CURRICULUM VITAE

Name Emőke ALBERT, PhD

assistant professor

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Affiliation

Budapest University of Technology and Economics, Faculty of Chemical Technology and Biotechnology, Department of Physical Chemistry and Materials Science, Centre for Colloid Chemistry, H-1521 Budapest, Hungary

Nationality

Hungarian

Education

- 2012 – 2015: PhD student, Oláh György Doctoral School, Budapest University of Technology and Economics, Faculty of Chemical Technology and Biotechnology, Budapest, Hungary

2016: PhD in chemistry (*summa cum laude*)

University: Budapest University of Technology and Economics

PhD registration number 2698-PhD

Title of the PhD dissertation: Mesoporous sol-gel coatings: preparation, characterization, application (in Hungarian)

- 2008 2009: **MSc in chemistry**, Babeş Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj–Napoca, Romania
- 2004 2008: **BSc in chemistry**, Babeş Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj Napoca, Romania

Employment

Budapest University of Technology and Economics, Faculty of Chemical Technology and Biotechnology, Department of Physical Chemistry and Materials Science, Centre for Colloid Chemistry

- assistant professor (1st June 2017)
- assistant lecturer (1st April 2016 31st May 2017)
- assistant research fellow (1st September 2015 31st March 2016)
- assistant research fellow, part-time (1st February 2014 31st December 2014)
- technical assistant, part-time (1st October 2012 31st December 2013)
- assistant research fellow, part-time (1st September 2012 30th September 2012)
- assistant research fellow (1st October 2009 31st August 2012)

Knowledge of languages

- Hungarian: native
- English: intermediate (ECL Level B2, complex, Certificate No: P6-073029) (2011)
- Romanian: advanced (ECL Level C1, complex, Certificate No: P6-096632) (2013)

Scholarships

- Ernő Pungor award for PhD candidates, Budapest University of Technology and Economics, Faculty of Chemical Technology and Biotechnology (1st September 2015 31st January 2016)
- Géza Schay award Budapest University of Technology and Economics, Faculty of Chemical Technology and Biotechnology (2015)
- Participation in Baku World Forum of Young Scientists on behalf of the Hungarian technological sciences, (26 31 May 2014)

- Apáczai Csere János Scholarship for PhD students (supported by the European Union and the State of Hungary, co-financed by the European Social Fund in the framework of TÁMOP–4.2.4.A/ 2-11/1-2012-0001 National Excellence Program (1st October 2013 – 30th September 2014)
- 10th Scientific Conference of Transylvanian Students, 2nd prize (2007)

Role in scientific community

- Member of public body of Hungarian Academy of Sciences (2017 –)
- Substitute Member of the Management Committee, CMST COST Action CM 1403: The European upconversion network from the design of photon-upconverting nanomaterials to biomedical applications (2017 –)
- Member, Hungarian Natural Science Society, Commission of Chemistry (2015 -)
- Member, Commission of Colloid Chemistry of the Hungarian Academy of Sciences (2013 -)
- Member, Commission of Colloid Chemistry and Nanotechnology of the Hungarian Chemical Society (2011 –)

Participation in research projects

- Project funded under the Call for research projects based on Hungarian–Thai international cooperation TNN_16, (123631, *Application of oxide and carbon nanostructure based nanofluids in energy and thermal systems*, 1st January 2018 31st December 2020)
- HORIZON 2020-SMEINST-2-2014 project (Optilight, 683541, *Increasing the efficiency of LED street lighting by 15% via optical design*, 1st September 2015 31st August 2017)
- R+D Contracts of Competitiveness and Excellence project (VKSZ-12-1-2013-0080, *Medical technology research and development on the effective healing of cataract*, 1st February 2014 31st December 2014)
- Hungarian-Romanian Bilateral Co-operation (SOLGELCOR, TéT_12_RO-1-2013-0011, *Functional sol-gel coatings on metal surfaces: preparation and characterization*, 1st March 2013 30th November 2014)
- Hungarian-French Bilateral Co-operation (PHONOSEL, TéT_11-2-2012-0008, *Photoactivity of noble metal particles assisted semiconductor layers: preparation and characterization*, 1st November 2012 31st October 2013)
- Hungarian Scientific Research Fund project (OTKA-A 78629, *Preparation and characterization of inorganic coatings with controlled pore structure*, 1st October 2009 31st August 2012)

Conference organizing committees

- Scientific Symposium for the 145th anniversary of the foundation of BME Faculty of Chemical Technology and Biotechnology, member of the Organizing Committee, Budapest, Hungary (1st June 2018)
- 11th Conference on Colloid Chemistry, member of the Organizing Committee, Eger, Hungary (28 30 May 2018)
- 10th Conference on Colloid Chemistry, member of the Organizing Committee, Budapest, Hungary (29 31 August 2012)
- *International Workshop on Functional Nanostructured Thin Films*, member of the Organizing Committee, Budapest, Hungary, Hungarian Academy of Sciences (13th December 2012)

Professional travels

- 21 25 May 2018: Babes Bolyai University, Cluj-Napoca, Romania, ERASMUS teaching mobility
- 29 30 June 2017: participation in the 2nd General Meeting of The Europian Upconversion Network (COST CM1403) Aveiro, Portugal
- 6 12 June 2017: Babeş Bolyai University, Cluj-Napoca, Romania, ERASMUS teaching mobility
- 22 28 June 2014: Babeş Bolyai University, Cluj-Napoca, Romania, ERASMUS teaching mobility
- 15 21 June 2014: Babeş Bolyai University, Cluj-Napoca, Romania, in the frame of Hungarian–Romanian Bilateral Co-operation (SOLGELCOR TÉT_12_RO-1-2013-0011)
- 26 31 May 2014: participation in *Baku World Forum of Young Scientists* on behalf of the Hungarian technological sciences, Baku, Azerbaijan

- 8 21 November 2013: Babeş Bolyai University, Cluj-Napoca, Romania, in the frame of Hungarian–Romanian Bilateral Co-operation (SOLGELCOR TÉT_12_RO-1-2013-0011)
- 23 28 September 2013: University of Paris-Sud, Paris, France, in the frame of Hungarian-French Bilateral Co-operation (PHONOSEL, TéT 11-2-2012-0008)
- 1 8 June 2013: Montpellier II University and European Membrane Institute, in the frame of Hungarian-French Bilateral Co-operation (PHONOSEL, TéT_11-2-2012-0008)
- 19 23 March 2012: Babeş Bolyai University, Cluj-Napoca, Romania
- 12 15 April 2011: COST Action D43 Training School: Fluids and Solid Interfaces, Sofia, Bulgaria
- 12 18 September 2010: Babeş Bolyai University, Cluj-Napoca, Romania, ERASMUS teaching mobility

Referee activity:

- 2 MSc Thesis (2017, 2018), 1 BSc Thesis (2016), 1 Thesis of Scientific Conference for Students (2016), 4
 Projection Tasks (2014, 2016, 2017), international scientific papers
- 21st Transylvanian Students' Scientific Conference, member of the Referee Committee of the Analytical, physical and inorganic chemistry section, Cluj-Napoca, Romania (24 – 27 May 2018)

Educational experiences (Budapest University of Technology and Economics, Faculty of Chemical Technology and Biotechnology)

- Supervisor of 9 individual works, 1 independent work, 3 BSc Theses and 1 MSc Thesis
- Consultant of 12 MSc Theses, 25 BSc Theses and 2 Theses of Scientific Conference for Students
- Consultant of numerous independent and individual works
- Instructor for the following laboratory practical courses:
 - Colloid chemistry V (2009, 2010)
 - Non-conventional materials (2010, 2011, 2012)
 - Material sciences (2011, 2013, 2014)
 - Testing methods in material sciences (2014, 2018)
 - Chemistry for physicist student (2010, 2011, 2012)
 - Physical Chemistry (2011, 2012, 2013)
- Participation in the education of *Colloid Chemical Principles of Nanotechnology* course (2012, 2013, 2014, 2016), lecturer of the course (2017 –) (in English)
- Participation in the education of *Colloid Chemical Principles of Nanotechnology* course (2014, 2015), lecturer of the course (2016 –) (in Hungarian)

Scientometric data:

- Number of papers: 19 (12 in peer-reviewed international and 7 in Hungarian journals/books)
- Cumulative impact factor: 22.930
- Number of independent citations: 50
- Number of citations: 74
- Hirsch index: 5
- Conference presentations: 74 (54 oral and 20 poster)
- The detailed publication activity is available at: https://vm.mtmt.hu//search/slist.php?lang=0&AuthorID=10042656

Budapest, 10th September 2018

Emőke Albert, PhD