**Andrea Antošová (F)**

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Education and Academic degrees

2011 Doctor of Philosophy (Philosophiae Doctor - PhD.) in Biochemistry defended at the Faculty of Science Šafárik University in Košice, Slovakia

2008Renum Naturalium Doctor (RNDr.) in Biochemistry defended at the Faculty of Science Šafárik University in Košice

2006 - 2010 PhD. studies in Biochemistry, Faculty of Science Šafárik University in Košice

Dissertation thesis: *Influence of denaturation conditions on protein aggregation*

2000 - 2006 Master degree (Mgr.), Faculty of Science Šafárik University in Košice

Master´s thesis: *Stability study of initiation factor 2 from Thermus thermophilus*

Professional Experience

2006 - 2008 research assistant at Department of Biochemistry at the Faculty of Science Šafárik University in Košice

2008 – 2011 research assistant at Department of Biophysics IEP SAS, Košice, Slovakia

2011 – 2016 young researcher (PostDoc) at Department of Biophysics IEP SAS, Košice, Slovakia

2016 – present senior researcher at Department of Biophysics IEP SAS, Košice, Slovakia

Short-term research fellowships

2005 3 month study visit at University of Bayreuth – Socrates Programme

2008 3 month study visit at ISMN, CNR Bologna – SAIA Programme

Research interest

Study of Amyloid Protein Aggregation, Study of Protein Interaction with Ligands and Nanoparticles  
using spectroscopic (UV-VIS, FTIR, CD, fluorescence) and microscopic techniques (AFM).

Organizing skills

* specialist consultant of 4 master´s theses, supervisor 1 master´s theses
* Educational Activities - Biochemistry Exercises
* organizer of popularization activities (Night of researchers, Proteins for schoolchildren)
* co-organizer of scientific conferences: Structure and stability of biomacromolecules
* co-investigator of VEGA grants, APVV grants, ERDF grants

Awards

The results about amyloid aggregation obtained by research team (Gažová, Antošová, Bednáriková et al) were selected as the best results of the Institute of Experimental Physics SAS in years 2010, 2011, 2013, 2015, 2016, 2017, 2018, 2019, 2020, 2021 as well as the best results of Slovak Academy of Science in 2011, 2013 and 2016, 2022.

Scientific team (Gažová, Antošová, Bednáriková, Marek, Fedunová) of the year 2019" by Slovak Ministery of Science and Education

**The most important published scientific works:**

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| ADCA – **ANTOŠOVÁ, Andrea** – GANČÁR, Miroslav – BEDNÁRIKOVÁ, Zuzana – MAREK, Jozef – BYSTRENOVÁ, Eva – GAŽOVÁ, Zuzana. The influence of cations on alpha-lactalbumin amyloid aggregation. In Journal of Biological Inorganic Chemistry, 2022, vol. 27, no. 7, p.679-689. (2021: 3.862 – IF, Q1 – JCR, 0.620 – SJR, Q1 – SJR, karentované – CCC). (2022 – Current Contents, WOS, SCOPUS). |
| ADCA – **ANTOŠOVÁ, Andrea** – GANČÁR, Miroslav – BEDNÁRIKOVÁ, Zuzana – MAREK, Jozef – ZAHN, D.R.T. – DUTZ, Silvio – GAŽOVÁ, Zuzana. Surface-modified magnetite nanoparticles affect lysozyme amyloid fibrillization. In Biochimica et Biophysica Acta – General Subjects, 2021, vol. 1865, no. 9, art. no. 129941. (2020: 3.770 – IF, Q2 – JCR, 1.204 – SJR, Q1 – SJR, karentované – CCC). (2021 – Current Contents, WOS, SCOPUS). |
| ADCA – BARBALINARDO, Marianna – **ANTOŠOVÁ, Andrea** – GAMBUCCI, Marta – BEDNÁRIKOVÁ, Zuzana – ALBONETTI, Cristiano – VALLE, Francesco – SASSI, Paola – LATTERINI, Loredana – GAŽOVÁ, Zuzana – BYSTRENOVÁ, Eva. Effect of metallic nanoparticles on amyloid fibrils and their influence to neural cell toxicity. In Nano Research, 2020, vol. 13, no. 4, p. 1081-1089. (2019: 8.183 – IF, Q1 – JCR, 2.518 – SJR, Q1 – SJR, karentované – CCC). (2020 – Current Contents). |
| ADCA – **ANTOŠOVÁ, Andrea** – BEDNÁRIKOVÁ, Zuzana – KONERACKÁ, Martina – ANTAL, Iryna – MAREK, Jozef – KUBOVČÍKOVÁ, Martina – ZÁVIŠOVÁ, Vlasta – JURÍKOVÁ, Alena – GAŽOVÁ, Zuzana\*\*. Amino Acid Functionalized Superparamagnetic Nanoparticles Inhibit Lysozyme Amyloid Fibrillization. In Chemistry -A European Journal, 2019, vol. 25, no. 31, p. 7501-7514. (2018: 5.160 – IF, Q1 – JCR, 1.842 – SJR, Q1 – SJR, karentované – CCC). |
| ADCA – **ANTOŠOVÁ, Andrea** – BEDNÁRIKOVÁ, Zuzana – KONERACKÁ, Martina – ANTAL, Iryna – ZÁVIŠOVÁ, Vlasta – KUBOVČÍKOVÁ, Martina – WU, Josephine W. – WANG, Steven S.S.– GAŽOVÁ, Zuzana. Destroying activity of glycine coated magnetic nanoparticles on lysozyme, alpha-lactalbumin, insulin and alpha-crystallin amyloid fibrils. In Journal of Magnetism and Magnetic Materials, 2019, vol. 471, p. 169-176. (2018: 2.683 – IF, Q2 – JCR, 0.680 – SJR, Q2 – SJR, karentované – CCC). |