

CURRICULUM VITAE
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Languages: English, Russian, German Citizenship: Canadian
Born in St.Petersburg, Russia on December 02, 1974.

Education

Ph.D. (*Cum Laude*¹), Mathematics and Natural Sciences (November 2000). Supervisor: **Prof. Alain Brisson**. University of Groningen, Dept. of Biophysical Chemistry, Electron Microscopy group, Groningen, the Netherlands.

B.Sc. (Honours) Biochemistry, Minor in Computer Sciences (April 1996). McMaster University, Hamilton, Ontario, Canada. One year (1994-95) was spent at the University of Leeds (Leeds, UK).

Current Positions:

From October 2006:
Group Leader at the Centro de Investigacion Cooperativa en biomateriales (CIC biomaGUNE), San Sebastian, Spain.

From February 2009:
Adjunct Professor, Department of Biochemistry and Molecular Biology, University of the Basque Country, Leioa, Biscay, Spain.

Short stays:

January 2012 – current:
Visiting professor at the Department of Biomedical Engineering, University of Toronto, Toronto, Canada, with the group of prof. J. E. Davies.

October 2011:
Visiting Professor at the Biomedical Engineering group at the Swiss Federal Institute of Technology (Zürich, Switzerland). Funded by the Travel grant MV-2011-2-48 from the Department of Education, Universities and Research of the Basque Government.

November 2010:
EMPA (Swiss Federal Laboratories for Materials Testing and Research, Dübendorf, Switzerland). A visit for conducting ToFF-SIMS experiments at the group of Beat Keller.

September 2010:

¹ Distinction *Cum Laude* is the highest awarded at the University of Groningen and requires that the Thesis is reviewed by two international referees in addition to the regular National committee.

Institute Laue-Langevin, Grenoble, France. A three-day visit for conducting neutron reflectometry experiments *Aminophospholipid asymmetry in bilayers supported on titania surfaces*. Proposal number: 8-02-560.

July 2010:

Paul Scherrer Institute, Villigen, Switzerland. A four-day visit for conducting neutron reflectometry experiments *Aminophospholipid asymmetry in bilayers supported on titania surfaces*. Proposal number: 20091187.

August 2009:

EMPA (Swiss Federal Laboratories for Materials Testing and Research, Dübendorf, Switzerland). A visit for conducting ToFF-SIMS experiments at the group of Beat Keller.

May 2009:

Institute Laue-Langevin, Grenoble, France. A four-day visit for conducting neutron reflectometry experiments *Aminophospholipid asymmetry in bilayers supported on titania surfaces*. Proposal number: 8-02-479.

Previous Appointments

January 2005 – September 2006:

Alexander von Humboldt Foundation Fellow at the Technical University of Clausthal, Clausthal-Zellerfeld, Germany. Host: Prof. Diethelm Johannsmann.

January 2002 – September 2004:

Senior Research Associate, Department of Chemical Engineering, University of Houston (Houston, TX, USA). Supervisor: Prof. P. G. Vekilov.

October 2000 – January 2002:

Postdoctoral fellow at the BioInterfaceGroup, Laboratory for Surface Science and Technology, Department of Materials, ETH Zürich (Zürich, Switzerland), with Prof. Dr. Marcus Textor.

February 2001: Visitor at the group of Prof. G. M. Whitesides, Department of Chemistry, Harvard University (Boston, MA, USA).

September 1996 – September 2000:

Ph.D. student with the Electron Microscopy group, Department of Biophysical Chemistry, University of Groningen (Groningen, the Netherlands), under the supervision of Prof. Alain Brisson.

May 1996 – September 1996:

Research assistant with Dr. F. Winnik, Department of Chemistry, McMaster University (Hamilton, Ontario, Canada).

September 1995 – April 1996:

Senior thesis student, under the supervision of Dr. A. Edwards, Department of Biochemistry, and Dr. F. Winnik, Department of Chemistry, McMaster University (Hamilton, Ontario, Canada).

November 1994 – June 1995:

Vacation project student with Dr. Andreas Holzenburg Department of Biochemistry and Molecular Biology and Department of Genetics, University of Leeds (Leeds, UK).

February 1993 – September 1994:

Research assistant with Dr. H.D.H. Stöver, Department of Chemistry, McMaster University (Hamilton, Ontario, Canada).

Funding Awarded

Travel grant MV-2011-2-48 from the Department of Education, Universities and Research of the Basque Government for the purpose of visiting the Biomedical Engineering group at the Swiss Federal Institute of Technology (Zürich, Switzerland) in October 2011. Award date: 03.08.2011. 3k

Strategic research project *BiONE* funded by the Department of Industry, tourism, and commerce of the Basque government. Program SAIOTEK. Duration: January 2011 – December 2011. Principal Investigator: Dr. E. Anitua (BTI S.L.). 30k€.

Basic Research Grant of the Spanish Ministry of Science and Innovation CTQ2009-11245: *Nanoscale view at the biocompatibility of inorganic surfaces*. Amount: 60 k€. Duration: January 2010 – December 2012.

Strategic research project *Integral approach to minimally invasive treatment – from diagnostics to implantation*. (Spanish name: TIMIN: Tratamiento integral mínimamente invasivo – del diagnóstico al implante), funded by the Department of Industry, tourism, and commerce of the Basque government. Program ETORGAI. Duration: November 2008 – December 2010. Principle investigator: Dr. Eduardo Anitua, BTI S.L. Portion awarded to my team at CIC biomaGUNE: 472 k€.

Swiss Federal Institute of Technology Internal Research Proposal PLL-g-PEG as a model protein-resistant coating: the roles of mechanical properties and of bound water. Co-investigator with professor Nicholas D. Spencer and professor Marcus Textor. ETHZ Project Number: TH-33. / 01-3. Amount: 300 kCHF. Duration: September 2001 – September 2004.

Supervision and co-supervision:

Postdoctoral Fellows

Elodie Trouche (Ph.D., Toulouse Paul Sabatier University)
Research Topic: Role of platelet rich plasmas in implant integration.
March 2010 – February 2012.

Doctoral students

Danijela Gregurec, M.Sc. (University of Zagreb, Croatia)
Liposome-surface interactions.
April 2011 – current.

Swati Gupta, M.Sc. (University of Leeds, Leeds, UK).
Research topic: *Blood-biomaterial interactions*
December 2009 – current

Ling Zhu (M.Sc., York University, York, UK).
Research Topic: *Organization of transmembrane proteins at solid-liquid interfaces*.
May 2009 – current.

Fernanda F. Rossetti. Joint with Marcus Textor (Swiss Federal Institute of Technology, Zürich, Switzerland).
Interactions of lipidic assemblies with metal oxides and brush-like polyelectrolytes.
Defended, September 2005.

Stéphanie Pasche. Joint with Marcus Textor and Nicholas Spencer (Swiss Federal Institute of Technology, Zürich, Switzerland).

Mechanisms of protein resistance of adsorbed PEG-graft co-polymers. Defended, October 2004.

June 2001 – January 2002.

Roger Michel. Joint with Marcus Textor and Nicholas Spencer (Swiss Federal Institute of Technology, Zürich, Switzerland).

Micro- and nano-chemical patterning of surfaces for biological applications. Defended, July 2002.

October 2000 – January 2002.

Masters/Diploma students:

Nicole Hain, exchange student from the Clausthal University of Technology, Clausthal-Zellerfeld, Germany.

Effect of liposome dimers on supported bilayer formation.

June 2010 – July 2011.

Sandra Camarero Espinosa. M.Sc. student at the Advanced Materials Masters program, the School of Engineering, University of the Basque Country, Bilbao, Spain.

Diffusion of phospholipids in solid-supported bilayers.

September 2009 – December 2010.

Matienea Soubelet Fagoaga. M.Sc. student with the Masters in Molecular Biology and Biomedicine (MBBM) program, the University of the Basque Country, Leioa, Spain.

Interactions between biotinylated liposomes and streptavidin 2D crystals.

February 2008 – May 2008.

Eurine Tellechea Malda. M.Sc. student with the Masters in Molecular Biology and Biomedicine (MBBM) program, the University of the Basque Country, Leioa, Spain.

Interactions between lipidic vesicles and solid surfaces.

January 2007 – May 2008.

Fernanda F. Rossetti. Joint with Marcus Textor and Nicholas Spencer (Swiss Federal Institute of Technology, Zürich, Switzerland). M.Sc. thesis *Can Atomically Flat Titanium Oxide Surfaces be Prepared by the Template Stripping Method?* Defended, May 2001.

November 2000 – April 2001.

Undergraduate/visiting/ERASMUS exchange students

Nicole Hain, ERASMUS student from the Clausthal University of Technology, Clausthal-Zellerfeld, Germany.

August 2009 – November 2009

Cornelis Luetgebaucks, B.Sc. (Honours), Biomedical Engineering, University of Applied Sciences, Münster, Germany.

Internship: *Deformation of the surface-adsorbed liposomes.*

November 2008 – August 2009.

Madeline Coxwell-Matthewman, B.Sc.(Honours), Biology.

Internship: *Lipid asymmetry in surface-supported bilayers.*

November 2008 – May 2009.

Ava Allahyar (M.Sc. student at the Chalmers technical University, Gothenburg, Sweden). CIC biomaGUNE visiting summer fellowship student.

July 2008 – August 2008.

Rik Matena ERASMUS student from the University College Utrecht, the Netherlands.

March 2008 – August 2008.

Tabrisur Rahman Khan. M.Sc. student, joint with Dr. Michelle Grandin, Swiss Federal Institute of Technology, Zürich.

Nanoscale dynamics of self-assembling systems: the effect of lipid-surface interactions on the lateral organization of lipids in the adsorbing vesicles.

October 2006 – March 2007.

Jone Muñoz Ugartemendia. CIC biomaGUNE summer fellowship student.

Diffusion of phospholipids in mica-supported lipid bilayers: influence of surface-bound cations.

July 2007 - September 2007.

Anne Simon, M. Sc., Visiting student in the group of prof. Alain Brisson. (University of Groningen, Groningen, the Netherlands). Project title: The Morphology of Mixed DPPC-DOPS Supported Phospholipid Bilayers.

October 1998 – December 1998.

Technical assistants

Marta Gallego Gonzalez, M.Sc. (Physics), University of Santiago de Compostela, Spain.

January 2008 – current.

Belén Sánchez Martínez de Ilarduya, Ph.D. (Chemistry), University of the Basque Country, Spain.

March 2011 – February 2012.

Sandra Camarero Espinosa, undergraduate research assistant.

April 2009 – August 2009.

Amaia Rebollo, Ph.D. Biotechnology, University of Navarra, Spain.

November 2008 – January 2009.

Elena Rojas Darceles.

January 2007 – February 2008.

Fernanda F. Rossetti, M.Sc. Joint with Marcus Textor (Swiss Federal Institute of Technology, Zürich, Switzerland). Research assistant.

May 2001 – July 2001.

Teaching

February – June 2010, 2011, 2012:

Lecturer and organizer, *Scientific Writing and Presentation* course, 20 academic hours. *Master Ingeniería de Materiales*, offered by *Escuela Técnica Superior de Ingeniería, Bilbao, Spain*.
Program co-ordinator: Professor José F. Cambra.

November – December 2009, 2010, 2011:

Lecturer, *Physical Chemistry of Surfaces (Fisicoquímica de superficies)* course, 6 academic hours. *Master Ingeniería de Materiales*, offered by *Escuela Técnica Superior de Ingeniería, Bilbao, Spain*.
Program co-ordinator: Professor José F. Cambra.

February – June 2009:

Lecturer and organizer, *Scientific Writing and Presentation* course, 20 academic hours.
Lecturer, Molecular Biophysics course, 12 academic hours.
Both courses are part of the *Master Ingeniería de Materiales*, offered by *Escuela Técnica Superior de Ingeniería, Bilbao, Spain*. Program co-ordinator: Professor Pedro L. Arias.

November 2007, 2008:

Lecturer, *Physical Chemistry of Surfaces (Fisicoquímica de superficies)* course, 4 academic hours
Lecturer and organizer, *Scientific Writing and Presentation* course, 20 academic hours. Both courses are part of the *Master Ingeniería de Materiales*, offered by *Escuela Técnica Superior de Ingeniería, Bilbao, Spain*. Program co-ordinator: Professor Pedro L. Arias.

April 2006 – July 2006:

Lecturer for the *Scientific Writing and Presentation* course. One academic hour per week for 8 weeks. Technical University of Clausthal (Germany).

October 2005:

Lecture *Vesicles: Examples of lipidic mesophases and their polymeric counterparts* at the European Graduate School on Microstructural Control In Free-Radical Polymerization. Two academic hours. Technical University of Clausthal (Germany).

October 2001 – January 2002:

Lecturer for the *Surface Functionalization* course, section on *Self-Assembled Monolayers and Langmuir-Blodgett films*, four academic hours. Department of Materials, ETH Zürich (Switzerland).

October 2000 – January 2002:

Teaching assistant for the *Basic Experimental Course in Material Science*, Department of Materials, ETH Zürich (Switzerland).

September 1996 – September 2000:

Practical courses on *Biological Applications of Atomic Force Microscopy*, Department of Biophysical Chemistry (Groningen, the Netherlands).

May 1998:

Lecture *AFM of Proteins, Lipids and Protein-lipid Complexes*, part of a graduate course entitled "Current Methods for the Analysis of Protein Structure". Free University of Amsterdam (Amsterdam, the Netherlands).

September 1995 - April 1996:

Teaching assistant for the *Introductory Biology and Introductory Chemistry* courses. Department of Biology and Department of Chemistry, McMaster University (Hamilton, Ontario, Canada).

Fellowships and Awards

Selected to attend the 56th Lindau Meeting of Nobel Prize Winners in Chemistry (June 2006).

Alexander von Humboldt Research Fellowship (October 2005 – September 2006).

2001 Paper of the Year award from the Journal of Structural Biology.

Ubbo Emmius Ph.D. fellowship, University of Groningen, the Netherlands (1996 – 2000).

Poster Honourable Mention award at the Keck/GCC 2002 Bioinformatics Symposium (October 2002, Rice University, Houston, TX, USA).

Conference Logo Contest winner for the Keck/GCC 2003 Annual Research Conference (October 2003, Clear Lake, Houston, TX, USA)

Society Memberships

Biophysical Society, American Physical Society (APS), Spanish Biophysical Society.

Professional Activities

Organizer of the FEBS international combined practical and lecture course on *Physical Chemistry of Biointerfaces*. July 2010, San Sebastian, Spain. Co-organizers: Ralf Richter (CIC biomaGUNE), Marisela Velez (CSIC, Institute of Catalysis, Madrid, Spain). The workshop was sponsored by the Federation of European Biochemical Societies (FEBS), Max Plank Institute for Metals Research (Stuttgart), Department of Education of the Basque Government, CIC biomaGUNE, and a constellation of industrial sponsors (Zeiss, Q-Sense, JPK, LOT Oriel, Telstar, and Resonant Probes) with a combined budget of 55 k€. The program included 15 lectures by prominent international scientists, young and established, and nine four-hour laboratory sessions that students could choose from. Counting students, tutors, and speakers, 60 people from seven countries were present at the workshop.

Session chair at the International Workshop on Mechanical and Electrical Properties of Artificial and Cellular Membranes, April 2008, Gomadingen, Germany

Platform session chair, 2005 Biophysical Society meeting, February 2005, Long Beach, CA, USA.

Focused session chair and organizer, the 2004 meeting of the American Physical Society, March 2004, Montreal, Canada.

Platform session chair, 2004 Biophysical Society meeting, February 2004, Baltimore, MD, USA

Manuscript review for Langmuir, Biochemistry, Biophysical Journal, International Journal of Molecular Sciences.

Proposal review for French National Research Agency (ANR), the National Science Foundation (NSF, USA).

Courses and Schools attended

Intensive Spanish Language Course. LaCunza Language Academy, San Sebastian, Spain. October 2006.

Intensive German Language Course. Göthe Institute, Bonn. November – December 2004.

Workshop on Single Particle Reconstruction, Visualisation, and Animation. Organised by the National Centre for Macromolecular Imaging. University of Houston, Houston, TX, USA. December 2003.

Chemical Analysis of Materials. Instructors: Prof. H. J. Mathieu and Dr. R. Houriet. Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland, November 2000.

Symmetry of Crystals. Instructors: Prof. T. Hahn and Prof. H. Wondratschek. Prague, Check Republic, August 1998.

Spectroscopy of Membrane Proteins. Organised by the Groningen Biomolecular Sciences and Biotechnology Institute. Schiermonnikoog, the Netherlands, February 1998.

Ist EMBO practical course on Scanning Probe Microscopy. Organisers: Prof. A. Engel, Dr. D. Mueller and Prof. H. Gaub. Basel, Switzerland, July 1997.

Publications

Ricardo Tejero, Peggy Roszbach, Beat Keller, Eduardo Anitua, Ilya Reviakine *Implant surfaces activated with plasma rich in growth factors: time of flight secondary ion mass spectrometry and principal component analysis study.*

Submitted.

Ling Zhu, Hartmut Stadler, Hans-Jürgen Apell, Ilya Reviakine *Supramolecular Organization of the Na⁺, K⁺-ATPase in Native Membranes.*

Submitted.

S. Gupta and I. Reviakine *Platelet Activation Profiles on TiO₂: Effect of Ca²⁺ Binding to the Surface.* *Biointerphases*, 2012. *Accepted.*

I. Reviakine, M. Gallego, D. Johannsmann, E. Tellechea *Deformation of Liposomes Adsorbing on TiO₂ Studied with Quartz Crystal Microbalance.*

J. Chem. Phys. 2012, 136, 084702 - 084705.

I. Reviakine, D. Johannsmann, R. P. Richter *Hearing what you can't see and visualizing what you hear: interpreting quartz crystal microbalance data from solvated interfaces.*

Analytical Chemistry, 2011, 83, 8838-8848. **Feature Article.**

D. Johannsmann, I. Reviakine, R. P. Richter *Dissipation in Films of Adsorbed Nanospheres Studied by QCM.*

Analytical Chemistry **81**, 8167 - 8176 (2009).

E. Tellechea, D. Johannsmann, Nicole F. Steinmetz, Ralf P. Richter, I. Reviakine *Model-independent analysis of QCM data on colloidal particle adsorption.*

Langmuir, **25**, 5177 – 5184 (2009).

D. Johannsmann, I. Reviakine, E. Rojas, M. Gallego *Effect of sample heterogeneity on the interpretation of QCM(-D) data: Comparison of*

combined QCM/AFM measurements with finite element method (FEM) modeling.

Analytical Chemistry **80**, 8891-8899 (2008).

E. Rojas, M. Gallego, I. Reviakine *Effect of sample heterogeneity on the interpretation of QCM(-D) data: impurity effects.*

Analytical Chemistry **80**, 8982-8990 (2008).

Tabrisur Rhaman Khan, H. Michelle Grandin, Alireza Mashaghi, Marcus Textor, Erik Reimhult, Ilya Reviakine *Lipid redistribution in phosphatidylserine-containing vesicles adsorbing on titania.*

Biointerphases **3**(2), FA90 - FA95 (2008).

Bucking W., Du B., Turshatov A., Konig A. M., Reviakine, I., Bode, B. Johannsmann, D., *Quartz crystal microbalance based on torsional piezoelectric resonators.*

Review of Scientific Instruments **78**, 074903 (2007).

Fernanda F. Rossetti, Marcus Textor, Ilya Reviakine *Asymmetric distribution of phosphatidyl serine in supported phospholipid bilayers on titanium dioxide.*

Langmuir **22**, 3467-3473 (2006).

Fernanda F. Rossetti, Marta Bally, Roger Michel, Marcus Textor, Ilya Reviakine *Formation and Patterning of Supported Phospholipid Bilayers on the Surface of a Medically Relevant Material.*

Langmuir **21**, 6443-6450 (2005).

Ilya Reviakine, Fernanda F. Rossetti, Alexander N. Morozov and Marcus Textor *Investigating the Properties of Supported Vesicular Layers on Titanium Dioxide by Quartz Crystal Microbalance with Dissipation (QCM-D) Measurements.*

Journal of Chemical Physics **122**, 204711 (2005).

Yasser Qutub, Ilya Reviakine, Carrie Maxwell, Javier Navarro, Ehud Landau, Peter G. Vekilov *Crystallization of transmembrane proteins in cubo: mechanisms of crystal growth and defect formation.*

J. Mol. Biol. **343**, 1243-1254 (2004).

Jost W. Lussi, Roger Michel, Ilya Reviakine, Didier Falconnet, Andreas Goessl, Gabor Csucs, Gaudenz Danuser, Jeffrey A. Hubbell, Marcus Textor *A novel generic platform for chemical patterning of surfaces.*

Prog. Surf. Sci. **76**, 55-69 (2004).

Fernanda F. Rossetti, Ilya Reviakine, Gabor Csucs, Fabiano Assi, Janos Vörös, Marcus Textor *Interactions of Poly(L-lysine)-g-poly(ethylene glycol) with Supported Phospholipid Bilayers.*

Biophys. J. **87**, 1711-1721 (2004).

Ilya Reviakine, Alexander N. Morozov, Fernanda F. Rossetti *Finite-Size Effects in Quartz Crystals in the Quartz Crystal Microbalance with Dissipation Measurement (QCM-D) System: Implications for Data Analysis.*

J. Appl. Phys. **95**(12), 7712-7716 (2004).

Ilya Reviakine, Dimitra K. Georgiou, Peter Vekilov *Capillarity Effects on the Crystallization Kinetics: Insulin.*

J. Amer. Chem. Soc. **125**(38), 11684-11693 (2003).

Olga Gliko, Ilya Reviakine and Peter Vekilov *Stable Equidistant Step Trains during Crystallization of Insulin.*

Phys. Rev. Lett. **90**, 225503 (2003).

Fernanda Rossetti, Ilya Reviakine. Marcus Textor *On the Preparation of Titanium Oxide Films by the Template-Stripping Method.*

Langmuir **19**, 10116-10123 (2003).

Natalia Govorukhina, Wilma Bergsma-Schutter, Christine Mazerès-Dubut, Serge Mazerès, Eugenia Drakopoulou, Leonid Bystrykh, Frank Oling, Anneke Mukhopadhyay, Ilya Reviakine, Josephine Lai Kee Him and Alain

Brisson. *Self-assembly of Annexin A5 on Lipid Membranes*. Annexins, Ed. J. Bondorowicz-Pikula, Landes Biosciences (Gergetown, TX), 2003.

Roger Michel, Ilya Reviakine, Duncan Sutherland, Christian Fokas, Gabor Csucs, Gaudenz Danuser, Nicholas D. Spencer and Marcus Textor *A Novel Approach to Produce Biologically Relevant Chemical Patterns at the Nanometer Scale: Selective Molecular Assembly Patterning Combined With Colloidal Lithography*.
Langmuir **18**, 8580-8586 (2002).

Marcel L. de Vocht , Ilya Reviakine, Wolf-Peter Ulrich, Wilma Bergsma-Schutter, Han A. B. Wösten, Horst Vogel, Alain Brisson, Joseph G. H. Wessels, George T. Robillard *Self-assembly of the hydrophobin SC3 proceeds via two structural intermediates*.
Protein Science, **11**(5), 1199-1205, (2002).

Roger Michel, Jost W. Lussi, Gabor Csucs, Ilya Reviakine, Gaudenz Danuser, Brigitte Ketterer, Jeffrey A. Hubbell, Marcus Textor, and Nicholas D. Spencer *Selective Molecular Assembly Patterning: a new approach to micro- and nanochemical patterning of surfaces for biological applications*.
Langmuir, **18**, 3281-3287, (2002).

Ilya Reviakine, Alain Brisson *Streptavidin 2D crystals on Supported Phospholipid Bilayers: Towards Constructing Anchored Phospholipid Bilayers*.
Langmuir **17**, 8293-8299 (2001).

Ilya Reviakine, Wilma Bergsma-Schutter, Alexander N. Morozov, Alain Brisson *Two-Dimensional Crystallization of Annexin A5 on Phospholipid Bilayers and Monolayers: A Solid- Solid Phase Transition Between Crystal Forms*.
Langmuir **17**, 1680-1686 (2001).

Ilya Reviakine, Wilma Bergsma-Schutter, Alain Brisson *Surface Topography of the p3 and p6 Annexin V Crystal Forms Determined by Atomic Force Microscopy.*

J. Struct. Biol. **131**, 234-239 (2000).

Marcel L. de Vocht, Ilya Reviakine, Han A. B. Wösten, Alain Brisson, Joseph G. H. Wessels, George T. Robillard *Structural and Functional Role of the Disulfide Bridges in the Hydrophobin SC3.*

J. Biol. Chem., **275**, 28428-28432 (2000).

Ilya Reviakine, Anne Simon, Alain Brisson *On the Effect of Ca²⁺ on the Morphology of Mixed DPPC-DOPS SPBs.*

Langmuir **16**, 1473-1477 (2000).

Ilya Reviakine, Alain Brisson *Formation of Supported Phospholipid Bilayers from Unilamellar Vesicles Investigated by Atomic Force Microscopy.*

Langmuir **16**, 1806-1815 (2000). **(Featured on issue cover)**

Alain Brisson, Wilma Bergsma-Schutter, Frank Oling, Olivier, Lambert, Ilya Reviakine *Two-dimensional crystallization of proteins on lipid monolayers at the air-water interface and transfer to an electron microscopy grid.*

J. Crystal Growth **196**, 456-470 (1999).

Ilya Reviakine, Wilma Bergsma-Schutter, Alain Brisson *Growth of Protein 2-D Crystals on Supported Planar Lipid Bilayers Imaged in situ by AFM.*

J. Struct. Biol. **121**(3), 356-361 (1998). **(Featured on issue cover)**

Ilya Reviakine, Svetla Stoylova and Andreas Holzenburg *Surfactosomes: A Novel Approach to the reconstitution and 2D crystallisation of Membrane Proteins.*

FEBS Letters **380**, 296-300 (1996). **(Featured on issue cover)**

Robert T. Shaver, Djordje Vlaovic, Ilya Reviakine, Rhonda Wittaker, Lorenzo P. Ferrari, Harald D.H. Stöver *Selective Oxidation of Poly(4-Methyl Styrene).*

J. Polymer Sci. A: Polymer Chemistry **33**, 957-965 (1995).

Invited Talks

Hydrodynamic effects in laterally heterogeneous films studied by QCM(-D). QCM-D Scientific World Tour 2011, Bensheim, Germany, September 2011.

Phosphatidyl Serine Containing Liposomes on Titania: Phase Behavior, Bilayer Formation, and Lipid Asymmetry. SFB 803 Colloquium, Institut für Organische und Biomolekulare Chemie, University of Göttingen, Germany. April 2011.

Phosphatidyl serine containing liposomes on titania: phase behaviour, bilayer formation, and lipid asymmetry. Invited talk at the E-MRS 2011 Spring Meeting, Nice, France, May 9 – 13 2011.

Atomic Force Microscopy and its applications to studying transmembrane proteins. A lecture at the SICI-Advanced Course in Structural Techniques, Bilbao, Spain. April 2011.

Phosphatidyl Serine Containing Liposomes on Titania: Phase Behavior, Bilayer Formation, and Lipid Asymmetry. Molecular and Nanoscale Physics Group School of Physics and Astronomy, University of Leeds, Leeds, UK. April 2011.

Interactions between Phosphatidyl Serine-containing Liposomes and Titanium Dioxide. NIST Centre for Neutron Research seminar, Gaithersburg, MD, USA. February 2011.

Phosphatidyl serine containing supported lipid bilayers on titania: formation and lipid asymmetry. Franco-Iberian Nanosensor Workshop (FINW), Biarritz, France, October 2010.

Phosphatidyl serine containing supported lipid bilayers on titania: formation and lipid asymmetry. Department of Physics, Ludwig-Maximilians University, Munich. September 2010.

Phosphatidyl serine containing supported lipid bilayers on titania: formation and lipid asymmetry. Swiss Federal Institute of Technology (Zurich), Laboratory of Biosensors and Bioelectronics, September 2010.

Studying heterogeneous soft films with quartz crystal microbalance: hearing what one can't see and seeing what one can't hear. Neutrons in Biology, Lund, Sweden, June 2009.

Studying heterogeneous soft films with quartz crystal microbalance: hearing what one can't see and seeing what one can't hear. Swiss Federal Institute of Technology (Zurich), Laboratory of Biosensors and Bioelectronics, May 2009.

High-resolution imaging of biological macromolecules by atomic force microscopy: a demonstration. Veeco SPM'09 Users Workshop (Spain and Portugal), Barcelona, Spain, May 2009.

Combined Atomic Force Microscopy - Quartz Microbalance Measurements for Studying Soft, Heterogeneous Films. Veeco SPM'09 Users Workshop (Spain and Portugal), Barcelona, Spain, May 2009.

Atomic Force and Quartz Crystal Microbalance studies of soft interfaces. Department of Chemistry, University College London, London, UK, December 2008.

Atomic force microscopy and quartz crystal microbalance studies of soft interfaces. Department of Chemistry, North Carolina State University, Raleigh, NC. June 2008.

Atomic force microscopy and quartz crystal microbalance studies of soft interfaces. Structural Biology and Biophysics Research Group Seminar at the School of Biological Sciences, University of Warwick, Warwick, UK. June 2008.

Liposome-surface interactions. Research seminar at the group of Prof. Sarah Keller, University of Washington Dept. of Chemistry, Seattle, Washington, USA. February 2008.

Atomic force microscopy – quartz crystal microbalance system combination for investigating biomaterial-surface interactions. Seminar at the atomic force microscopy division of Agilent Technologies, Inc., Tempe, Arizona, USA. February 2008.

The touch of AFM: Feeling Molecular Structure and Dynamics. The Veeco SPM'07 Workshop, San Sebastian, Spain. May 2007.

Interactions of phospholipid vesicles with titanium dioxide: the role of Ca^{2+} . The joint Biophysics centre, University of the Basque Country, Leioa, Spain. January 2007.

Interactions of phospholipid vesicles with titanium dioxide. Department of Biochemistry, University of Oxford, Oxford, January 2006, UK.

Crystallisation of Soluble and Transmembrane Proteins Studied by Atomic Force Microscopy in Solution. Department of Materials, Swiss Federal Institute of Technology (ETH) Zurich. August 2005, Zürich, Switzerland.

Interactions of phospholipid vesicles with titanium dioxide. Institute for Physical Chemistry, Department of Biophysical Chemistry, University of Heidelberg, June 2005, Germany.

Crystallisation of Soluble and Transmembrane Proteins Studied by Atomic Force Microscopy in Solution.

Department of Biological Sciences, University of Warwick Department of Biology, April 2005, Warwick, UK.

Formation of Supported Phospholipid Bilayers on Titanium Dioxide.

Department of Chemistry, Imperial College London, March 2005, London, UK.

Crystallisation of Soluble and Transmembrane Proteins Studied by Atomic Force Microscopy in Solution.

Institute of Physical Chemistry, Technical University Clausthal, January 2005, Clausthal-Zellerfeld, Germany.

Formation of Supported Phospholipid Bilayers on titanium Dioxide.

University of Leeds, Department of Biochemistry and Microbiology, July 2004, Leeds, UK.

Supported lipidic systems.

University of Houston, April 2004, Houston, TX, USA

Growth of Insulin Crystals Monitored by Atomic Force Microscopy.

University of Bordeaux - 1, May 2003, Bordeaux, France.

Viscoelastic Properties of Supported Vesicular Layers on Titanium Dioxide.

Swiss Federal Institute of Technology - Lausanne (EPFL), May 2003, Lausanne, Switzerland.

The "Touch" of AFM: Studying Molecular Structure and Dynamics.

The OChEGS Symposium, October 2002, University of Houston, Houston, Texas.

Tailoring adsorption of proteins, Directing attachment of cells, Studying the behaviour of vesicles on surfaces.

Department of Chemistry and Biochemistry, University of South Carolina at Columbia, April 2002, Columbia, South Carolina.

Behaviour of Phospholipid Vesicles on Various Surfaces.

Sandia National Laboratories, March 2002, Livermore, California.

Growth of Protein Two-dimensional Crystals on Supported Phospholipid Bilayers Investigated by Atomic Force Microscopy: Transition Between Crystal Forms.

Dental Material and Biomaterial Section of the Department of Oral and Dental Science, Faculty of Medicine, University of Bristol. March 2001, Bristol, UK.

Growth of Protein Two-dimensional Crystals on supported Phospholipid Bilayers Investigated by Atomic Force Microscopy.

Special Seminar at the group of Prof. G. M. Whitesides, Department of Chemistry, Harvard University. February 2001, Boston, MA.

Formation of Supported Phospholipid Bilayers (SPBs) and Growth of Protein Two-Dimensional Crystals On SPBs Investigated By Atomic Force Microscopy.

University of Washington Centre For Nanotechnology Seminar. April 2000, Seattle, Washington.

Formation of Supported Phospholipid Bilayers (SPBs) and Growth of Protein Two-Dimensional Crystals On SPBs Investigated By Atomic Force Microscopy.

University of California, Santa Barbara Department of Chemistry Seminar. April 2000, Santa Barbara, California.

Formation of Supported Phospholipid Bilayers (SPBs) and Growth of Protein Two-Dimensional Crystals On SPBs Investigated By Atomic Force Microscopy.

Carnegie Mellon University Colloids, Polymers and Surfaces Program Seminar. March 2000, Pittsburgh, PA.

Formation of Supported Phospholipid Bilayers and Growth of Protein Two-dimensional Crystals on SPBs Investigated by AFM.

Department of Materials, Swiss Federal Institute of Technology (ETH) Zurich. March 2000, Zurich, Switzerland.

Conference Presentations, Oral

(Conference presentations given by my students are listed under the heading Contributions below).

Ilya Reviakine, Ralf Richter, Nicole Hain, Marta Gallego *Unraveling the Supported Lipid Bilayer Formation Kinetics*. Neutrons in Biology 2011, Institute Laue Langevin, Grenoble, France, 19-23 October 2011.

Eduarne Tellechea, Elena Rojas, Marta Gallego, Diethelm Johannsmann, Nicole F. Steinmetz, Ralf P. Richter, I. Reviakine *Studying Surface-Adsorbed Colloidal Particles with Quartz Crystal Microbalance: Hydrodynamic Effects*. Imaginenano2011, April 2011, Bilbao, Spain.

S. Camarero, C. Lütgebauks, R. Matena, M. Gallego, I. Reviakine. *Phosphatidyl serine containing supported lipid bilayers on titania: formation and lipid asymmetry*. Swedish Neutron Scattering Society Meeting - 14th Annual Meeting Biointerfaces: From Molecular Understanding to Applications International Workshop. August 2010, Lund, Sweden.

S. Camarero, C. Lütgebauks, R. Matena, M. Gallego, I. Reviakine. *Phosphatidyl serine containing supported lipid bilayers on titania: formation and lipid asymmetry*. International Workshop on Mechanical and Electrical Properties of Artificial and Cellular Membranes, March 2010, Gomadingen, Germany.

E. Tellechea, D. Johannsmann, N. Steinmetz, R. P. Richter, I. Reviakine *Size of the Surface-Adsorbed Colloidal Particles from the Model-Independent Analysis of QCM Data*. International Frequency Control Symposium - European Frequency and Time Forum (IFTF-IFCS), April 20-24 2009, Besancon, France.

E. Tellechea, D. Johannsmann, I. Reviakine *High-Frequency Shear Rheology of Soft Colloidal Interfaces: Quartz Crystal Microbalance Studies of Surface-Adsorbed Liposomes*. 82nd ACS Colloids and Surfaces Symposium, June 2008, Raleigh, North Carolina, USA.

E. Rojas, D. Johannsmann, I. Reviakine *Effect of Sample Heterogeneity on the Interpretation of Quartz Crystal Microbalance Data*. 82nd ACS Colloids and Surfaces Symposium, June 2008, Raleigh, North Carolina, USA.

Fernanda F. Rossetti, Marta Bally, Ilya Reviakine Didier Falconnet, Roger Michel, Marcus Textor *Formation of Supported Phospholipid Bilayers on Titanium Oxide Surfaces*. 49th Annual Meeting of the Biophysical Society, February 2005, Long Beach, CA, USA.

Fernanda F. Rossetti, Ilya Reviakine, Gabor Csucs, Fabiano Assi, Janos Vörös, Marcus Textor *Interactions between poly(L-Lysine)-g-poly(Ethylene Glycol) and Supported Phospholipid Bilayers*. 48th Annual Meeting of the Biophysical Society, February 2004, Baltimore MD.

Ilya Reviakine, Dimitra K. Georgiou, Peter Vekilov *Growth of insulin crystals followed by Atomic Force Microscopy at high resolution*. The ACS annual meeting, March 2003, New Orleans, LA.

Ilya Reviakine, Fernanda Rossetti, Marcus Textor and Nicholas D. Spencer *Interactions of phospholipid vesicles with various surfaces*. Q-Sense Scientific Network Meeting, December 2001, Zürich, Switzerland.

Ilya Reviakine, Wilma Bergsma-Schutter, Alexander N. Morozov, Alain Brisson. *Solid-Solid Phase Transition Between Two Crystal Forms of Annexin V*. Short Presentation at the Conference on Self-Assembling Peptides and Proteins in Biology, Medicine, and Engineering. July 2001, Crete, Greece.

Ilya Reviakine, Wilma Bergsma-Schutter, Natalia Govorukhina, Christine Mazerés-Dubut, Alain Brisson *Growth of protein two-dimensional crystals on SPBs investigated by Atomic Force Microscopy.*

17th Annual Meeting Schweizerische Arbeitsgemeinschaft Oberflächen und Grenzflächen (SAOG). January 2001, University of Fribourg, Fribourg, Switzerland.

Ilya Reviakine, Wilma Bergsma-Schutter, Alexander N. Morozov, Alain Brisson *Growth of Protein Two-Dimensional Crystals on supported Phospholipid Bilayers Investigated by AFM.* The Annual Groningen Biomolecular Biosciences (GBB) institute symposium. September 2000, Groningen, the Netherlands.

Ilya Reviakine, Alain Brisson *Formation of Supported and Anchored Phospholipid Bilayers by Fusion of Unilamellar Vesicles: An AFM Study.* March Meeting of the American Physical Society. March 2000, Minneapolis, MN, USA.

Ilya Reviakine, Wilma Bergsma-Schutter, Natalia Govorukhina, Christine Mazerés-Dubut, Alain Brisson *Growth of Annexin V Two - Dimensional Crystals on Supported Phospholipid Bilayers: Transitions Between Crystal Forms.* March Meeting of the American Physical Society. March 2000, Minneapolis, MN, USA.

Ilya Reviakine, Wilma Bergsma-Schutter, Anne Simon, Christine Mazéres-Dubut, Natalia Govorukhina, Alain Brisson *2D Crystallisation of Annexin V on Supported Phospholipid Bilayers Investigated by AFM.* The Centennial Meeting of the American Physical Society. March 1999, Atlanta, GA, USA.

Ilya Reviakine, Wilma Bergsma-Schutter, Anne Simon, Christine Mazéres-Dubut, Natalia Govorukhina, Alain Brisson *2D Crystallisation of Annexin V on Supported Phospholipid Bilayers Investigated by AFM.* The annual Dutch Research Foundation (SON, protein section) meeting. December 1998, the Netherlands.

Ilya Reviakine, Wilma Bergsma-Schutter, Alain Brisson *Atomic Force Microscopy of Time-Dependant Processes.* 6th Dutch Symposium on Scanning Probe Microscopy. October 1998, Nijmegen, the Netherlands.

Ilya Reviakine, Wilma Bergsma-Schutter, Alain Brisson *Formation of 2 dimensional protein crystals followed by atomic force microscopy.* The annual Groningen Biomolecular Biosciences (GBB) institute symposium. September 1998, Groningen, the Netherlands.

Ilya Reviakine, Wilma Bergsma-Schutter, Alain Brisson *Atomic Force Microscopy of Time-Dependent Processes.* SXM3 - 3rd Conference on Development and Technological Applications of Scanning Probe Methods. September 1998, Basel, Switzerland

Ilya Reviakine, Wilma Bergsma-Schutter, Alain Brisson *Formation of 2 dimensional protein crystals followed by atomic force microscopy.* European Crystallographic Meeting August 1998, Praha, Czech Republic.

Ilya Reviakine, Wilma Bergsma-Schutter, Alain Brisson *Two-Dimensional Protein Crystals Formed on Supported Planar Lipid Bilayers Imaged by Atomic Force Microscopy.* The annual Dutch Research Foundation (SON, lipid section) meeting. March 1998, the Netherlands.

Ilya Reviakine *Epitaxial Growth of Protein Crystals on Modified Glass Surfaces.* Boris Monsaroff Memorial Medal Student Paper Presentation Night. January 1996, Hamilton, Ontario, Canada.

Ilya Reviakine, Brian Callen, Harald D.H. Stöver *Surface Modification of Films Composed of Poly(4-Methyl Styrene) and co-polymers.*

Polymer Colloquium Series, Department of Chemical Engineering, McMaster University, September 1994, Hamilton, Ontario, Canada.

Conference Presentations, Poster

(Conference presentations given by my students are listed under the heading Contributions below).

Ilya Reviakine, Sandra Camarero, Cornelis Lütgebauks, Marta Gallego, Hanna Wacklin *Asymmetry in titania-supported lipid bilayers analyzed by neutron reflectometry*. 5th European conference on Neutron Scattering, Prague, Czech Republic, 17-22 July 2011.

Sandra Camarero, Cornelis Lütgebauks, Rik Matena, Marta Gallego, Hanna Wacklin Ilya Reviakine *Phosphatidyl serine containing liposomes on titania: phase behaviour, bilayer formation, and lipid asymmetry*. Imaginenano2011, April 2011, Bilbao, Spain.

Sandra Camarero, Cornelis Lütgebauks, Rik Matena, Marta Gallego, Hanna Wacklin Ilya Reviakine *Phosphatidyl serine containing liposomes on titania: phase behaviour, bilayer formation, and lipid asymmetry*. 55th annual meeting of the Biophysical Society, March 2011, Baltimore, MD, USA.

Ilya Reviakine, Sandra Camarero, Cornelis Lütgebauks, Marta Gallego, Hanna Wacklin. *Asymmetry in titania-supported lipid bilayers analyzed by neutron reflectometry*. BiLL 2011, January 2011, Institut Laue-Langevin, Grenoble, France.

Sandra Camarero, Cornelis Lütgebauks, Rik Matena, Marta Gallego, Ilya Reviakine *Phase behaviour of phosphatidyl serine-containing liposomes on TiO₂*. BiLL 2011, January 2011, Institut Laue-Langevin, Grenoble, France.

S. Camarero, C. Lütgebauks, R. Matena, M. Gallego, I. Reviakine. *Phosphatidyl serine containing supported lipid bilayers on titania: formation and lipid asymmetry*. Grodon Research Conference on Biointerface Science, Les Diablerets, Switzerland, September 2010.

Tellechea E., Matena R., Johannsmann D., Reviakine I. Model-Independent analysis of QCM data on liposome adsorption: correlation between liposome size and the $\Delta\Gamma/\Delta F$ ratio. Nano South-West European Conference (NanoSWEC 2008), November 2 - 5 2008, Bordeaux, France.

Fernanda F. Rossetti, Marta Bally, Marcus Textor, Ilya Reviakine *Lipid diffusion in phosphatidyl serine containing solid supported bilayers on mica and on titania*. EMBO-ESF conference on Biological Surfaces and Interfaces, July 2007, Sant Feliu de Guixols, Spain.

Fernanda F. Rossetti, Marta Bally, Marcus Textor, Ilya Reviakine *Lipid diffusion in phosphatidyl serine containing solid supported bilayers on mica and on titania*. 51st Annual Meeting of the Biophysical Society, March 2007, Baltimore, MD, USA.

Fernanda F. Rossetti, Marta Bally, Roger Michel, Marcus Textor, Ilya Reviakine *Interactions of Phospholipid Vesicles with Titanium Dioxide*. Jülich Soft Matter Days 2005, Bonn, Germany.

Ilya Reviakine and Diethelm Johannsmann *Combined AFM/QCM measurements: Instrument design and preliminary results*. Scanning Probe Microscopy in Life Sciences workshop, October 2005, Berlin, Germany.

Ilya Reviakine, Susan M. De Paul, Alexander N. Morozov, Fernanda F. Rossetti, Janos Vörös, Marcus Textor *New interpretation of QCM-D results from studies of polyelectrolyte and vesicle adsorption on metal oxide surfaces*. Gordon Research Conference on Organic Thin Films, May 2003, Il Ciocco, Barga, Italy.

Ilya Reviakine, Fernanda Rossetti, Alexander N. Morozov *Adsorption of Vesicles to Titanium Dioxide: Effect of Vesicle Size and Lipid Composition*. AVS 49th International Symposium, November 2002, Denver, CO.

Ilya Reviakine, Peter Vekilov *Growth of Insulin Crystals Followed by Atomic Force Microscopy at High Resolution.*

Keck/GCC 2002 Bioinformatics Symposium, October 2002, Rice University, Houston, Texas.

Roger Michel, Jost Lussi, Gabor Csucs, Andreas Goessl, [Ilya Reviakine](#), Marcus Textor and Nicholas D. Spencer *Micro- and Nanochemical Patterning of Surfaces for Biological Applications.*

Symposium on Bioinformatics and Proteomics: From Sequence to Function. Biophysics Section of the Swiss Biochemical Society, December 2001, Swiss Federal Institute of Technology – Lausanne (EPFL), Lausanne, Switzerland.

Ning-Ping Huang, [Ilya Reviakine](#), Susan M. De Paul, Marcus Textor, Nicholas D. Spencer *Organisation of Multifunctional Co-polymers on Metal Oxide Surfaces for Optical Biosensing Applications.*

Symposium on Bioinformatics and Proteomics: From Sequence to Function. Biophysics Section of the Swiss Biochemical Society, December 2001, Swiss Federal Institute of Technology – Lausanne (EPFL), Lausanne, Switzerland.

Marcel L. de Vocht, [Ilya Reviakine](#), Han A. B. Wösten, Alain Brisson, Joseph G. H. Wessels, George T. Robillard. *Functional Amyloid Fibrils Formed by the SC3 Hydrophobin.*

Conference on Self-Assembling Peptides and Proteins in Biology, Medicine, and Engineering. July 2001, Crete, Greece.

Ilya Reviakine, Marcus Textor, Nicholas D. Spencer *Adsorption of Protein A on Silicon Dioxide.*

Conference on Self-Assembling Peptides and Proteins in Biology, Medicine, and Engineering. July 2001, Crete, Greece.

Ilya Reviakine, Wilma Bergsma-Schutter, Alexander N. Morozov, Alain Brisson. *Solid-Solid Phase Transition Between Two Crystal Forms of Annexin V.*

Conference on Self-Assembling Peptides and Proteins in Biology, Medicine, and Engineering. July 2001, Crete, Greece.

Ilya Reviakine, Wilma Bergsma-Schutter, Alexander N. Morozov, Alain Brisson. *Solid-Solid Phase Transition Between Two Crystal Forms of Annexin V.* The 75th Colloid and Surface Science Symposium, June 2001, Pittsburgh, PA, USA.

Ilya Reviakine, Wilma Bergsma-Schutter, Anne Simon, Christine Mazères-Dubut, Natalia Govorukhina *2D Crystallisation of Annexin V Investigated by Atomic Force Microscopy.* The annual Groningen Biomolecular Biosciences (GBB) institute symposium. September 1999, Groningen, the Netherlands.

Ilya Reviakine, Alain Brisson *Mechanism of Supported Bilayer Formation by Fusion of Unilamellar Vesicles.* The annual Groningen Biomolecular Biosciences (GBB) institute symposium. September 1999, Groningen, the Netherlands.

Ilya Reviakine, Alain Brisson *Mechanism of Supported Bilayer Formation by Fusion of Unilamellar Vesicles.* The Centennial Meeting of the American Physical Society. March 1999, Atlanta, GA, USA.

Ilya Reviakine, Alain Brisson *Mechanism of Supported Bilayer Formation by Fusion of Unilamellar Vesicles: An AFM study.* The annual Dutch Research Foundation (SON, protein section) meeting. December 1998, the Netherlands.

Ilya Reviakine, Marcel de Vocht, Wilma Bergsma-Schutter, Han A. Wosten, Joseph G.H. Wessels, G.T. Robillard, Alain Brisson *Behaviour of SC3 Hydrophobin on Hydrophilic and Hydrophobic Surfaces.* The annual Dutch Research Foundation (SON, protein section) meeting. December 1998, the Netherlands.

Ilya Reviakine, Serge Mazères, Alain Brisson *Atomic Force Microscopy of Biological Macromolecules and Their Assemblies Adsorbed on Mica*. The annual Dutch Research Foundation (SON, protein section) meeting. December 1997, the Netherlands.

Ilya Reviakine, Serge Mazères, Alain Brisson *Atomic Force Microscopy of Biological Macromolecules and Their Assemblies Adsorbed on Mica*. The annual meeting of the Dutch Society of Microscopies (NVvM). November 1997, the Netherlands.

Ilya Reviakine, Alain Brisson *Atomic Force Microscopy of Biological Macromolecules and Their Assemblies*. The annual Groningen Biomolecular Biosciences (GBB) institute symposium. September 1997, Groningen, the Netherlands.

Felix J. B. Kremer, Ilya Reviakine and Alain Brisson *Atomic Force Microscopy of Protein 2D. Arrays adsorbed on Lipid Layers: Preliminary Results*. The annual Dutch Research Foundation (SON, protein section) meeting. December 1996, the Netherlands.

Ilya Reviakine, Alla Polozova and Françoise Winnik *Interactions Between Hydrophobically Modified Poly-(N-Isopropylacrylamide) and Polymerisable Liposomes*. The 28th Canadian High Polymer Forum. August 1996, Sarnia, Ontario, Canada.

Quan Sheng, Ilya Reviakine, Ivan DeSouza, Harald D.H. Stöver *Selective Functionalisation of Poly(4-Methyl Styrene) and Co-polymers*. McMaster Institute of Polymer Production Technology meeting. August 1994, Hamilton, Ontario, Canada.

Fadi H. Asfour, Jeffrey S. Downey, Lorenzo P. Ferrari, Karen Moffat, Quan Sheng, Mei Lin Yang, Wen Hui Li, Ilya Reviakine, Dr. Harald D. H. Stöver *Polymer Chemistry*. The Harry Thode day, Department of Chemistry, McMaster University. September 1995, Hamilton, Ontario, Canada.

Contributions

Sandra Camarero, Cornelis Lütgebaucks, Danijela Gregurec, Rik Matena, Marta Gallego, Hanna Wacklin, Ilya Reviakine. *Phosphatidyl serine containing liposomes on titania: phase behaviour, bilayer formation, and lipid asymmetry*. Poster presentation at the Neutrons in Biology 2011, Institute Laue Langevin, Grenoble, France, 19-23 October 2011.

Ling Zhu, Ilya Reviakine *Towards cell membrane mimics: cholesterol-containing Supported Lipid Bilayers on TiO₂*.

Oral presentation at the Neutrons in Biology 2011, Institute Laue Langevin, Grenoble, France, 19-23 October 2011.

Ricardo Tejero, Peggy Rossbach, Beat Keller, Eduardo Anitua, Ilya Reviakine. *Blood plasma on TiO₂*. Poster presentation at the ESF EMBO symposium; Biological Surfaces and Interfaces, June 2011, Sant Feliu de Guixols, Spain.

Elodie Trouche, Ricardo Tejero, Belen Sánchez Martínez de Ilárduya, Eduardo Anitua, Ilya Reviakine. *How activation with Plasma Rich in Growth Factors influences immune response to titanium implants*. Poster presentation at the ESF EMBO symposium; Biological Surfaces and Interfaces, June 2011, Sant Feliu de Guixols, Spain.

Sandra Camarero, Cornelis Lütgebaucks, Danijela Gregurec, Rik Matena, Marta Gallego, Hanna Wacklin, Ilya Reviakine. *Phosphatidyl serine containing liposomes on titania: phase behaviour, bilayer formation, and lipid asymmetry*. Poster presentation at the ESF EMBO symposium; Biological Surfaces and Interfaces, June 2011, Sant Feliu de Guixols, Spain.

Ling Zhu, Ilya Reviakine. *Native membrane patches containing Na⁺, K⁺-ATPase studied by AFM*. Poster presentation at the Membrane Proteins: Structure and Function Conference, 6-8 April 2011, Oxford, UK.

Ling Zhu, Ilya Reviakine. *Native membrane patches containing Na⁺, K⁺-ATPase studied by AFM*. Poster presentation at the IV Spanish Portuguese Biophysical Congress, 7-10 July 2010, Zaragoza, Spain.

E. Tellechea and I. Reviakine *The effect of the bilayer bending modulus on the QCM response from surface adsorbed vesicles*. Poster presentation at the International Workshop on Mechanical and Electrical Properties of Artificial and Cellular Membranes, April 2008, Gomadingen, Germany.

E. Tellechea and I. Reviakine *The effect of the bilayer bending modulus on the extent of deformation of surface adsorbed vesicle: preliminary results*. Poster presentation at the EMBO-ESF conference on Biological Surfaces and Interfaces, July 2007, Sant Feliu de Guixols, Spain.

Y. Outub, I. Reviakine, P. G. Vekilov *Bicelle crystallization of transmembrane proteins may be driven by lipid phase transitions*. Oral presentation at the 50th Annual Meeting of the Biophysical Society, February 2006, Salt Lake City, Utah, USA.

Y. Outub, I. Reviakine, C. Maxwell, J. Navarro, E. Landau, P. G. Vekilov *Crystallization of transmembrane proteins in cubo: mechanisms of crystal growth and defect formation*. Poster presentation at the 49th Annual Meeting of the Biophysical Society, February 2005, Long Beach, CA, USA.

Y. Outub, I. Reviakine, C. Maxwell, J. Navarro, E. Landau, P. G. Vekilov *Crystallization of transmembrane proteins in cubo: mechanisms of crystal growth and defect formation*. Oral presentation at the The OChEGS Symposium, October 2004, University of Houston, Houston, TX, USA.

F. F. Rossetti, I. Reviakine, G. Csucs, F. Assi, J. Vörös, M. Textor *Immobilization and Detection of Functionalized Nanocontainers on Patterned Surfaces*. Oral presentation at the 7th World Biomaterial Congress, May 2004, Sydney, Australia.

D. K. Georgiou, I. Reviakine, O. Gliko, P. G. Vekilov *Why do protein crystals grow slowly? An AFM study of insulin crystallisation*. 2003 Annual Meeting of the American Institute of Chemical Engineers (AIChE), November 2003, San Francisco, CA, USA.

F. F. Rossetti, I. Reviakine, G. Csucs, F. Assi, J. Vörös, M. Textor *Immobilization and Detection of Functionalized Nanocontainers on (Patterned) Surfaces*. A poster presentation at the BioSurf V - Functional Polymeric Surface in Biotechnology, September 2003, Zurich, Switzerland.

D. Stamou, C. Duschl, E. Delamarche, H. Vogel and F. F. Rossetti, R. Michel, N.-P. Huang, I. Reviakine, G. Csucs, S. M. DePaul, D. Sutherland, J. Vörös, M. Textor *Self-Assembled Arrays of Attoliter Lipid Vesicles on Surfaces*. A poster presentation at the International Nano Conference – 2003 4th Annual TOP Nano21 Meeting, September 2003, St. Gallen, Switzerland.

F. F. Rossetti, I. Reviakine, S. M. DePaul, G. Csucs, F. Assi, J. Vörös, M. Textor *Interaction of Poly(L-Lysine)-g-poly(ethylene glycol) with Negatively Charged Supported Phospholipid Bilayers*. A poster presentation at the Gordon Research Conference on Organic Thin Films, May 2003, Ciocco, Italy.

F. F. Rossetti, I. Reviakine, S. M. DePaul, G. Csucs, F. Assi, J. Vörös, M. Textor *Interactions of Poly(L-Lysine)-g-poly(ethylene glycol) with Negatively Charged Supported Phospholipid Bilayers*.

An oral presentation at the Second Q-Sense Scientific Network Meeting, November 2002, Bordeaux, France.

F. F. Rossetti, I. Reviakine, G. Csucs, S. M. De Paul, J. Vörös, M. Textor, Nicholas D. Spencer *Interactions of Poly(L-Lysine)-g-poly(ethylene glycol) with negatively charged supported phospholipid bilayers.*

A poster presentation at the AVS 49th International Symposium, November 2002, Denver, CO².

F. F. Rossetti, I. Reviakine, G. Csucs, J. Vörös, F. Assi, M. Textor *Immobilization and Detection of functionalized nanocontainers on patterned surfaces.*

A poster presentation at the Third Annual TOP NANO 21 Meeting, October 2002, Berne, Switzerland

F. Assi, F. F. Rossetti, G. Csucs, I. Reviakine, M. Textor *Vesicle immobilization at surface and nano patterning: an AFM, Fluorescence Microscopy (FM) and Quartz Crystal Microbalance (QCM) study.*

A poster presentation at the ASI/NATO meeting, October 2002, Portugal.

R. Michel, J. W. Lussi, D. Falconnet, G. Csucs, I. Reviakine, J. Vörös, D. Sutherland, A. Goessl, J. A. Hubbell, G. Danuser, B. Kasemo, N. D. Spencer, M. Textor *Selective molecular assembly patterning – from micro- to nanochemical patterning of surfaces for biological applications.*

Nano-7/ecoss-21 meeting, June 2002, Malmö, Sweden

Ning-Ping Huang, Janos Vörös, Susan M. De Paul, Ilya Reviakine, Marcus Textor, Nicholas D. Spencer *Design of a Model Biosensor Interface Architecture Based On PLL-g-PEG/PEGbiotin-(Strept)Avidin,*

Society for Biomaterials Meeting, April 2002, Tampa, FL, US.

M. Textor, S. VandeVondele, N.-P. Huang, S. Tosatti, J. Lussi, R. Michel, S. M. De Paul, G. Csucs, I. Reviakine, A. Goessl, G. Danuser, J. A. Hubbell, N. D. Spencer *Molecular Assembly of Multifunctional Molecules to Design 2D and 3D Surfaces: Fabrication and Application to Biosensor Chip and Biomaterial Development*

An oral presentation at the Tissue Engineering 2002 Conference, February 2002, St. Gallen, Switzerland.

M. Textor, S.M. De Paul, J. Vörös, I. Reviakine, N.-P. Huang, R. Michel, S. Tosatti, J. Lussi, N.D. Spencer, J.A. Hubbel *Designing biosensor surfaces and interfaces based on molecular assembly techniques.*

XV Aachen Colloquium on Biomaterials, February 2002, Aachen, Germany .

R. Michel, J.W. Lussi, I. Reviakine, M. Textor, N. D. Spencer *Selective Molecular Assembly Patterning - a new approach to micro- and nanochemical patterning of surfaces for biological applications.*

And oral presentation at the AVS 48th International Symposium, October 2001, San Francisco, CA, USA.

Ning-Ping Huang, Ilya Reviakine, Susan De Paul, Marcus Textor, Nicholas D. Spencer *Organisation of Multifunctional Co-polymers on Metal Oxide Surfaces for Optical Biosensing Applications.*

A poster presentation at the AVS 48th International Symposium, October 2001, San Francisco, CA, USA³.

S. M. De Paul, J. Vörös, I. Reviakine, C. Galli, M. Collaud Coen, M. Textor, N. D. Spencer *Measuring bound water in protein-resistant coatings: a combined OWLS and QCM-D study of poly(L-lysine)-g-poly(ethylene glycol).*

A poster presentation at the AVS 48th International Symposium, October 2001, San Francisco, CA, USA.

² The poster was awarded a "2002 student poster prize" in the Biomaterials Session poster competition.

³ The poster was awarded a 2nd prize in the Biomaterials Session poster competition.

Roger Michel, J.W. Lussi, G. Csucs, A. Goessel, I. Reviakine, J.A. Hubbell, G. Danuser, M. Textor, N.D. Spencer *Selective molecular assembly patterning — a new approach to micro- and nanochemical patterning of surfaces for biological applications.*

An oral presentation at the BIOSURF IV, Spatial Organisation and Dynamics of Biomolecules and Cells at Surfaces, September 2001, Lausanne, Switzerland.

J. Vörös, S. M. De Paul, N.-P. Huang, R. Michel, I. Reviakine, M. Textor, N. D. Spencer (ETH Zürich, Switzerland); A. Abel, M. Pavlak, E. Schürmann, M. Ehrat (Zeptosens, Witterswil) *Controlled Biosensor Surfaces.*

A poster presentation at the Gordon Research Conference on Chemical Sensors and Interfacial Design, May 2001, Ciocco, Italy.

A. Brisson, I.Reviakine, Wilma Bergsma-Schutter, Natalia Govorukhina, Serge Mazères *Formation of 2D Crystals of Proteins on Solid-Supported Lipid Bilayers Followed by AFM.*

An oral presentation at the 46th AVS International Symposium, October 1999, Seattle, WA, USA.

Ilya Reviakine, Wilma Bregmsma-Schutter, Christine Mazères, Natalia Govorukhina, Serge Mazerés, Alain Brisson *Formation of 2D crystals of Proteins on Solid-Supported Lipid Bilayers Followed by AFM.*

A poster presentation at the Workshop on Biosensors utilizing Lipid Bilayer Membranes, April 1999, MPI, Mainz, Germany.

Ilya Reviakine, Wilma Bregmsma-Schutter, Alain Brisson *Growth of 2-D crystals of annexin V on solid-supported lipid bilayers followed in real time and in situ by Atomic Force Microscopy.*

An oral presentation at the Fifth European Symposium on Calcium Binding Proteins in Normal and Transformed Cells, July 1998, Nordkirchen/Muenster, Germany.

Alain Brisson, Wilma Bergsma-Schutter, Frank Oling, Olive Lambert, Ilya Reviakine *On the process of 2-D crystallization of proteins on lipid layers.*

An oral presentation at the 7th International Conferences on the Crystallisation of Biological Macromolecules (ICCBM-7), May 1998, Granada, Spain.

Alla Polozova, Ilya Reviakine and Francoise Winnik *Artificial Temperature Sensitive Cytoskeleton: Interaction of Phospholipid Liposomes With Hydrophobically Modified Poly-(N-Isopropylacrylamides).*

A poster presentation at the 1996 FASEB Summer Conference on Molecular Biophysics of Cellular Membranes. July 1996, Vermont, USA.

Attendance

The 56th Meeting of the Nobel Prize Winners in Chemistry. June 2006, Lindau, Germany. Selected to attend in a competitive process.

The Amersham Biosciences *Challenging Proteins* workshop. October 2005, Paris, France.

The Annual Meeting of the American Crystallographic Association. May 2002, San Antonio, TX, USA.

ECM II The Cell-Biomaterial Interaction. June 2001, Davos, Switzerland.

The US-Swiss Forum on NanoBiosciences. December 2000, Princeton University, Princeton, NJ, USA.

Third International Symposium on Magnetic Resonance in Cardiovascular Research. September 1997, Utrecht, the Netherlands.

The 35th IUPAC International Symposium on Macromolecules (MACROAKRON'94), Akron, OH, USA.

The Annual South-Western Ontario Undergraduate Chemistry Conference, University of Waterloo. March 1994, Waterloo, Canada.