Prof. Slavka Tcholakova

Head of Laboratory of Active Formulations and Materials
Faculty of Chemistry and Pharmacy
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Academic degrees:

2004 – PhD in Physical Chemistry, Sofia University, Sofia, Bulgaria.

1996 – MSc in Chemical Physics and Theoretical Chemistry, Sofia University, Sofia, Bulgaria.

Academic career:

2013 – present: Professor, Faculty of Chemistry and Pharmacy, Sofia University

2009-2013: Associate Professor, Faculty of Chemistry, Sofia University

2006-2009: Assistant Professor, Faculty of Chemistry, Sofia University.

1997: Research Associate, Research Center Paul Pascal, CNRS, Bordeaux, France.

1996-2006: Researcher, Faculty of Chemistry, Sofia University.

Professional and administrative service:

2024 – present: Head, Laboratory of Active Formulations and Materials, Faculty of Chemistry and Pharmacy, Sofia University

2015-2024: Head, Department of Chemical and Pharmaceutical Engineering, Faculty of Chemistry and Pharmacy, Sofia University

2024-present: Project leader of project “Plant based formulations”, Center of Competence Bioresources BG

2018-2024: Project leader of project “Natural bioactive substances for personal care products, cosmetics and dietary supplements”, Centre of Competence “Sustainable utilization of bio resources and waste of medicinal and aromatic plants for innovative bioactive products”

2018-2024: Head, Laboratory of “Formation and characterization of foams, emulsions and porouse materials” in Centre of Excellence “National Centre for Mechatronics and Clean Technologies”

2016-2022: Member, Editorial Board, Colloid & Interfaces (MDPI)

2022 – present: Member, Editorial Board, Frontiers in Soft Matter

2005-present: Reviewer for numerous international journals and research funds

Research Interests:

Physical chemistry and applications of disperse systems and surfactants:

- Formation, stability and rheology of foams and emulsions
- Antifoam effect of oils and oil-solid mixtures
- Formation and stability of porous materials
- Oral drug delivery and biophysics of food digestion
- Surfactants, micellar solutions, adsorption, solubilization, detergency

Publications, patents, conferences and supervision:

- 150 scientific papers, incl. *Nature* (1), *Nature Phys.* (1), *Nature Comm.* (1), *Adv. Colloid Interface Sci.* (5), *J. Colloid Interface Sci* (10), *Langmuir* (37), *Colloids Surfaces A* (28) cited > 6300 times, *h*-index = 44 (Scopus),
- 10 patents - 6 international (WIPO, US, Europe), 1 German, 1 French, 1 Japanese, 1 Chinese
- 105 lectures and posters presented at International conferences and symposia (21 plenary or keynote)
- Supervisor and co-supervisor of 16 completed PhD Theses and 6 others under preparation
- Supervisor and co-supervisor of 50 completed MSc and BSc Theses

Teaching Courses:

- Transport Phenomena
- Chemical Kinetics and Catalysis
- Emulsifiers, Foam Stabilizers and Wetting Agents
- Formation and Stability of Disperse Systems
- Separation Processes in Disperse Systems

Awards and fellowships:

2023: Bulgarian science fund award for successfully implemented project ДКОСТ-01/12 - 2018

2018: National award “Pythagoras” for high scientific achievements in natural sciences.

2006: Sofia University Foundation "St. Kliment Ohridski" award "Best Young Scientist"

Organizer of scientific events:

2025: Formula 12 Conference, Sofia, Bulgaria
2011: Training school "Fluids and Solid Interfaces", Sofia, Bulgaria, 12-15 April 2011
2010: 8th International conference Eufoam; Bugaria

2010: Summer training school Physics of Droplets; Bulgaria

Member of the scientific committees of 3 international conferences

Professional Societies:

American Chemical Society (ACS)

Projects:

2004-present: PI of 70 projects funded by international companies, incl. Unilever, BASF, Saint Gobain, Wacker, Lubrizol, Productalysa.
2024-present: Leader of the Bulgarian team, Project 101157688 — SurfToGreen, HORIZON-JU-CBE-2023-IA-05 — Development of scalable, safe bio-based surfactants, with an improved sustainability profile, in Type of action: HORIZON JU Innovation Action
2024-present: Participation in project 101168870 — Edible Soft Matter for call: HORIZON-MSCA-2023-DN-01 — Doctoral Networks
2019-2021: Leader of the Bulgarian team, ERC project (CoolNanoDrop No 841827, in collaboration with Queen Mary University of London)
2017-2018: Leader of the Bulgarian team, ERC project (ShipShape No 766656, in collaboration with Queen Mary University of London)
2017-2024: Member of the MC of 2 COST actions CA16205 UNGAP and MP1305 "Flowing Matter"

List of publications:

Emulsions: formation, stability, rheology (theoretical models for predicting the outcome of emulsification in turbulent flow; mechanisms and factors controlling the coalescence stability of protein containing emulsions and experimental and theoretical studies about emulsion rheology; self-shaping and self-emulsifications).

1. D. Cholakova, K. Tsvetkova, V. Yordanova, K. Rusanova, N. Denkov, S. Tcholakova, Hydroxypropyl cellulose polymers as efficient emulsion stabilizers: The effect of molecular weight and overlap concentration, *Gels* **2025**, *11*, 113, doi: 10.3390/gels11020113
2. Z. Valkova, K. Rusanova, S. Tcholakova, D. Cholakova, N. Denkov, Rheology of dispersions containing non-spherical lipid particles, *Colloids Surf. A* **2025**, *710*, 136284, doi: 10.1016/j.colsurfa.2025.136284
3. I. Lesov, S. Tcholakova, Emulsification in nearly Newtonian and non-Newtonian media of wormlike micelles, *Colloids Surf. A* **2025**, *705*, 135603, doi: 10.1016/j.colsurfa.2024.135603
4. D. Cholakova, A. Biserova, S. Tcholakova, N. Denkov, Self-shaping of triglyceride and alkane drops: Similarities and differences, *Colloids Surf. A* 692 (**2024**) 134037. Doi: 10.1016/j.colsurfa.2024.134037
5. D. Cholakova, M. Pantov, S. Tcholakova, N. Denkov, Structure of rotator phases formed in C13-C21 alkanes and their mixtures: in bulk and in emulsion drops, *Cryst. Growth Des.* 24 (**2024**) 362 - 377. doi: 10.1021/acs.cgd.3c01088
6. D. Glushkova, D. Cholakova, A. Biserova, K. Tsvetkova, S. Tcholakova, N. Denkov, Drop Shape Stability vs Shape Shifting: Role of Surfactant Adsorption Layer. *Colloids Surf. A* 656 (**2023**) 130374. doi: 10.1016/j.colsurfa.2022.130374
7. D. Cholakova, D. Glushkova, M. Pantov, S. Tcholakova, N. Denkov, Triglyceride mixtures: Cold-bursting and double emulsion formation. *Colloids Surf. A* 668 (**2023**) 131439. doi: https://doi.org/10.1016/j.colsurfa.2023.131439
8. D. Cholakova, Z. Vinarov, S. Tcholakova, N. Denkov, Self-emulsification in chemical and pharmaceutical technologies. *Current Opinion in Colloid & Interface Sci.* 59 (**2022**) 101576; doi: 10.1016/j.cocis.2022.101576
9. I. Lesov, D.Glushkova, D.Cholakova, M.T.Georgiev, S.Tcholakova, S.K.Smoukov, N.Denkov Flow Reactor for Preparation of Lipid Nanoparticles via Temperature Variations *J. Ind. Eng. Chem.* 112 (**2022**) 37–45; doi: 10.1016/j.jiec.2022.03.043
10. D. Cholakova, K. Tsvetkova, S. Tcholakova, N. Denkov, Rheological Properties of Rotator and Crystalline Phases of Alkanes. *Colloids Surf. A* 634 (**2022**) 127926; doi: 10.1016/j.colsurfa.2021.127926
11. D. Cholakova, M. Lisicki, S. K. Smoukov, S. Tcholakova, E. Lin, J. Chen, G. De Canio, E. Lauga, N. D. Denkov. Rechargeable Self-Assembled Droplet Microswimmers Driven by Surface Phase Transitions, *Nature Physics* 17 (**2021**) 1050–1055; doi: 10.1038/s41567-021-01291-3.
12. D. Cholakova, D. Glushkova, S. Tcholakova, N. Denkov, Cold-Burst Method for Nanoparticle Formation with Natural Triglyceride Oils, *Langmuir* 37 (**2021**) 7875–7889; doi: 10.1021/acs.langmuir.0c02967
13. D. Cholakova, D. Glushkova, Z. Valkova, S. Tsibranska-Gyoreva, K. Tsvetkova, S. Tcholakova, N. Denkov, Rotator phases in hexadecane emulsion drops revealed by X-ray synchrotron techniques. *J. Colloid Interface Sci.* 604 (**2021**) 260-271; doi: 10.1016/j.jcis.2021.06.122
14. N. Politova-Brinkova, S. Tsibranska-Gyoreva, S. Tcholakova, N. Denkov, T. Danner, Preparation of TiO_2 Nanoparticle Aggregates and Capsules by the 'Two-Emulsion Method'. *Colloids Interfaces* **4** (**2020**) 57; doi: 10.3390/colloids4040057

15. D. Cholakova, D. Glushkova, S. Tcholakova, N. Denkov, Nanopore and Nanoparticle Formation with Lipids Undergoing Polymorphic Phase Transitions, *ASC Nano* 14 (**2020**) 8594−8604; doi: 10.1021/acsnano.0c02946

16. D. Cholakova, Zh. Valkova, S. Tcholakova, N. Denkov, B. P. Binks, Spontaneous Particle Desorption and "Gorgon" Drop Formation From Particle-Armored Oil Drops Upon Cooling. *Soft Matter* 16 (**2020**) 2480−2496; doi: 10.1039/c9sm02354b3

17. S. Tsibranska, S. Tcholakova, K. Golemanov, N. Denkov, L. Arnaudov, E. Pelan, S. Stoyanov, Origin of the extremely high elasticity of bulk emulsions, stabilized by Yucca Schidigera saponins. *Food Chem.* 316 (**2020**) 126365; doi: https://doi.org/10.1016/j.foodchem.2020.126365

18. S. Tsibranska, S. Tcholakova, K. Golemanov, N. Denkov, E. Pelan, S. Stoyanov, Role of Interfacial Elasticity for the Rheological Properties of Saponin-stabilized Emulsions. J. Colloid Interface Sci. 564 (**2020**) 264; doi: https://doi.org/10.1016/j.jcis.2019.12.108

19. D. Gazolu-Rusanova, I. Lesov, S. Tcholakova, N. Denkov, B. Ahtchi, Food Grade Nanoemulsions Preparation by Rotor-Stator Homogenization. Food Hydrocolloids 102 (**2020**) 105579; doi: 10.1016/j.foodhyd.2019.105579

20. N. Denkov, S. Tcholakova, D. Cholakova, Surface Phase Transitions in Foams and Emulsions. Curr. Opin. Colloid Interface Sci. 44 (**2019**) 32–42; doi: 10.1016/j.cocis.2019.09.005

21. D. Cholakova, N. Denkov, S. Tcholakova, Zh. Valkova, S. Smoukov. "Multilayer Formation in Self-Shaping Emulsion Droplets" *Langmuir* **2019**, *35*, 5484–5495; doi: 10.1021/acs.langmuir.8b02771.

22. I. Lesov, Z. Valkova, E. Vassileva, G. Georgiev, K. Ruseva, M. Simeonov, S. Tcholakova, N. Denkov, S. Smoukov, "Bottom-Up Synthesis of Polymeric Micro- and Nanoparticles with Regular Anisotropic Shapes". *Macromolecules* **2018**, *51*, 7456−7462; doi: 10.1021/acs.macromol.8b00529.

23. Zh. Valkova, D. Cholakova, S. Tcholakova, N. Denkov, S. K. Smoukov. "Mechanisms and Control of Self-Emulsification upon Freezing and Melting of Dispersed Alkane Drops". *Langmuir* **2017**, *33*, 12155−12170.

24. N. Politova, S. Tcholakova, S. Tsibranska, N. D. Denkov, K. Muelheims. "Coalescence Stability of Water-in-Oil drops: Effects of Drop Size and Surfactant Concentration", *Colloids Surf. A* **2017,** *531*, 32–39.

25. D. Cholakova, Zh. Valkova, S. Tcholakova, N. Denkov, S. K. Smoukov. ""Self-Shaping" of Multicomponent Drops.", *Langmuir* **2017**, *33*, 5696−5706.

26. S. Tcholakova, Z. Valkova, D. Cholakova, Z. Vinarov, I. Lesov, N. D. Denkov, K. Smoukov. "Efficient Self-Emulsification via Cooling-Heating Cycles.", *Nature Comm.*, **2017**, *8*, 15012; doi: 10.1038/ncomms15012.

27. D. Cholakova, N. Denkov, S. Tcholakova, I. Lesov, S. K. Smoukov, „Control of Drop Shape Transformations in Cooled Emulsions", *Adv. Colloid Interface Sci.* **2016,** *235*, 90–107.

28. N. Denkov, D. Cholakova, S. Tcholakova, S. Smoukov. „On the Mechanism of Drop Self-Shaping in Cooled Emulsions", *Langmuir* **2016**, *32*, 7985–7991.

29. S. Tcholakova, N. Politova, N. Denkov, "Kinetics of Drop Breakage and Drop-Drop Coalescence in Turbulent Flow" *Biomath Communications* **2016**, *3*, 1-11.

30. N. Denkov, S. Tcholakova, I. Lesov, D. Cholakova, S. Smoukov "Self-Shaping of Droplets via Formation of Intermediate Rotator Phases upon Cooling" *Nature* **2015**, *528*, 392-395.

31. S. Tcholakova, I. Lesov, K. Golemanov, N. D. Denkov, S. Judat, R. Engel, T. Danner "Efficient Emulsification of Viscous Oils at High Drop Volume Fraction" *Langmuir* **2011**, *27*, 14783–14796.

32. S. Tcholakova, I. Lesov, K. Golemanov, N. D. Denkov, S. Judat, "Drop size in concentrated emulsions, obtained by rotor-stator homogenization", *5th World Congress on Emulsions,* Lyon **2010**, Reference 1.1-50.

33. N. D. Denkov, S. Tcholakova, K. Golemanov, A. Lips, "Viscous friction in sheared concentrated emulsions and foams" *5th World Congress on Emulsions,* Lyon **2010**, Reference 1.3-69.

34. S. Tcholakova, N. D. Denkov, D. Hristova, M. Deruelle, "Emulsification and emulsion stability of silica-charged silicone oils", *5th World Congress on Emulsions,* Lyon **2010**, Reference 4.1-53.

35. S. Tcholakova, N. Denkov, A. Lips, "Comparison of solid particles, globular proteins and surfactants as emulsifiers" *Phys. Chem. Chem. Phys.* **2008**, *10*, 1608-1627.

36. K. Golemanov, S. Tcholakova, N. D. Denkov, K.P. Ananthapadmanabhan, A. Lips, "Breakup of bubbles and drops in steadily sheared foams and concentrated emulsions" *Phys. Rev. E* **2008**, *78*, 051405.

37. S. Tcholakova, N. D. Denkov, K. Golemanov, K.P. Ananthapadmanabhan, A. Lips, "Theoretical model of viscous friction inside steadily sheared foams and concentrated emulsions", *Phys. Rev. E* **2008**, *78*, 011405.

38. N. Vankova, S. Tcholakova, N.D. Denkov, I.B. Ivanov, V. Vulchev, T. Danner, "Emulsification in turbulent flow 1. Mean and maximum drop diameters in inertial and viscous regimes", *J. Colloid Interface Sci.* **2007**, *312*, 363-380.

39. N. Vankova, S. Tcholakova, N.D. Denkov, V. Vulchev, T. Danner, "Emulsification in turbulent flow 2. Breakage rate constants", *J. Colloid Interface Sci.* **2007**, *313*, 612-629.

40. S. Tcholakova, N. Vankova, N.D. Denkov, T. Danner, "Emulsification in turbulent flow 3. Daughter drop-size distribution", *J. Colloid Interface Sci.* **2007**, *310*, 570-589.

41. H. Steiner, R. Teppner, G. Brenn, N. Vankova, S. Tcholakova, N. Denkov, "Numerical simulation and experimental study of emulsification in a narrow-gap homogenizer", *Chemical Engineering Sci.* **2006**, *61*, 5841-5855.

42. S. Tcholakova, N. Vankova, N.D. Denkov, I.B. Ivanov, T. Danner, "Kinetics of drop breakup during emulsification in turbulent flow", *4th World Congress on Emulsions,* Lyon **2006**, Reference 304.

43. N.D. Denkov, S. Tcholakova, I.B. Ivanov, "Globular proteins as emulsion stabilizers - similarities and differences with surfactants and solid particles", *4th World Congress on Emulsions,* Lyon **2006**.

44. S. Tcholakova, N. D. Denkov, I. B. Ivanov, B. Campbell, "Coalescence stability of emulsions containing globular milk proteins", *Adv. Colloid Interface Sci.* **2006**, *123-126*, 259-293.

45. S. Tcholakova, N. D. Denkov, D. Sidzhakova, B. Campbell, "Effect of thermal treatment, ionic strength, and pH on the short-term and long-term coalescence stability of □-lactoglobulin emulsions", *Langmuir* **2006**, *22*, 6042-6052.

46. K. Golemanov, S. Tcholakova, P. Kralchevsky, K. P. Ananthapadmanabhan, A. Lips, "Latex-particle-stabilized emulsions of anti-Bancroft type", *Langmuir* **2006**, *22*, 4968-4977.

47. K. Golemanov, S. Tcholakova, N. D. Denkov, Th. Gurkov, "Selection of surfactants for stable paraffin-in-water dispersions, undergoing solid-liquid transition of the dispersed particles", *Langmuir* **2006**, *22,* 3560-3569.

48. S. Tcholakova, N. D. Denkov, D. Sidzhakova, I. B. Ivanov, B. Campbell, "Effects of electrolyte concentration and pH on the coalescence stability of □-lactoglobulin emulsions: Experiment and interpretation", *Langmuir* **2005**, *21*, 4842-4855.

49. P. S. Denkova, S. Tcholakova, N. D. Denkov, K. D. Danov, B. Campbell, C. Shawl, D. Kim, "Evaluation of the precision of drop-size determination in oil/water emulsions by low resolution NMR spectroscopy", *Langmuir* **2004**, 20, 11402-11413.

50. S. Tcholakova, N. D. Denkov, I. B. Ivanov, R. Marinov, "Evaluation of short-term and long-term stability of emulsions by centrifugation and NMR", *Bulg. J. Phys.* **2004**, *31*, 96-110.

51. S. Tcholakova, N. D. Denkov, I. B. Ivanov and T. Danner, "Main factors controlling the emulsification process under turbulent conditions. Experiment and data interpretation", 21st *ICTAM*, Warsaw, **2004**, Reference FM8S_11669.

52. S. Tcholakova, N. D. Denkov, T. Danner, “Role of surfactant type and concentration for the mean drop size during emulsification in turbulent flow”, *Langmuir* **2004**, *20*, 7444-7458.

53. S. Tcholakova, N. D. Denkov, D. Sidzhakova, I. B. Ivanov, B. Campbell, “Interrelation between drop size and protein adsorption at various emulsification conditions”, *Langmuir* **2003**, *19*, 5640-5649.

54. S. Tcholakova, N. D. Denkov, I. B. Ivanov, B. Campbell, “Coalescence in protein stabilized emulsions”, *Third World Congress on Emulsions,* Lyon **2002**, Reference 200.

55. N. D. Denkov, S. Tcholakova, I. B. Ivanov, B. Campbell, “Methods for evaluation of emulsion stability at a single drop level”, *Third World Congress on Emulsions,* Lyon **2002**, Reference 198.

56. S. Tcholakova, N. D. Denkov, I. B. Ivanov, B. Campbell, “Coalescence in β-lactoglobulin-stabilized emulsions: Effects of protein adsorption and drop size”, *Langmuir* **2002**, *18*, 8960-8971.

57. I. B. Ivanov, E. Basheva, Th. D. Gurkov, A. Hadjiiski, L. Arnaudov, N. Vassileva, S. Tcholakova, B. Campbell, "Stability of oil-in-water emulsions containing protein", in "*Food Colloids: Fundamentals of formulation",* eds. E. Dickinson and R. Miller, Royal Society of Chemistry, Cambridge, **2001**, pp. 73-90.

58. S. Tcholakova, N. D. Denkov, R. Borwankar, B. Campbell, "Van der Waals interaction between two truncated spheres covered by a uniform layer (deformed drops, vesicles, or bubbles)", *Langmuir* **2001**, *17*, 2357-2362.

Foams: formation, stability, rheology (experimental studies and theoretical models for predicting the foamability, stability against Ostwald ripening and foam rheology).

59. L. Delforce, S. Tcholakova, Alkyl sucrose esters vs. Brijs: How chain length and temperature impact surface and foam properties, *Journal of Molecular Liquids* **2024**, *416*, 126491, doi: 10.1016/j.molliq.2024.126491

60. I. Lesov, H. Alexandrov, B. Ivanov, J. Delavoipiere, S. Tcholakova, Role of dispersion nanostructure for bubble dissolution under pressure, *Colloids Surf. A* **2025**, *712*, 136443, doi: 10.1016/j.colsurfa.2025.136443

61. I. Lesov, G. I. Georgiev, J. Delavoipiere, S. Tcholakova, Bubbles nucleation in supersaturated emulsion drops, *Scientific Reports* **2025**, *15*, 22542, doi: 10.1038/s41598-025-06117-3

62. S. Tcholakova, B. Petkova, Bubble size and foamability: Role of surfactants and hydrodynamic conditions, *Curr. Opin. Colloid Interface Sci.* 72 (**2024**) 101824; doi: 10.1016/j.cocis.2024.101824

63. L. Delforce, S. Tcholakova, Role of temperature and urea for surface and foam properties of nonionic surfactants with dodecyl alkyl chain, *Colloids Surf. A* 691 (**2024**) 133844. Doi: 10.1016/j.colsurfa.2024.133844

64. V. Georgiev, Z. Mitrinova, N. Genchev, A. Gers-Barlag, G. Jaunky, N. Denkov, S. Tcholakova, Surface and foam properties of polyvinyl alcohol solutions, *Colloids Surf. A* 681 (**2024**) 132828. 10.1016/j.colsurfa.2023.132828

65. F. Mustan, N. Politova-Brinkova, Z. Vinarov, D. Rossetti, P. Rayment, S. Tcholakova, Interplay between bulk aggregates, surface properties and foam stability of nonionic surfactants. *Adv. Colloid Interface Sci.* 302 (**2022**) 102618; doi: 10.1016/j.cis.2022.102618

66. T.Arnaudova, Z.Mitrinova, N.Denkov, D.Growney, R.Brenda, S.Tcholakova, Foamability and Foam Stability of Oily Mixtures. *Colloids Surf. A* (**2022**) 129987; doi: 10.1016/j.colsurfa.2022.129987

67. F. Mustan, N. Politova-Brinkova, D. Rossetti, P. Rayment, S. Tcholakova, Oil soluble surfactants as efficient foam stabilizers. *Colloids Surf. A* 633 (**2022**) 27874; doi: 10.1016/j.colsurfa.2021.127874

68. B. Petkova, S. Tcholakova, N. Denkov, Foamability of Surfactant Solutions: Interplay Between Adsorption and Hydrodynamic Conditions, *Colloids Surf. A* **626** (2021) 127009; doi: 10.1016/j.colsurfa.2021.127009

69. N. Denkov, S. Tcholakova, N. Politova-Brinkova, Physicochemical Control of Foam Properties. *Curr. Opin. Colloid Interface Sci.* **50** (2020) 101376; doi: 10.1016/j.cocis.2020.08.001

70. B. Petkova, S. Tcholakova, M. Chenkova, K. Golemanov, N. Denkov, D. Thorley, S. Stoyanov, Foamability of Aqueous Solutions: Role of Surfactant Type and Concentration. Adv. Colloid Interface Sci. 276 (**2020**) 102084; doi: 10.1016/j.cis.2019.102084

71. N. Politova, S. Tcholakova, Zh. Valkova, K. Golemanov, N. D. Denkov. "Self-regulation of foam volume and bubble size during foaming via shear mixing" *Colloids Surf. A* **2018,** *539*, 18–28.

72. S. Tcholakova, F. Mustan, N. Pagureva, K. Golemanov, N. D. Denkov, E. G. Pelan, S. D. Stoyanov. "Role of surface properties for the kinetics of bubble Ostwald ripening in saponin-stabilized foams" *Colloids Surf. A* **2017,** *534*, 16–25.

73. N. Pagureva, S. Tcholakova, K. Rusanova, N. Denkov, T. Dimitrova, „Factors Affecting the Coalescence Stability of Microbubbles", *Colloids Surf. A* **2016**, *508*, 21-26.

74. Z. Mitrinova, S. Tcholakova, N. Denkov, K.P. Ananthapadmanabhan, "Role of interactions between cationic polymers and surfactants for foam properties" *Colloids Surf. A* **2016**, *489*, 378-391.

75. Z. Mitrinova, S. Tcholakova, K. Golemanov, N. Denkov, M. Vethamuthu, K.P. Ananthapadmanabhan. "Surface and Foam Properties of SLES + CAPB + Fatty Acid Mixtures: Effect of pH for C12–C16 Acids", *Colloids Surf. A* **2013**, *438*, 186-198.

76. R. Petkova, S. Tcholakova, N.D. Denkov, "Role of Polymer–Surfactant Interactions in Foams: Effects of pH and Surfactant Head Group for Cationic Polyvinylamine and Anionic Surfactants", *Colloids Surf. A* **2013**, *438*, 174-185.

77. N. Denkov, S. Tcholakova, R. Hohler, S. Cohen-Addad, "Foam Rheology", In "*Foam Engineering"*, Stevenson, P., Ed.: Marcel Dekker: New York, **2012**, Chapter 6, pp 91-120.

78. N. Politova, S. Tcholakova, K. Golemov, N.D. Denkov, M. Vethamuthu, K.P. Ananthapadmanabhan, "Effect of Cationic Polymers on Foam Rheological Properties", *Langmuir* **2012**, *28*, 1115−1126.

79. R. Petkova, S. Tcholakova, N. D. Denkov, "Foaming and foam stability for mixed polymer-surfactant solutions: Effects of surfactant type and polymer charge", *Langmuir,* **2012**, *28*, 4996−5009.

80. S. Tcholakova, Z. Mitrinova, K. Golemanov, N. D. Denkov, M. Vethamuthu, K.P. Ananthapadmanabhan, "Control of Ostwald Ripening by Using Surfactants with High Surface Modulus" *Langmuir* **2011**, *27*, 14807–14819.

81. N. D. Denkov, S. Tcholakova, K. Golemanov, T. Hu, and A. Lips, "Theoretical model of viscous friction inside steadily sheared foams and concentrated emulsions", *Amer. Inst. Physics Conference Proceedings*, **2008**, *1027*, 902-904

82. N. D. Denkov, S. Tcholakova, K. Golemanov, A. Lips, "Jamming in Sheared Foams and Emulsions, Explained by Critical Instability of the Films between Neighboring Bubbles and Drops", *Phys. Rev. Letters* **2009**, *103*, 118302.

83. N. Denkov, S. Tcholakova, K. Golemanov, K. P. Ananthpadmanabhan A. Lips, "Role of surfactant type and bubble surface mobility in foam rheology" *Soft Matter* **2009**, *7*, 3389-3408.

84. K. Golemanov, N. D. Denkov, S. Tcholakova, M. Vethamuthu, A. Lips, "Surfactant mixtures for control of bubble surface mobility in foam studies" *Langmuir* **2008**, *24*, 9956-9961.

85. N. D. Denkov, S. Tcholakova, K. Golemanov, K.P. Ananthapadmanabhan, A. Lips, "Viscous friction in foams and concentrated emulsions under steady shear", *Phys. Rev. Letters* **2008**, *100*, 138301.

86. N. D. Denkov, S. Tcholakova, K. Golemanov, V. Subramanian, A. Lips, "Foam-wall friction: Effect of air volume fraction for tangentially immobile bubble surface", *Colloid Surf. A* **2006**, *282-283*, 329-347.

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