

BORIS G TENCHOV

Member of the Bulgarian Academy of Sciences

EDUCATION / DEGREES

M.S. in Physics, Moscow State University, Dept of Physics, Moscow, Russia, 1970

Ph.D. in Physics, Moscow State University, Dept of Physics, Moscow, Russia, 1974

D.Sc. in Biology, Bulgarian Academy of Sciences, Sofia, Bulgaria, 1985

FIELDS OF RESEARCH

Molecular and Membrane Biophysics, Physical & Colloid Chemistry, Polymer & Protein Science, Material Sciences, Drug Delivery

PROFESSIONAL CAREER

1975-1982 Research Associate, Bulg Acad Sci, Central Lab Biophys, Sofia, Bulgaria

1982-1989 Assoc Professor, Bulg Acad Sci, Central Lab Biophys, Sofia, Bulgaria

1989-2003 Professor in Biophysics, Bulg Acad Sci, Institute of Biophysics, Sofia, Bulgaria

1995 Corresponding Member of Bulg Acad Sci

2003 Member of Bulg Acad Sci

1989-2000 Deputy-Director and Director of Institute of Biophysics, Bulg Acad Sci

1991-1996 Scientific Secretary of the Bulg Acad Sci

2000-2001 Research Associate, Ohio State University, Dept Chem, Columbus OH, USA

2002-2003 Senior Investigator, University of Chicago, Div Biol Sci, Chicago IL, USA

2003-2008 Senior Research Associate, Northwestern University, BMBCB, Evanston IL

2008-current Sci Info Analyst, American Chemical Society, CAS, Columbus OH, USA

2009-current Visiting Professor, Ohio State University, Columbus OH, USA

VISITING SCHOLAR

Dept Biomolecular Sciences, King's College London, UK

Nagoya University, Department of Engineering, Nagoya, Japan

University of Regensburg, Regensburg, Germany

University of Munster, Institute of Physical Chemistry, Germany

Institute of Biophysics and X-ray Research, Graz, Austria

University of the Basque Country, Dept Biochemistry, Bilbao, Spain

European Molecular Biology Laboratory (EMBL), Hamburg Outstation, Germany

HASYLAB, Deutsches Elektronen Synchrotron (DESY), Hamburg, Germany

TEACHING

Supervisor of 5 PhD and 12 MS theses; Lecturer at the Depts of Physics, Chemistry and Biology of the Sofia University, Bulgaria in different years

PUBLICATIONS

over 100 articles in peer-reviewed journals; 60 articles and abstracts in conference proceedings

Address:

Ohio State University

Parks Hall, 500 W 12th Ave

Columbus, OH 43210

e-mail: tenchov.1@osu.edu; tenchov@bas.bg

RECENT PUBLICATIONS

Koynova R, Tenchov B (2010)

Topics in Current Chemistry DOI: 10.1007/128_2010_67

Cationic Lipids: Molecular Structure/Transfection Activity Relationships and Interactions with Biomembranes

Ibarguren M, Alonso A, Tenchov B, Goñi F (2010)

Biochim Biophys Acta-Biomembranes 1798, 1735–1738

Quantitation of cholesterol incorporation into extruded lipid bilayers

Vladkova R, Koynova R, Teuchner K, Tenchov B (2010)

Biochim Biophys Acta-Biomembranes 1798, 1586-1592

Bilayer structural destabilization by low amounts of chlorophyll a

Koynova R, Tenchov B (2009)

Soft Matter, 5, 3187-3200

Cationic phospholipids – structure / transfection activity relationships

Koynova R, Tenchov B, Wang L, MacDonald RC (2009)

Mol Pharmaceutics 6, 951-958

Hydrophobic moiety of cationic lipids strongly modulates their transfection activity

Koynova R, Tenchov B (2009)

in Wiley Encyclopedia of Chemical Biology, John Wiley & Sons, Hoboken (2009) Vol. 2, pp 601-615; DOI: 10.1002/9780470048672.webc287

Phase Transitions of Lipids

Tenchov BG, Wang L, Koynova R, MacDonald RC (2008)

Biochim Biophys Acta-Biomembranes 1778, 2405-2412

Modulation of a membrane lipid lamellar-nonlamellar phase transition by cationic lipids: a measure for transfection efficiency

Siegel DP, Tenchov BG (2008)

Biophys J 94, 3987-3995

Influence of the lamellar phase unbinding energy on the relative stability of lamellar and inverted cubic phases.

Tenchov BG, MacDonald RC, Siegel DP (2006)

Biophys J 91, 2508-2516

Cubic phases in phosphatidylcholine-cholesterol mixtures: Cholesterol as membrane "fusogen"

Tenchov BG, Vescio EM, Sprott GD, Zeidel ML, Mathai JC (2006)

J Biol Chem 281, 10016 - 10023

Salt tolerance of archaeal extremely halophilic lipid membranes