Professor Tzvetanka Ivanova, PhD

Born: in Sofia, Bulgaria

Education:

1979 M.Sc. in Molecular biology, University of Sofia.

1992 PhD in Physical Chemistry, University of Sofia

1993-1994 - Post-doctoral grand in Laboratoire de biophysique pharmaceutique - Université d'Angers (France)

Positions:

1979 -1986 - Biologist; Bulgarian Academy of Sciences

1986 -1994 - Research fellow, Bulgarian Academy of Sciences

1994 -2005 - Assistant Professor, Department of Physical Chemistry, University of Sofia

2005 -2015 - Associate Professor, Department of Physical Chemistry, University of Sofia

2015 to present - Professor, Department of Physical Chemistry, University of Sofia

Teaching:

Physical Chemistry and Colloid Chemistry – mandatory course for bachelor and master level Biophysical Chemistry - mandatory course of the master program Medical and Pharmacological Biophysical Chemistry

Area of interest:

Biophysical Chemistry (membrane model systems; pharmaceutical applications);

Keywords: interface, monolayers, bilayers liposomes, micro- and nano- capsulation

Publications:

Over 60 scientific papers in the field of physical chemistry of interfaces and biophysical chemistry, cited more than 600 times.

Selected Publications:

A. Chanachev, S. Simeonova, P. Georgiev, K. Balashev, Tz. Ivanova, I. Panaiotov-Monolayer kinetic model of formation of gold nanoparticles by reducing agents hexadecylaniline or bovine serum albumin, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 508 (2016) 1-7.

Tz. Ivanova, K. Mircheva, K. Balashev, I. Panaiotov, F. Boury- Monolayer kinetic model of formation of β-cyclodextrin - β-carotene inclusion complex, *Colloids and Surfaces B: Biointerfaces*, 135 (2015) 542–548.

A.C. Groo, K. Mircheva, J.Bejaud, C. Ailhas, I.Panaiotov, P. Saulnier, Tz. Ivanova, F. Lagarce, - Development of 2D and 3D Mucus Models and Their Interactions with Mucus Penetrating Paclitaxel- loaded Lipid Nanocapsules, *Pharmaceutical Research,* 31 (7) (2014) 1753-1765

K. Mircheva, M. Gonnet, K. Balashev, Tz. Ivanova, F. Boury, I. Panaiotov - Properties of β-carotene and retinoic acid in mixed monolayers with dipalmitoylphosphatidylcholine (DPPC) and Solutol, *Colloids and Surfaces A: Physicochemical and Engineering Aspects,* 460 (2014) 209–218.

Tz. Ivanova, K. Mircheva, K. Balashev, I. Minkov, P. Saulnier and I. Panaiotov - Interfacial behavior of lipid nanocapsules spread on model membrane monolayers, *Coll. Polym. Sci,* 292 (6) (2014) 1307-1318.

I. Minkov, K. Mircheva, N.Grozev, Tz. Ivanova, I. Panaiotov – Properties of mixed monolayers of clinical lung surfactant, serum albumin and hydrophilic polymers, *Colloids and Surfaces B: Biointerfaces,* 101 (2013) 135-142.

K. Mircheva, Tz. Ivanova, I. Panaiotov, R. Verger - Hydrolysis of mixed monomolecular films of tricaprylin/dilauroylphosphatidylcholine by lipase and phospholipase A_2", *Colloids and Surfaces B: Biointerfaces* , 86 (2011) 71-80.

K. Mircheva, I. Minkov, Tz. Ivanova, I. Panaiotov, J.E.Proust, R. Verger-Comparative study of lipolysis by PLA_2 of DOPC substrates organized as monolayers, bilayer vesicles and nanocapsules, *Colloids and Surfaces B:Biointerfaces*, 67 (2008) 107-114.

Minkov, Tz. Ivanova, I. Panaiotov, J. Proust, P. Saulnier - Reorganisation of lipid nanocapsules at air-water interface: 1. Kinetics of surface film formation, *Colloids and Surfaces B: Biointerfaces*,45 (2005) 14-23.

P. Saulnier, F. Boury, A. Malzert, B. Heurtault, Tz. Ivanova, A. Cagna, I. Panaiotov**,** J. E. Proust - Rheological Model for the Study of Dilational Properties of Monolayers. Comportment of Dipalmitoylphosphatidylcholine (DPPC) at the Dichloromethane (DCM)/Water Interface under Ramp Type or Sinusoidal Perturbations, *Langmuir*, 17 (2001) 8104-8111.

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