



## Curriculum Vitae (CV) Researcher mobility programme "Mobilitas"

1. Surname Välejalg

2. First Name Õie

3. Current position senior researcher

4. Current institution University of Tartu

5. Date of birth 01.04.1977

6. Education 1. 2007 Doctor's Degree, University of Tartu

2. 2004-2007 University of Tartu,

Department of Chemistry, Ph.D.student

3. 1999-2001 University of Tartu, Department of Chemistry, M.Sc. (chemistry) 2001

4. 1995-1999 University of Tartu, Department of Chemistry, B.Sc. (chemistry) 1999

7. Research and professional experience

- 2008 University of Tartu, Intstitute of Chemistry, senior researcher
- 2007 2007 Chalmers University of Technology, Gothenburg, Sweden, quest-researcher
- 3. 2004 2007 University of Tartu, Institute of Physical Chemistry, researcher
- 4. 2001 2004 University of Tartu, Institute of Physical Chemistry, temporary researcher
- 5. 1999 2001 Tartu Technologies Ltd., chemist
- 6. 1996 1999 Tartu Technologies Ltd. senior laboratory assistant
- 7. 1995 1996 Tartu Technologies Ltd. laboratory assistant

- 8. Honours/awards
- 9. Administrative responsibilities

2004 Member of the International

## Society of Electrochemistry (ISE)

10. Supervised dissertations	Cäthlyn Kask, Master's Degree, under supervision, (sup) Simusk, T, Sammal, A, Välejalg, Õ, Energy analysis of a solid oxide fuel cell fed by either ethanol or methane, University of Tartu, Faculty of Physics and Chemistry, Institute of Physical Chemistry
11. Current research interest	Thermodynamic analysis of solid oxide fuel cells
12. Received grant funding	
13. List of publications	
<b>Välejalg, Õ</b> , Andersson, M, P, Ulvaeus, G, Stenbock, K (2008) Thermodynamic analysis of methane fed solid oxide fuel cells: Comparison between proton-conducting electrolyte and oxygen ion-conducting electrolyte. Journal of Power Sources, Vol 183, 2, 682-686	
Simusk, T, Pütt, S, <b>Välejalg, Õ</b> (2007 thermodynamic characteristics of high 1616	T) The Electrode porosity and the name temperature SOFC. ECS Transactions, 1609
Simusk, T, Sammal, A, Pütt, S, <b>Välejalg, Õ</b> , Paan, P (2007) Hydrogen production by thermocatalytic decomposition of methane over Ni-Al and Ni-Cu-Al catalysts: Effect of calcination temperature. Journal of Power Sources Volume 169, 1, 150-157	
Simusk, T, Sammal, A, <b>Välejalg</b> , $\tilde{\mathbf{O}}$ (2005) Electricity from ethanol fed SOFCs: the expectations and technological benefiits. International Journal of Hydrogen Energy, Volume 29, 4, 375-379, Fuel Cells	
Simusk, T, Sammal, A, <b>Välejalg</b> , <b>Õ</b> Paan, P (2005) Heat transfer phenomena in a solid oxide fuel cell: A thermodynamical approach (2004) Chemical Engineering Science Vol 60, 16, 4423-4430	
Signature	Date