty of Chemistry, University of Sofia, Sofia, Bulgaria, June 2, 2009, invited lecture
- 111. Tsarevsky, N. V., Jakubowski, W., McCarthy, P., "Atom Transfer Radical Polymerization (ATRP): Synthesis of Well-Defined Functional Polymers", General Electric Global Research, Niskayuna, NY, December 8, 2008, invited talk
- 112. Tsarevsky, N. V., "Atom Transfer Radical Polymerization: Development of a "Green" Polymerization Method through Mechanistic Understanding and Synthesis of Well-Defined Functional Polymers", Department of Chemistry, The City University of New York, College of Staten Island, NY, November 10, 2008, invited lecture
- 113.Tsarevsky, N. V., Braunecker, W. A., Tang, W., Kwak, Y., Matyjaszewski, K., "Catalyst Performance in Atom Transfer Radical Polymerization: A Closer Look", 236th ACS National Meeting, August 17-21, 2008, Philadelphia, PA, talk POLY 35
- 114.Tsarevsky, N. V., "Synthesis of Well-Defined Functional Polymers by ATRP: From Mechanism to Materials", 236th ACS National Meeting, August 17-21, 2008, Philadelphia, PA, National Starch and Chemical Company Award for Outstanding Graduate Research in Polymer Chemistry, award address, talk PMSE 108
- 115.Tsarevsky, N. V., Braunecker, W. A., Matyjaszewski, K., "Understanding Solvent Effects on Thermodynamic Equilibria in Atom Transfer Radical Polymerization", 236th ACS National Meeting, August 17-21, 2008, Philadelphia, PA, poster POLY 358
- 116.Tsarevsky, N. V., McCarthy, P., Jakubowski, W., Spanswick, J., Matyjaszewski, K., "Atom Transfer Radical Polymerization (ATRP) as a Tool for the Synthesis of Well-Defined Functional Polymeric Materials", NSTI Nanotech 2008, June 1-5, **2008**, Boston, MA, oral presentation TU21.202
- 117. Tsarevsky, N. V., Jakubowski, W., McCarthy, P., "Systematic Libraries of Functional Polymers Enabled by Atom Transfer Radical Polymerization (ATRP)", NIST Combinatorial Methods Center Consortium Meeting NCMC-13: Advances in Library Fabrication, April 28-9, 2008, Gaithersburg, MD, invited lecture
- 118.Tsarevsky, N. V., Golas, P. L., Matyjaszewski, K., "ATRP and Click-Type Chemical Transformations: Towards Novel Functional Well-Defined Polymers", 235th ACS National Meeting, April 6-10, **2008**, New Orleans, LA, talk POLY 571
- 119.Tsarevsky, N. V., "Combining the Thiol-Disulfide Interchange and ATRP: Synthesis of Well-Defined (Bio)Degradable Polymers", University of Texas at Dallas, Department of Chemistry and BioNano Group, invited lecture, February 22, 2008, Dallas, TX
- 120.Tsarevsky, N. V., Jakubowski, W., McCarthy, P., "Atom Transfer Radical Polymerization (ATRP) as a Tool for the Preparation of Well-Defined Functional Polymeric Materials and Systematic Libraries", NIST, invited talk, December 21, 2007, Gaithersburg, MD
- 121. Tsarevsky, N. V., Jakubowski, W., McCarthy, P., "Novel Initiating Techniques in ATRP Enabling the Synthesis of Better-Defined Functional Polymeric Materials", PPG Corporation, Allison Park, PA, December 11, 2007, invited talk
- 122. Tsarevsky, N. V., "Combining ATRP and the Chemistry of Epoxides (and Aldehydes): Functional Polymers Made Easy", CRP Consortium Meeting, October 8-9, 2007, Carnegie Mellon University, Pittsburgh, PA
- 123. Tsarevsky, N. V., "Understanding the Role of the Catalyst in ATRP: Toward Better Polymerization Control", 234th ACS National Meeting, August 19-23, **2007**, Boston, MA, talk POLY 250
- 124.Tsarevsky, N. V., Golas, P. L., Sumerlin, B. S., Matyjaszewski, K., "Combining ATRP and Click Chemistry: A Route to Well-Defined Functional Polymeric Materials", Gordon Research Conference on Polymers (East), June 17-22, **2007**, Mount Holyoke College, South Hadley, MA, poster
- 125.Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP) as a Tool for the Synthesis of Well-Defined Polymers and Nanomaterials", South-West University Faculty of Mathematics and Natural Sciences International Scientific Conference, June 6-10, 2007, Blagoevgrad, Bulgaria, invited plenary lecture
- 126.Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP): From Mechanism to Synthesis of Well-Defined Functional Polymeric Materials", Faculty of Chemistry, University of Sofia, May 29, 2007, Sofia, Bulgaria, invited lecture

- 127. Tsarevsky, N. V., Braunecker, W. A., "Structure-Reactivity Correlations in Optimizing ATRP", CRP Consortium Meeting, April 2007, Carnegie Mellon University, Pittsburgh, PA
- 128. Tsarevsky, N. V., Matyjaszewski, K., "Acrylonitrile as a Building Block for Well-Defined Functional Copolymers Prepared by ATRP: From Synthesis to Applications", 1st Young Polymer Scientists Conference and 5th Short Course on Block Copolymer-Based Nanomaterials, March 25-29, **2007**, Santiago de Compostela, Spain, invited lecture
- 129. Tsarevsky, N. V., "Selecting the Right Catalyst for ATRP", CRP Consortium Meeting, October **2006**, Carnegie Mellon University, Pittsburgh, PA
- 130.Tsarevsky, N. V., Min, K., Matyjaszewski, K., "Synthesis of Degradable Functional Polymers with Various Molecular Architectures by Combination of ATRP and Nature-Inspired Reversible Reactions", 232nd ACS National Meeting, September 10-14, 2006, San Francisco, CA, talk POLY 557
- 131.Matyjaszewski, K., Tsarevsky, N. V., Braunecker, W. A., "Rational Selection of Catalysts for Atom Transfer Radical Polymerization (ATRP) for Various Monomers and Reaction Media", 232nd ACS National Meeting, September 10-14, **2006**, San Francisco, CA, talk INOR 2
- 132. Tsarevsky, N. V., Matyjaszewski, K., "Selection of the Catalyst in Copper-Mediated Atom Transfer Radical Polymerization: Factors Determining the Catalyst Performance in Various Reaction Media", 4th IUPAC Sponsored International Symposium on Radical Polymerization: Kinetics and Mechanism SML'06, September 3-8, **2006**, Il Ciocco (Lucca), Italy, poster P40
- 133.Tsarevsky, N. V., Min, K., Gao, H., Matyjaszewski, K., "(Bio)degradable Network, Star-Shaped, and Hyperbranched Polymers via Combination of Atom Transfer Radical Polymerization (ATRP) and the Thiol-Disulfide Interchange", 1st European Chemistry Congress, August 27-31, **2006**, Budapest, Hungary, lecture M-OC-9
- 134.Tsarevsky, N. V., Min, K., Oh, J. K., Matyjaszewski, K., "Combining ATRP and Nature-Inspired Reversible Reactions: A Strategy to Prepare Well-Defined (Bio)Degradable Functional Polymeric Materials", 41st International Symposium on Macromolecules (IUPAC): World Polymer Congress MACRO 2006, July 16-21, **2006**, Rio de Janeiro, Brazil, oral presentation
- 135.Silverstein, M. S., Shach-Caplan, M., Bianco-Peled, H., Tsarevsky, N. V., Cooper, B. M., Matyjaszewski, K., "Nanoscale Structure of SAN-PEO-SAN Triblock Copolymers Synthesized by ATRP", 41st International Symposium on Macromolecules (IUPAC): World Polymer Congress MACRO 2006, July 16-21, **2006**, Rio de Janeiro, Brazil, poster
- 136.Matyjaszewski, K., Tsarevsky, N. V., "Nanostructured Materials via New ATRP Initiating Systems", 41st International Symposium on Macromolecules (IUPAC): World Polymer Congress MACRO 2006, July 16-21, **2006**, Rio de Janeiro, Brazil, invited lecture
- 137. Tsarevsky, N. V., Matyjaszewski, K., Min, K., Jakubowski, W., "Towards "Green" Atom Transfer Radical Polymerization (ATRP): Strategies to Significantly Reduce the Amount of Copper-Based Catalyst", plenary talk, 10th Annual Green Chemistry and Engineering Conference, June 26-30, **2006**, Washington, DC (Alternative Synthesis II, 194)
- 138. Tsarevsky, N. V., Matyjaszewski, K., "Well-Defined Functional Polymeric Materials via Atom Transfer Radical Polymerization (ATRP)", invited talk, Dionex Corporation, April 13, **2006**, Sunnyvale, CA
- 139.Tsarevsky, N. V., Matyjaszewski, K., "Well-Defined Functional Polymeric Materials via Atom Transfer Radical Polymerization (ATRP)", invited talk, Golden Gate Polymer Forum, April 12, **2006**, Palo Alto, CA
- 140.Tsarevsky, N. V., Matyjaszewski, K., "Well-Defined Functional Polymers via Atom Transfer Radical Polymerization (ATRP): From Mechanism and Synthesis to Applications", invited talk, Guidant Corporation, April 12, **2006**, Santa Clara, CA
- 141. Tsarevsky, N. V., "Environmentaly Benign ATRP: Towards "Greener" Processes and Materials", CRP Consortium Meeting, April 2006, Carnegie Mellon University, Pittsburgh, PA
- 142.Tsarevsky, N. V., "Combining ATRP and Reversible Redox Reactions: A Route to Functional Biodegradable Materials", CRP Consortium Meeting, October **2005**, Carnegie Mellon University, Pittsburgh, PA
- 143.Tsarevsky, N. V., McKenzie, B., Tang, W., Matyjaszewski, K., "Tuning the Activity and Performance of the Catalyst in Atom Transfer Radical Polymerization and General Rules for Catalyst Selection", 230th ACS National Meeting, August 28 September 1, 2005, Washington, DC, talk POLY 41
- 144.Tsarevsky, N. V., Cooper, B. M., Wojtyna, O. J., Jahed, N. M., Gao, H., Matyjaszewski, K., "Halogen Exchange in Atom Transfer Radical Polymerization as a Route to Well-Defined Block Copolymers", 230th ACS National Meeting, August 28 September 1, 2005, Washington, DC, POLY 454
- 145.Tsarevsky, N. V., Sumerlin, B. S., Golas, P. L., Matyjaszewski, K., ""Click" Coupling of Azide- and Alkyne-Functionalized Well-Defined Polymers Prepared by Atom Transfer Radical Polymerization", 230th ACS National Meeting, August 28 September 1, 2005, Washington, DC, POLY 455
- 146.Tsarevsky, N. V., Matyjaszewski, K., "Rules for Selection of the Catalyst for the Direct Atom Transfer Radical Polymerization of Polar Monomers in Protic Media", USA-Japan Forum "Advances in Polymer Chemistry and Their Impacts upon Society", June 24-29, **2005**, South Lake Tahoe, CA, oral presentation
- 147. Tsarevsky, N. V., Matyjaszewski, K., "Combining ATRP and Nature-Inspired Reversible Reactions: A Route to Well-Defined Functional Degradable Polymeric Materials", Gordon Research Conference on Polymers (East), June 19-24, **2005**, Mount Holyoke College, South Hadley, MA, poster

- 148. Tsarevsky, N. V., "Conducting ATRP: Rules for Catalyst Selection", CRP Consortium Meeting, March 2005, Carnegie Mellon University, Pittsburgh, PA
- 149.Tsarevsky, N. V., Matyjaszewski, K., "Synthesis of Well-defined (Bio)degradable Polymeric Materials with Disulfide Bonds by Atom Transfer Radical Polymerization", 229th ACS National Meeting, March 13-17, 2005, San Diego, CA, talk POLY 162
- 150.Tsarevsky, N. V., Wu, W., Hudson, J. L., Kowalewski, T., Tour, J. M., Matyjaszewski, K., "Grafting of Well-defined Polymers from the Surface of Functionalized Single-Walled Carbon Nanotubes via Atom Transfer Radical Polymerization and Visualization of the Polymer-Nanotube Hybrids by Atomic Force Microscopy", 229th ACS National Meeting, March 13-17, 2005, San Diego, CA, poster POLY 250
- 151. Tsarevsky, N. V., "Atom Transfer Radical Polymerization (ATRP): From Process and Catalyst Optimization to Well-defined Materials Synthesis", Invited lecture, Universita degli Studi di Firenze, Florence, Italy, November 22, 2004
- 152. Tsarevsky, N. V., "Learning from Nature: Expanding the Utility of ATRP", CRP Consortium Meeting, October **2004**, Carnegie Mellon University, Pittsburgh, PA
- 153. Tsarevsky, N. V., Matyjaszewski, K., "Synthesis of Well-defined (Co)polymers with Ionic or Ionizable Groups by Atom Transfer Radical Polymerization", 228th ACS National Meeting, August 22-26, **2004**, Philadelphia, PA, talk POLY 193
- 154.Tsarevsky, N. V., Matyjaszewski, K., "Rational Design of the Catalyst for Atom Transfer Radical Polymerization in Aqueous Media", 228th ACS National Meeting, August 22-26, **2004**, Philadelphia, PA, talk POLY 401
- 155.Tsarevsky, N. V., Matyjaszewski, K., "Atom Transfer Radical Polymerization in Protic Media: Possibilities and Limitations", 40th International Symposium on Macromolecules (IUPAC): World Polymer Congress MACRO 2004, July 4-9, **2004**, Paris, France, poster P2.1-144
- 156. Tsarevsky, N. V., "Atom Transfer Radical Polymerization in Protic (Water-based) Solvents: Possibilities and Limitations", CRP Consortium Meeting, April **2004**, Carnegie Mellon University, Pittsburgh, PA
- 157. Tsarevsky, N. V., Dufour, B., Matyjaszewski, K., "Synthesis of Well-defined Homo- and Copolymers Containing Tetrazole Units by Combining Atom Transfer Radical Polymerization and "Click" Chemistry", 227th ACS National Meeting, March 28 April 1, 2004, Anaheim, CA, poster POLY 221
- 158. Tsarevsky, N. V., Pintauer, T., Matyjaszewski, K., "The Rate of Deactivation in Atom Transfer Radical Polymerization in Protic and Aqueous Media", 227th ACS National Meeting, March 28 April 1, 2004, Anaheim, CA, poster POLY 222
- 159.Tsarevsky, N. V., "Synthesis of Well-defined Polymeric Materials with Polar Groups by Atom Transfer Radical Polymerization. Some Applications", Pittsburgh Section of the Polymer Division of ACS Student Research Night, Awardee Lecture, January 14, 2004, Pittsburgh, PA
- 160. Tsarevsky, N. V., Wojtyna, P. J., Cooper, B. M., "Halogen Exchange in Atom Transfer Radical Polymerization", CRP Consortium Meeting, October **2003**, Carnegie Mellon University, Pittsburgh, PA
- 161.Tsarevsky, N. V., "Atom Transfer Radical Polymerization in Aqueous Systems: Possibilities and Limitations", 7th Annual Green Chemistry and Engineering Conference, Kennet G. Hancock Memorial Award awardee lecture, June 23-26, **2003**, The National Academies, Washington, D.C.
- 162. Tsarevsky, N. V., "Polyacrylonitrile-based Materials by Atom Transfer Radical Polymerization", CRP Consortium Meeting, April 2003, Carnegie Mellon University, Pittsburgh, PA
- 163.Tsarevsky, N. V., "Atom Transfer Radical Polymerization: Novel Polymeric Materials and Green Chemistry Applications", Invited lecture, South-West University, Blagoevgrad, Bulgaria, March 25, 2003
- 164.Tsarevsky, N. V., Matyjaszewski, K., "Water Soluble and Hydrophilic Polymers by Atom Transfer Radical Polymerization in Aqueous Media", Meeting of the Pittsburgh Section of the Polymer Division of ACS, January 8, 2003, Pittsburgh, PA
- 165. Tsarevsky, N., "Hydrophilic Polymers by Atom Transfer Radical Polymerization: Mechanisms and Materials", CRP Consortium Meeting, October 2002, Carnegie Mellon University, Pittsburgh, PA
- 166.Tsarevsky, N. V., Pintauer, T., Glogowski, E., Matyjaszewski, K., "Atom Transfer Radical Polymerization of 2-Hydroxyethyl Methacrylate and 2-(N,N-dimethylamino)ethyl Methacrylate in Aqueous Homogeneous Media: Synthesis and Mechanistic Studies", 224th ACS National Meeting, August 18-22, **2002**, Boston, MA, poster POLY 465
- 167. Tsarevsky, N. V., Pintauer, T., Matyjaszewski, K., "Atom transfer Radical Polymerization of Ionic Monomers in Aqueous Solution: Mechanistic Studies and Synthesis", 224th ACS National Meeting, August 18-22, **2002**, Boston, MA, poster POLY 466
- 168. Tsarevsky, N. V., Matyjaszewski, K., "Preparation of Polymers with Disulfide and Thiol Groups by Atom Transfer Radical Polymerization", 224th ACS National Meeting, August 18-22, **2002**, Boston, MA, poster POLY 467
- 169. Tsarevsky, N. V., Jia, S., Tang, C., Kowalewski, T., Matyjaszewski, K., "Synthesis of Block Copolymers of Acrylonitrile and n-Butyl Acrylate by Atom Transfer Radical Polymerization. Morphological Studies by Atomic Force Microscopy", 224th ACS National Meeting, August 18-22, **2002**, Boston, MA, poster POLY 468
- 170. Tsarevsky, N. V., Sarbu, T., Goebelt, B., Hahn, L. G., Matyjaszewski, K., "Synthesis of Block Copolymers with SAN Segments by Atom Transfer Radical Polymerization", 224th ACS National Meeting, August 18-22, **2002**, Boston, MA, poster POLY 469

- 171. Tsarevsky, N. V., Pintauer, T., Glogowski, E., Matyjaszewski, K., "Atom Transfer Radical Polymerization (ATRP) in Aqueous Homogeneous Media" 6th Annual Green Chemistry and Engineering Conference, June 24-27, **2002**, Georgetown University Center, Washington, D.C.
- 172. Tsarevsky, N., "ATRP in Aqueous Homogeneous Media: Mechanism and Materials", From Structured Fluids to Complex Nanostructures: Symposium Honoring the Career of Professor Guy C. Berry, May 3-4, **2002**, Carnegie Mellon University, Pittsburgh, PA
- 173. Tsarevsky, N. V., "ATRP in Homogeneous Aqueous Media: Mechanisms and Materials", CRP Consortium Meeting, April **2002**, Carnegie Mellon University, Pittsburgh, PA
- 174.Tsarevsky, N. V., "Water Soluble Polymers by ATRP", CRP Consortium Meeting, October **2001**, Carnegie Mellon University, Pittsburgh, PA
- 175. Tsarevsky, N. V., Kowalewski, T., "Synthesis and Morphology of Block Copolymers of Acrylonitrile and Butyl Acrylate", CRP Consortium Meeting, April 2001, Carnegie Mellon University, Pittsburgh, PA
- 176.Tsarevsky, N. V., Glogowski, E., "Controlled Radical Polymerization in Aqueous Homogeneous Systems", CRP Consortium Meeting, April **2001**, Carnegie Mellon University, Pittsburgh, PA
- 177. Tsarevsky, N. V., "Controlled Radical Polymerization in Aqueous Homogeneous Systems", ATRP Consortium Meeting, October 2000, Carnegie Mellon University, Pittsburgh, PA
- 178.Qiu, J., Tsarevsky, N. V., Matyjaszewski, K., "ATRP in Miniemulsions", Polymer/Colloid Minisymposium 2000, June 20, **2000**, Carnegie Mellon University, Mellon Institute, Pittsburgh, PA
- 179.Qiu, J., Tsarevsky, N. V., "ATRP in Miniemulsions", ATRP Consortium Meeting, April **2000**, Carnegie Mellon University, Pittsburgh, PA
- 180. Georgiev, G. S., Tsarevsky, N. V., Kamenska, E. B., Christov, L. K., "Hypervalent Iodine Iniferters", 218th ACS National Meeting, August 22-26, 1999, New Orleans, LA, poster POLY 479
- 181. Tsarevsky, N. V., Georgiev, G. S., Kamenska, E. B., Christov, L. K., "Hypervalent Iodine Iniferters", Gordon Research Conference on Polymers (East), July 4-9, **1999**, The Queen's College, Oxford, UK, conf. 1128509
- 182. Stoeva, S., Stoimenov, P., Tsarevsky, N., Slaveykova, V., Manev, S., "Studies of Pyrolysis Processes in the Determination of Selenium and Tellurium by Electrothermal Atomic Absorption Spectrometry. Influence of the Modifier Characteristics", SIAS'98, September 15-17, **1998**, Varna, Bulgaria, poster AAS-10
- 183. Stoimenov, P., Tsarevsky, N., Stoeva, S., Slaveykova, V., Lazarov, D., "Kinetic Parameters of Adsorption, Desorption and Atomization Processes in Electrothermal Atomic Absorption Spectrometry", SIAS'98, September 15-17, **1998**, Varna, Bulgaria, poster AAS-11
- 184.Tsarevsky, N., Stoimenov, P., Stoeva, S., Slaveykova, V., Manev, S., "Differential Vaporization Curves in the Study of Vaporization Processes in Electrothermal Atomic Absorption Spectrometry", SIAS'98, September 15-17, **1998**, Varna, Bulgaria, poster AAS-12
- 185.Tsarevsky, N., Petrov, P., Chuchev, K., "Quantum Chemical Studies of the Electronic Structure and Spectra of Some Compounds of Mono- and Polyvalent Iodine. Comparison with Experimental Data", SIAS'98, September 15-17, **1998**, Varna, Bulgaria, poster MOL-91
- 186. Georgiev, G. S., Kamenska, E. B., Christov, L. K., Tsarevsky, N. V., "The Iodanes, 10-I-3 Compounds, A Universal Class of Initiators for Polymerization", 1st International Conference of the Chemical Societies of the S. E. E. Countries on Chemical Sciences and Industry, June 1-4, **1998**, Halkidiki, Greece, poster PO199
- 187. Tsarevsky, N. V., Petrov, P. J., "Studies of d-Orbital Resonance in Some Compounds of Hypervalent Iodine", Session of the Young Scientists from the Faculty of Chemistry, University of Sofia, Sofia, Bulgaria, May 20, 1998,
- 188. Stoeva, S., Tsarevsky, N., Slaveykova, V., Manev, S., "Role of Some Matrix Modifiers During Pyrolysis Process in Electrothermal Atomic Absorption Spectrometry", SIAS'97, September 17-19, **1997**, Varna, Bulgaria, poster AAS-4
- 189.Tsarevsky, N., Lozanova, Ch., Manev, S., "Spectroscopic Studies of Some Azo Dyes Containing Polyvalent Iodine", SIAS'97, September 17-19, **1997**, Varna, Bulgaria, poster MOL-27
- 190. Tsarevsky, N., Stoeva, S., Lozanova, Ch., Manev, S., "Spectroscopic Studies of Copper(II) Complexes Containing Substituted Hydantoins", SIAS'97, September 17-19, **1997**, Varna, Bulgaria, poster MOL-28
- 191. Tsarevsky, N. V., Stoeva, S. I., Manev, S. G., Lazarov, D. L., Maneva, L. S., Golovinsky, E. V., "Chemistry and Biological Activity of Some Diaryliodonium Salts", Session of the Young Scientists from the Faculty of Chemistry, University of Sofia, Sofia, Bulgaria, May 22, 1997
- 192. Slaveykova, V., Tsarevsky, N., Stoeva, S., "Thermal Stabilization at Low Modifier Concentration in Electrothermal Atomic Absorption Spectrometry", SIAS'96, September 16-18, **1996**, Varna, Bulgaria, poster AAS-3

Popular science lectures, educational demonstrations, and outreach activities

- 1. "The Nobel Prize in Chemistry for 2019: Lithium Ion Batteries", 2019 Nobel Prize Panel, SMU Faculty Club, Fincher Hall, Southern Methodist University, Dallas, TX, November 20, **2019**
- 2. "The Nobel Prize in Chemistry for 2017: Cryo-Electron Microscopy", 2017 Nobel Prize Panel, SMU Faculty Club, Fincher Hall, Southern Methodist University, Dallas, TX, November 16, **2017**
- 3. "Creativity in Science and Creativity-Enabling Science", Meadows Museum, Dallas, TX, February 15, **2017**, lecture and panel discussion on "Intersections of Creativity and Interdisciplinarity"

- 4. "Colors and Chemistry", Smith Auditorium, Meadows Museum, Dallas, TX, June 13, **2015**, three 30-minute demonstrations presented as part of the "Turn Up!" event organized and co-sponsored by the Meadows Museum, Big Thought, and the Dallas Mayor's Office
- 5. "Chemistry Summer Camp", Department of Chemistry, Southern Methodist University, Dallas, TX, summer of 2010, 2012, 2013, and 2014, two-day event consisting of chemistry demonstrations for elementary, middle, and high school students