Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Beck / Andrea**
Address(es)	**29/33 Konkoly Th. M. út, H-1121 Budapest / P. O. Box 77, H-1525 Budapest, Hungary (office)**
Telephone(s)	**36 1 392 2534 (office)** **Mobile:**
Fax(es)	**36 1 392 2703 (office)**
E-mail	**beck@mail.kfki.hu**
Nationality	**Hungarian**
Date of birth	**27-08-1962**
Gender	**female**

Work experience

Dates	**02.09.1985 - present**
Occupation or position held	**Senior research fellow (recent position)**
Main activities and responsibilities	**Research in the field of heterogeneous catalysis**
Name and address of employer	**Institute of Isotopes, Hungarian Academy of Sciences 29/33 Konkoly Th. M. út, H-1121 Budapest / P. O. Box 77, H-1525 Budapest, Hungary**
Type of business or sector	**Scientific research**

Education and training

Dates	**1992.**
Title of qualification awarded	**Candidate of Science in Chemistry**
Principal subjects/occupational skills covered	**Research in the field of heterogeneous catalysis,Title of thesis: Modeling of alumina supported rhenium and ruthenium catalysts by metal carbonyl clusters**
Name and type of organisation providing education and training	**Hungarian Academy of Sciences**
Level in national or international classification	**PhD**
Dates	**1980-85**
Title of qualification awarded	**MSc in chemistry**
Principal subjects/occupational skills covered	**Chemistry**
Name and type of organisation providing education and training	**University of Eötvös Loránd**
Level in national or international classification	**MSc**

Personal skills and competences

Mother tongue(s)	**Hungarian**
Other language(s)	**English**

Self-assessment	Understanding		Speaking		Writing
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
Language English	B2	B2	B2	B2	B2

(*) Common European Framework of Reference for Languages

Main research areas

Preparation, structural characterization and catalytic application of supported metal/metal oxide nanostructures

Publications and presentations

More than 45 publications, more than 20 presentations on international conferences, 2 book chapters

Selected publications

1. A. Beck, A. Horváth, A. Sz_cs, Z. Schay, Z. E. Horváth, Z. Zsoldos, I. Dékány, L. Guczi
Pd nanoparticles prepared by „controlled colloidal synthesis" in solid-liquid interfacial layer on silica. I Particle size regulation by reduction time
Catal. Letters, 65: 33-42 (2000)
2. A. Horváth, A. Beck, A. Sárkány and L. Guczi,
Sol-Derived Pd/SiO2 Catalyst: Characterization and Activity in Benzene hydrogenation
J. Mol. Catal. A, 182-183: 295 (2002)
3. L. Guczi, A. Beck, A. Horváth and D. Horváth,
From Molecular Clusters to Metal Nanoparticles
Topics in Catalysis, 19: 157 (2002)
4. L. Guczi, G. Pető, A. Beck, K. Frey, O. Geszti, G. Molnár and C. Daróczi,
Gold Nanoparticles Deposited on SiO2/Si(100): Correlation between Size, Electron Structure and Activity in CO Oxidation
J. Am. Chem. Soc., 125(14): 4332-4337 (2003)
5. A.M. Venezia, L. F. Liotta, G. Pantaleo, V. La Parola, G. Deganello, A. Beck, Zs. Koppány, K. Frey, D. Horváth and L. Guczi,
Activity of SiO2 Supported Gold-Palladium Catalysts in CO Oxidation
Appl. Catal. A, 251: 359-368 (2003)
6. L. Guczi, A. Horváth, A. Beck, and A. Sárkány,
Controlling Metal Particle Size in Preparation of Pd/SiO2 Catalysts
Stud. Surf. Sci. and Catal., 145: 351-354 (2003)
7. L. Guczi, A. Beck, A. Horváth, Zs. Koppány, G. Stefler, I. Sajó, O. Geszti and D. Bazin and J. Lynch,
AuPd bimetallic nanoparticles on TiO2: XRD, TEM, in situ EXAFS studies and catalytic activity in CO oxidation
J. Mol. Catal. A, 204: 545-552 (2003)
8. Guczi, L; Frey, K; Beck, A; Pető, G; Daróczi, CS; Kruse, N; Chenakin, S
Iron oxide overlayers on Au/SiO2/Si(100): Promoting effect of Au on the catalytic activity of iron oxide in CO oxidation
Appl. Catal. A, 291 (1-2): 116-125 (2005)
9. Horváth, A; Beck, A; Sárkány, A; Stefler, Gy; Varga, Zs; Geszti, O; Tóth, L; Guczi, L
Silica-supported Au nanoparticles decorated by TiO2: Formation, morphology, and CO oxidation activity
J. Phys. Chem. B, 110 (31): 15417-15425 (2006)
10. Venezia, AM; Liotta, FL; Pantaleo, G; Beck, A; Horváth, A; Geszti, O; Kocsonya, A; Guczi, L
Effect of Ti(IV) loading on CO oxidation activity of gold on TiO2 doped amorphous silica
Appl. Catal. A, 310: 114-121 (2006)
11. Beck, A; Horváth, A; Schay, Z; Stefler, Gy; Koppány, Zs.; Sajó, I; Geszti, O; Guczi, L
Sol derived gold-palladium bimetallic nanoparticles on TiO2: structure and catalytic activity in CO oxidation
Topics in Catal., 44 (1-2): 115-121 (2007)
12. A. Beck, A. Horváth, Gy. Stefler, R. Katona, O. Geszti, Gy. Tolnai, L.F. Liotta, L. Guczi
Formation and structure of Au/TiO2 and Au/CeO2 nanostructures in mesoporous SBA-15,
Catal. Today, 139: 180 (2008)
13. Guczi L., Beck A., Frey K.,
Role of promoting oxide morphology dictating the activity of Au/SiO2 catalyst in CO oxidation,
Gold Bulletin, 42 (2009) 5-12
14. Guczi L., Beck A., Horváth A., Stefler G., Scurrell M. S., Guczi L.
Role of preparation techniques in the activity of Au/TiO2 nanostructures stabilised on SiO2:
CO and preferential CO oxidation,
Topics in Catalysis 52 (2009) 912-919