Dr. Petra UHLMANN

born March 28th, 1963, female
Leibniz Institut für Polymerforschung Dresden e.V (IPF)., Hohe Straße 6, 01069 Dresden, Germany
Tel. (+49)-351-4658-236, Fax –1326, www.ipfdd.de, uhlmannp@ipfdd.de
Adjunct Professor/ University of Nebraska-Lincoln, Head of Department

Academic Education

1981 – 1986:	Study of Chemistry at Dresden University of Technology, Germany Diploma in chemistry, topic: "Contributions to Research into Atmospheric Corrosion Mechanisms." Thesis advisor Prof. Dr. W. Forker

Scientific qualification

1992:	PhD at Institute of Physical and Electrochemistry, TU Dresden, Germany topic: "Modification of Waterborne Polymer Dispersions by Corrosion Inhibitors", Thesis advisor Prof. Dr. G. Reinhard

Professional Career

2014 - present:	Adjunct Professor of Chemistry, University of Nebraska-Lincoln, USA
2013 – present:	Head of the department Nanostructured Materials at IPF
2005 – 2013:	Group Leader in the department Nanostructured Materials at IPF
1993 – 2005:	Project Leader at IPF Dresden
1992 - 1993	Postdoc at CNRS, Centre de Recherches sur la Physico-Chimie des Surfaces Solides, Mulhouse, France, group Dr. E. Papirer,
1986 - 1991	Research Associate at TU Dresden, Institute of Physical and Electrochemistry

Selected other professional activities, awards

2015 – present:	Member of the scientific board of Deutsche Forschungsgesellschaft für Oberflächenbehandlung e.V.(DFO), Neuss, Germany
2009 – present:	Chair of the board "Combined Surface Technology" of four German Coatings and Thin Films Associations (DFO, EFDS, Inplas, DGO)
2013	Grant for BMBF Innovation Days, Berlin
1998:	Medaille of Coatings Societies International for the best presentation and "Outstanding Technical Achievement" FATIPEC Congress, Interlaken, Switzerland
Ongoing:	since 2016 elected reviewer for AiF (GAG 5), reviewer for DFG, NSF
Ongoing:	Reviewer for more than 15 journals devoted to material science and physico-chemistry from ACS, Wiley VCH, Elsevier, Springer, RSC and others
Ongoing:	Conferences: organization/ scientific committee of 18 international and national scientific conferences since 2006, e.g. Organizing Committee member of "NDVaK" (Beschichtung, Modifizierung und Charakterisierung von Kunststoffen), annual, since 2011, 8th Workshop of Ellipsometry, Dresden 2014, Polymer Discussion, Meissen 2016, ECOF, Dresden 2017, PPS Europe/Africa Conference, Dresden 2017, PPS Conference, Boston 2018

10 Most important Publications

1. Furchner, A.; Kroning, A.; Rauch, S ; Uhlmann, P. ; Eichhorn, K.-J. ; Hinrichs, K.: Molecular Interactions and Hydration States of Ultrathin Functional Films at the Solid-Liquid Interface. Analytical Chemistry 89 (2017). - S. 3240-3244

2. Grundke, K. ; Pöschel, K. ; Synytska, A. ; Frenzel, R. ; Drechsler, A. ; Nitschke, M. ; Cordeiro, A. L. ; Uhlmann, P. ; Welzel, P. : Experimental studies of contact angle hysteresis phenomena on polymer surfaces - Toward the understanding and control of wettability for different applications. - Advances in Colloid and Interface Science 222 (2015). - S. 350-376

3. Psarra E., Foster, E., König, U., You J., Ueda, Y., Eichhorn, K.-J, Müller, M., Stamm, M., Revzin, A., Uhlmann, P., Growth factor-bearing polymer brushes - Versatile bioactive substrates influencing cell response, , Biomacromolecules 16 (2015) 3530-3542.

4. Psarra,E., König, U., Ueda, Y, Bellmann, C., Janke, A., Bittrich, E., Eichhorn, K.-J., and Uhlmann, P., Nanostructured Biointerfaces: Nanoarchitectonics of Thermoresponsive Polymer Brushes Impact Protein Adsorption and Cell Adhesion, , ACS Applied Materials & Interfaces 2015 7 (23), 12516-12529.

5. König, M. ; Kasputis, T. ; Schmidt, D. ; Rodenhausen, K. B. ; Eichhorn, K.-J. ; Pannier, A. K. ; Schubert, M. ; Stamm, M. ; Uhlmann, P. : Combined QCM-D/GE as a tool to characterize stimuli-responsive swelling of and protein adsorption on polymer brushes grafted onto 3D-nanostructures. Analytical and Bioanalytical Chemistry 406 (2014).7223-724; Erratum: 407 (2015) 1275-1276

6. Rauch, S., Eichhorn, K.-J., Kuckling, D., Stamm, M. and Uhlmann, P., Chain Extension of Stimuli-Responsive Polymer Brushes: A General Strategy to Overcome the Drawbacks of the “Grafting-To” Approach. Adv. Funct. Mater., 2013, 23, 5675–5681.

7. König, M.; Magerl, D; Philipp, M. ; Eichhorn, K.-J. ; Müller, M.; Müller-Buschbaum, P.; Stamm, M.; Uhlmann, P. : Nanocomposite coatings with stimuli-responsive catalytic activity. RSC Advances 4, 2014. 17579-17586

8. Contreras-Caceres, R., Dawson, C., Formanek, P., Fischer, D., Simon, F., Janke, A., Uhlmann, P. Stamm, M., Polymers as templates for Au and Au@Ag bimetallic nanorods: UV-vis and surface enhanced raman spectroscopy, Chemistry of Materials 25 (2013) 158-169.

9. Bittrich, E.; Burkert, S. ; Müller, M. ; Eichhorn, K.-J. ; Stamm, M. ; Uhlmann, P. : Temperature sensitive swelling of poly(N-isopropylacrylamide) brushes with low molecular weight and grafting density. - Langmuir 28 (2012). 3439-3448

10. Truman, P., Uhlmann, P., Frenzel, R., Stamm M., A stack of functional nanolayers for simultaneous emulsion separation and sensing, Advanced Materials 21 (2009) 3601-3604

Dresden, October 11, 2018