Curriculum vitae

Personal information	
Surname / First name	Ing. Markéta Ilčíková, Ph.D.
Address	Polymer Institute, Slovak Academy of Sciences Dubravska cesta 9, Bratislava Slovakia
	Marketa.ilcikova@savba.sk
Nationality	Czech
Date of birth	04th August 1985
Birthplace	Kyjov, Czech republic
Professional experiences	
Period	September 2013 – ongoing Since January 2016 parental leave
Organization	Polymer Institute, Slovak Academy of Sciences Bratislava, Slovakia
Position	Researcher
Period	February 2014 – July 2015
Organization	Centre for Advanced Materials Qatar University, Doha, Qatar
Position	Postdoctoral fellow
Education	
Period	2009 – 2013
Title of qualification awarded	Ph.D.
Principal branch	Macromolecular Chemistry
Organization providing education	Slovak Technical University Faculty of Chemical and Food Technology Bratislava, Slovakia
External education institute	Polymer Institute Slovak Academy of Sciences Bratislava, Slovakia
Period	2007 – 2009
Title of qualification awarded	Ing.
Principal branch	Polymer Engineering

Organization providing education	Tomas Bata University in Zlín, Faculty of Technology Department of Polymer Engineering
Period	2004 – 2007
Title of qualification awarded	Bc.
Principal branch	Chemistry and Materials Technology
Organization providing education	Tomas Bata University in Zlín, Faculty of Technology Department of Polymer Engineering

Training Abroad

Date	Three one-week stays (2010/2013)
Place	Aveiro, Portugal
Organisation providing training Supervisor	University of Aveiro, Department of Physics, Prof. Luis Cadillon Costa
Date	Seven short stays (2010/2013)
Place	Zlín, Czech republic
Organisation providing training Supervisor	Tomas Bata University, Centre of Polymer Materials Dr. Rober Moučka, Asoc. Prof. Natalia Kazantseva
Date	Three one-month stays (2011/2012)
Place	Mainz, Germany
Organisation providing training Supervisor	Max Planck Institute for Polymer Research, Department of Experimental Physics Dr. Kaloian Koynov

Skills

Surface modification of organic and inorganic fillers

Reversible activation-deactivation polymerization techniques

Spectroscopic methods: UV-VIS, FT-IR

Gel permeation chromatography

Preparation of polymer composites *via* solution techniques

Dielectric spectroscopy

Thermogravimetric analysis

Dynamic mechanical analysis

Differential scanning calorimetry

Participation in projects

2014/2015	NPRP 6-381-1-078, Qatar National Research Fund Preparation, characterization and application of lectin biodevices in cancer diagnostics and in discovery of cancer biomarkers Postdoctoral fellow
2012/2014	MNT-ERA-Net II Applications of polymer nanocomposites with low content of graphene in electronical devices – APGRAPHEL Member of research team
2011/2014	Centre of Excellence of the Slovak Academy of Sciences Centre of Excellence for Functionalized Multiphase Materials – FUN-MAT Member of research team
2011/2012	DAAD bilateral Slovak-German project Fluorescent labels for optimization of graphene distribution in graphene/polymer nano-composite materials with improved properties. Member of research team
2011/2014	Project of Slovak R&D Agency SRDA Living/controlled polymerizations: Optimization of polymerization process toward well defined polymers with targeted architecture and properties. Member of research team
2010/2012	Bilateral Slovak-Czech republic project Effect of conductivity on the dielectric and magnetic properties of hybrid polymer composites Member of research team
2010/2012	Bilateral Slovak-Portugal project New electric conductive polymer nanocomposites based on graphene Member of research team
2009/2012	Project of the 7th frame program of European Union Nano Optical Mechanical Systems, Registration number: 228916 Member of research team

Additional personal skills and competences	
Mother tongue	Czech
Other language	English - Independent user
	German – Basic user
	Slovak – Independent user
Driving licence	B
Computer skills	Good command of Microsoft Office package, Omnic, Origin v 7.5, Mestrec

Awards

2015	Best poster award. Materials Science and Engineering Symposium 2015. A&T Texas University at Qatar. Doha, Qatar. 17.3.2015.
2012	Best poster award. Plastko conference, , April 11-12, 2012, Zlín Czech republic.
2011	Best poster award Nanocomposites 2011 – Multiphase Polymers and Polymer Composites From Nanoscale to Macro Composites, June 7-10, 2011, Paris, France
2007	Tomas Baťa's Foundation award for best bachelor thesis

List of Publications

h-index (WOS) = 8
Sum of Times Cited without self-citations = 233

1) Bertok, T., Dosekova, E., Belicky, S., Holazova, A., Lorencova, L., Mislovicova, D., Paprckova, D., Vikartovska, A., Plicka, R., Krejci, J., Ilcikova, M., Kasak, P., Tkac, J. Mixed Zwitterion-Based Self-Assembled Monolayer Interface for Impedimetric Glycomic Analyses of Human IgG Samples in an Array Format. Langmuir (2016), 32, 7070-7078.

2) Osička, J., Ilčíková, M., Popelka, A., Filip, J., Betrok, T., Tkáč, J., Kasák, P. Simple, Reversible, and Fast Modulation in Superwettability, Gradient, and Adsorption by Counterion Exchange on Self-Assembled Monolayer. Langmuir (2016), 32, 22, 5491-5499.

3) Osička, J., Ilčíková, M., Mrlík, M., Ali S.A. Al-Maadeed, M., Šlouf, M., Tkac, J., Kasák, P. Anisotropy in CNT composite fabricated by combining directional freezing and gamma irradiation of acrylic acid. Materials and Design (2016), 97, 300-306.

4) Ilčíková, M., Danko, M., Doroshenko, M., Mrlík, M., Csomorová, K., Šlouf, M., Chorvát, D., Koynov, K., Mosnáček, J. Visualization of carbon nanotubes dispersion in composite by using confocal laser scanning microscopy. European Polymer Journal (2016), 79, 187-197.

5) Mrlik, M., Ilcikova., M., Plachy, T., Pavlinek, V., Spitalsky, Z., Mosnacek, J. Graphene oxide reduction during surface-initiated atom transfer radical polymerization of glycidyl methacrylate: Controlling electro-responsive propertie. Chemical Engineering Journal (2016), 283, 717-720.

6) Ilcikova, M., Mrlik, M., Spitalsky, Z., Micusik, M., Csomorova, K., Sasinkova, V., Kleinova, A., Mosnacek, J. A tertiary amine in two competitive processes: reduction of graphene oxide vs. catalysis of atom transfer radical polymerization. RSC Advances (2015), 5, 5, 3370-3376.

7) Cvek, M.; Mrlik, M.; Ilcikova, M., Plachy, T.; Sedlacik, M.; Mosnacek, J., Pavlinek, V. A facile controllable coating of carbonyl iron particles with poly(glycidyl methacrylate): a tool for adjusting MR response and stability properties. Journal of Materials Chemistry C (2015), 3, 18, 4646-4656.

8) Cvek, M., Mrlik, M., Ilcikova, M., Mosnacek, J., Babayan, V., Kucekova, Z., Humpolicek, P., Pavlinek, V. The chemical stability and cytotoxicity of carbonyl iron particles grafted with poly(glycidyl methacrylate) and the magnetorheological activity of their suspensions. RSC Advances (2015), 5, 89, 72816-72824.

9) Ilcikova, M., Mrlik, M., Sedlacek, T., Doroshenko, M., Koynov, K., Danko, M., Mosnacek, J. Tailoring of viscoelastic properties and light-induced actuation performance of triblock copolymer composites through surface modification of carbon nanotubes. Polymer (2015), 72, 368-377.

10) Ilcikova, M., Mrlik, M., Babayan, V., Kasak, P. Graphene oxide modified by betaine moieties for improvement of electrorheological performance. RSC Advances 2015, vol. 5, Issue 71, pages: 57820-57827. RSC Advances (2015), 5, 71, 57820-57827.

11) Bertok, T., Sediva, A., Filip, J., Ilcikova, M., Kasak, P., Velic, D., Jane, E., Mravcova, M., Rovensky, J., Kunzo, P., Lobotka, P., Smatko, V., Vikartovska, A., Tkac, J. Carboxybetaine Modified Interface for Electrochemical Glycoprofiling of Antibodies Isolated from Human Serum. Langmuir (2015), 31, 25, 7148-7157.

12) Ilcikova, M., Filip, J., Mrlik, M., Plachy, T., Tkac, J., Kasak, P. Polypyrrole Nanotubes Decorated with Gold Particles Applied for Construction of Enzymatic Bioanodes and Biocathodes. International Journal of Electrochemical Science (2015), 15, 8, 6558-6571.

13) Ilcikova, M., Tkac, J., Kasak, P. Switchable Materials Containing Polyzwitterion Moieties. Polymers (2015), 7, 11, 2344-2370.

14) . Texeira, S. S., Graca, M. P. F., Dionisio, M., Ilcikova, M., Mosnacek, J., Spitalsky, Z., Krupa, I., Costa, L. C. Self-standing elastomeric composites based on lithium ferrites and their dielectric behavior. Journal of Applied Physics (2014), 116, 22, Article number 224102.

15) M. Ilčíková, M. Mrlík, T. Sedláček, M. Šlouf, A. Zhigunov, K. Koynov, J. Mosnáček. Synthesis of Photoactuating Acrylic Thermoplastic Elastomers Containing

Diblock Copolymer-Grafted Carbon Nanotubes. ASC Macro Letters (2014), 3, 999-1003.

16) M. Ilčíková, J. Mosnáček, M. Mrlík, T. Sedláček, K. Csomorová, K. Czaniková, I. Krupa. Influence of surface modification of carbon nanotubes on interactions with polystyrene-b-polyisoprene-b-polystyrene matrix and its photo-actuation properties. Polymers for Advanced Technologies (2014), 25, 1293-1300.

17) H. Valentová, M. Ilčíková, K. Czaniková, Z. Špitalský, M. Šlouf, J. Nedbal, M. Omastová. Dynamic mechanical and dielectric properties of ethylene vinyl acetate/carbon nanotube composites. Journal of Macromolecular Science, Part B: Physics (2014), 53, 3, 496-512.

18) M. Mrlík, R. Moučka, M. Ilčíková, P. Bober, N. Kazantseva, Z. Špitálský, M. Trchová, J. Stejskal. Charge transport and dielectric relaxation processes in anilin-based oligomers. Synthetic Metals (2014), 192, 37-42.

19) M. Mrlík, M. Ilčíková, M. Sedlačík, J. Mosnáček, P. Peer, P. Filip. Cholesteryl-coated carbonyl iron particles with improved anti-corrosion stability and their viscoelastic behaviour under magnetic field. Colloid and Polymer Science (2014), 292, 9, 2137-2143.

20) M. Ilčíková, M. Mrlík, T. Sedláček, D. Chorvát, I. Krupa, M. Šlouf, K. Koynov, J. Mosnáček. Viscoelastic and photo-actuation studies of composites based on polystyrene-grafted carbon nanotubes and styrene-b-isoprene-b-styrene block copolymer. Polymer (2014), 55, 1, 211-218.

21) R. Moučka, M. Mrlík, M. Ilčíková, Z. Špitalský, N. Kazantseva, P. Bober, J. Stejskal. Electrical transport properties of poly(aniline-co-p-phenylenediamine) and its composites with incorporated silver particles. Chemical papers (2013), 67, 8, 1012-1019.

22) K. Czaniková, M. Ilčíková, I. Krupa, M. Mičušík, P. Kasák, E. Pavlová, J. Mosnáček, D. Chorvát Jr, M. Omastová. Elastomeric photo-actuators and their investigation by Confocal Laser Scanning Microscopy. Smart and Nanostructured Materials (2013), 22, 10. Article NO. 104001.

23) M. Mrlík, M. Ilčíková, V. Pavlínek, J. Mosnáček, P. Peer, P. Filip. Improved thermooxidation and sedimentation stability of covalently-coated carbonyl iron particles with cholesteryl groups and their magnetorheology. Journal of Colloid and Interface Science (2013), 396, 146-151.

24) M. Ilčíková, K. Czaniková, J. Mosnáček, M. Mičušík, P. Kasák, I. Krupa, M. Omastová, D. Chorvát, Jr., K. Koynov, M. Šlouf: Photoactuating of Materials Designed for Haptic Aid-Tablets for Visually Impaired People Based on Styrene-b-Isoprene-b-Styrene Block Copolymer Nanocomposites. Chemik (2013), 67, 3, 224-231.

25) J. Vilčáková, R. Moučka, P. Svoboda, M. Ilčíková, N. Kazantseva, M. Hřibová, M. Mičušík, M. Omastova. Effects of surfactants on the dispersive ability, electricalproperties and thermal conductivity of carbon nanotube/silicone nanocomposites. Molecules (2012), 17, 11, 13157-13174.

26) M. Brzeziński, M. Bogusławska, M. Ilčíková, J. Mosnáček, and T. Biela. Unusual

Thermal Properties of Polylactides and Polylactide Stereocomplexes Containing Polylactide-Functionalized Multi-Walled Carbon Nanotubes. Macromolecules (2012), 45, 21, 8714-8721.

27) J. Mosnáček and M. Ilčíková. Photochemically Mediated Atom Transfer Radical Polymerization of Methyl Methacrylate Using ppm Amounts of Catalyst. Macromolecules, (2012), 45, 15, 5859–5865.

28) K. Czaniková, I. Krupa, M. Ilčíková, P. Kasák, D. Chorvát Jr, M. Valentin, M. Šlouf, J. Mosnáček, M. Mičušík, M. Omastová. Photo-actuating materials on the base of elastomers and modified carbon nanotubes. Journal of Nanophotonics (2012), 6, article number: 063522.

Book chapters:

1) Mrlik, M., Ilcikova, M., Mosnacek, J., Pavlinek, V. Chapter 13: Modification of Carbon Nanotubes: Improvement of Physical and Photo-actuating Properties of their Elastomeric Composites. Research and Innovation in Carbon Nnanotube-based Composites. Advances in Materials Science and Applications (AMSA), The World Academic Publishing Co., Ltd.

2) Ilcikova, M., Mrlik, M., Mosnacek, J. Chapter 6: Thermoplastic elastomers with photoactuating properties. Thermoplastic Elastomers - Synthesis and Applications. InTech d.o.o, Rijeka, Croatia. Edited by Chapal Kumar Das, ISBN 978-953-51-2223-4, 176 pages, Publisher: InTech, Chapters published November 26, 2015 under CC BY 3.0 license