Europass Curriculum Vitae

Personal information

Surname(s) / First name(s)	Frey Krisztina
Address(es)	29-33., Konkoly Thege M. út, H-1121, Budapest, Hungary
Telephone(s)	+36-1-392-2222/3182
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E-mail	frey@mail.kfki.hu
Nationality	Hungarian
Date of birth	09. 05. 1975.
Gender	female

Work experience

Dates	2008 -
Occupation or position held	Chemist, senior research fellow
Dates	2001- 2008
Occupation or position held	Chemist, research fellow
Main activities and responsibilities	research
Name and address of employer	Hungarian Academy of Sciences, Institute of Isotope, Department of Surface Chemistry and Catalysis, H-1121 Budapest, Konkoly Thege M. út 29-33.
Type of business or sector	catalysis
Dates	2001 April – 2001 September
Name and address of employer	HANNA Instruments Kft., Szeged
Dates	2000 September – 2001 April
Occupation or position held	labor assistant
Main activities and responsibilities	research
Name and address of employer	University of Szeged, Department of Botanica
Dates	1999 - 2000
Occupation or position held	demonstrator
Main activities and responsibilities	research
Name and address of employer	University of Szeged, Department of Optics

Education and training

Dates	2001 - 2007
Title of qualification awarded	Chemical Ph.D.
Name and type of organisation providing education and training	University of Szeged
Dates	2001 - 2003

Title of qualification awarded	International degree in Ecotechnique
Name and type of organisation providing education and training	University of Szeged, Postgraduate School of Environmental Chemistry
Dates	1993 - 2001
Title of qualification awarded	Chemist and teacher of chemistry degrees
Name and type of organisation providing education and training	University of Szeged
Dates	1994 - 2000
Title of qualification awarded	Religious education teacher degree
Name and type of organisation providing education and training	Reformed Theological University of Debrecen

Personal skills and competences

Mother tongue(s)	Hungarian
Other language(s)	English and German medium level

Additional information

1. Imre B, Halász J, Frey K, Varga K, Kiricsi I.: Oxidative hydroxylation of benzene and toluene by nitrous oxide over Fe-containing ZSM-5 zeolites
Reaction Kinetics and Catalysis Letters 74 (2), 377-383, 2001
2. M. Kedves, K. Frey and Zs. Imre: LM and TEM investigations on partially degraded pollen grains of Chenopodium album
Plant Cell Biology and Development (Szeged) (14), 39-48, 2001
3. M. Kedves and K. Frey: Experimental studies on the monocotyledonous monosulcate pollen grains
Plant Cell Biology and Development (Szeged) (14), 66-74, 2001
4. M. Kedves and K. Frey: C60 fullerene/benzol solution as an agent of partial degradation of Botryococcus braunii Kütz. I. colonies from Hungarian Alginite
Plant Cell Biology and Development (Szeged) (14), 92-94, 2001
5. M. Kedves, Zs. Imre, K. Frey, J. Bangó, P. Lukács, E. Hajnal, B. Gégény, T. Szél, T. Krizsán and G. Schulz: Experimental investigations on the pollen grains of Malva sylvestris L. and Hibiscus syriacus L., I.
Plant Cell Biology and Development (Szeged) (15), 59-68, 2002
6. M. Miklós, Z. Kántor, A. Simon and K. Frey: Reconstruction of low-count step-like signals in ion microbeam analysis
Vacuum 71(1-2), 53-57, 2003
7. László Guczi, Gábor Pető, Andrea Beck, Krisztina Frey, Olga Geszti, György Molnár and Csaba Daróczi: Gold Nanoparticles Deposited on SiO_2/Si(100): Correlation between Size, Electron Structure and Activity in CO Oxidation
Journal of the American Chemical Society (125), 4332-4337, 2003
8. L. Guczi, A. Beck, A. Horváth, Zs. Koppány, G. Stefler, K. Frey, I. Sajó, O. Geszti, D. Bazin and J. Lynch: AuPd bimetallic nanoparticles on TiO_2: XRD, TEM, in situ EXAFS study and catalytic activity in CO oxidation,
Journal of Molecular Catalysis A, Chemical (204/205), 545-552, 2003
9. A. Beck, K. Frey, Zs. Koppány, D. Horváth, V. La Parola, L. F. Liotta, G. Pantaleo, A. M. Venezia and L. Guczi: Activity of SiO_2 Supported Gold Palladium Catalysts in CO Oxidation and NO Reduction
Applied Catalysis A. General, (251), 359-368, 2003
10. G. Pető. O. Geszti, G. Molnár, Cs.S. Daróczi, A. Karacs, L. Guczi, A. Beck, K. Frey, Valence band and catalytic activity of Au nanoparticles in Fe_2O_3/SiO_2/Si(100) environment,
Material Science and Engineering,C., (23), 733-736, 2003
11. László Guczi, Krisztina Frey, Andrea Beck, Gábor Pető, Csaba S. Daróczi, Norbert Kruse and Sergey Chenakin: Iron oxide overlayers on Au/SiO_2/Si(100): Promoting effect of Au on the catalytic activity of iron oxide in CO oxidation,
Applied Catalysis A. General, (291), 116-125, 2005
12. Krisztina Frey, Andrea Beck, Gábor Pető, György Molnár, Olga Geszti and László Guczi: Activity of TiO_2 overlayer deposited on Au/SiO_2/Si(100) model system
Catalysis Communications, (7), 64-67, 2005
13. L. Guczi, Z. Pászti, K. Frey, A. Beck, G. Pető and Cs. S. Daróczy: Modeling gold/iron oxide interface system
Topics in Catalysis 39(3-4), 137-143, 2006
14. B. Smid, P. Hanys, K. Frey, T. Mori, M. Takahashi, I. Matolinova and V. Matolin: Comparing Catalytic Properties of Copper Loaded CeO_2 and SnO_2 Oxides Catalysts for CO oxidation
Trans. Materials Res. Soc. Japan, 32(4), 1023–1026, 2007
15. Krisztina Frey, Viacheslav Iablokov, Gérôme Melaet, László Guczi and Norbert Kruse: CO oxidation activity of Ag/TiO_2 catalysts prepared via oxalate co-precipitation
Catalysis Letters 124 (1-2), 74-79, 2008
16. László Guczi, Andrea Beck, Krisztina Frey: Role of promoting oxide morphology dictating the activity of Au/SiO_2 catalyst in CO oxidation
Gold Bulletin, 42 (1), 5-12, 2009
17. O. Hakkel, Z. Pászti, T. Keszthelyi, K. Frey and L. Guczi: Study of the Au/FeOx interface by in situ Sum Frequency Generation Vibrational Spectroscopy
Reaction Kinetics and Catalysis Letters, 96(2), 345-356, 2009

18. Viacheslav Iablokov, Krisztina Frey, Olga Geszti and Norbert Kruse: High catalytic activity in CO oxidation over unsupported MnO_x nanocrystal,
Catalysis Letters, 134, 210-216, 2010

Trainings

2007 – 2010 (5 months)
Sample preparation and catalysis
Chemical Physics of Materials (Catalysis - Tribology), Université Libre de Bruxelles, Brüsszel, Belgium

2006. 09. – 2007. 06.
postdoc
Károly Egyetem Prága, Matematika - Fizika Kar, Elektronika és Vákuumfizika Tanszék

2003. 05. – 2003. 07.
Samples characterization by SIMS
Chemical Physics of Materials (Catalysis - Tribology), Université Libre de Bruxelles, Brüsszel, Belgium

2002. 11. (2 weekst)
Catalytical measurements
I.S.M.N. (Istituto per lo Studio dei Materiali Nanostrutturati) C.N.R., Palermo, Szicília