

DR. KARL J.J. MAYRHOFER

PERSONAL INFORMATION

- Age, marital status: 35, married
- Place of Birth, nationality: Villach, Austria
- Researcher ID: D-4166-2009

EMPLOYMENT

Since 2010	Max-Planck-Institut für Eisenforschung	Germany
	Group Leader Electrocatalysis	
	Since 07/2013 W2 Group Leader	
	<i>Activity, Stability and Selectivity of Electrocatalytic Materials</i>	
	Prof. Dr. M. Stratmann	
2006-2009	Technische Universität München	Germany
	Postdoctoral Research Fellow	
	<i>Size-selected Cluster as Catalysts for Fuel Cell Reactions</i>	
	Prof. Dr. U. Heiz; Dr. M. Arenz	

EDUCATION

2003-2005	Lawrence Berkeley National Laboratory	Ca, USA
	■ Visiting researcher; group of P.N. Ross and N.M. Markovic	
1999-2000	University of Texas at Austin	Tx, USA
	■ Graduate student exchange	
1996-2006	Technische Universität Wien	Austria
	■ Masters and PhD in Technical Chemistry	
1992-1996	BG/BRG Perau Villach	Austria
	■ Graduated with honors	

THESIS

2003-2005	Lawrence Berkeley National Laboratory	Ca, USA
	PhD Thesis	
	<i>Oxygen Reduction and Carbon Monoxide Oxidation on Pt – from Model to Real Systems for Fuel Cell Electrocatalysis</i>	
2001-2002	Ballard Power Systems	Germany
	Masters Thesis	
	<i>Influence of operating conditions and structure parameters on the current density distribution in Polymer-Electrolyte Fuel Cells</i>	

FELLOWSHIPS AND AWARDS

- | | | |
|-----------|--|---------------|
| 2012 | NRW Innovationspreis | Germany |
| ■ | Award for innovational research; endowed with 50.000€ | |
| 2012 | ISE Prize for Applied Electrochemistry | International |
| ■ | Junior scientist prize (< 35); International Society of Electrochemistry | |
| 2011 | Anton-Paar Prize | Austria |
| ■ | Junior scientist prize (< 35); Austrian Chemical Society | |
| 2009 | Hans-Juergen-Engell Prize | International |
| ■ | Junior scientist prize (< 35); International Society of Electrochemistry | |
| 2007-2009 | Erwin-Schroedinger Scholarship | Austria |
| ■ | Postdoctoral research award; FWF | |
| 2007-2008 | Humboldt research Scholarship | Germany |
| ■ | Humboldt-Gesellschaft – declined due to commitment above | |
| 1996-2001 | Erich-Lackner Scholarship | Austria |
| ■ | Honors student award; Erich-Lackner Stiftung | |

ACQUIRED PROJECTS

- | | | |
|-----------|---|---------|
| 2012-2014 | Umicore AG&Co | Germany |
| Grant Sum | 165.000€ | |
| | <i>SFC-Grundlagenuntersuchungen an neuen Elektrokatalysatoren (-part of the BMBF project „NEKat“</i> | |
| 2012-2014 | DFG Project (<i>Sachbeihilfe</i>) | Germany |
| Grant Sum | 195.000€ | |
| | <i>Mikrobiologisch beeinflusste Korrosion durch hochaggressive sulfatreduzierende Bakterien</i> | |
| 2012-2014 | Thyssen Krupp Steel | Germany |
| Grant Sum | 200.000€ | |
| | <i>Untersuchung von Korrosionsvorgängen komplexer metallischer Überzüge auf Stahlfleinblech mittels orts aufgelöster elektrochemischer Methoden</i> | |
| 2011-2016 | BMBF project – ECCO2 | Germany |
| Grant Sum | 1.125.000€ | |
| | <i>Combinatorial electrocatalytic CO2 reduction – ECCO2</i> | |
| 2011-2013 | Arcelor Mittal – OCAS NL | Belgium |
| Grant Sum | 120.000€ | |
| | <i>Development of a Scanning Flow Cell system with Dynamic Electrolyte Change for Fully Automated Parameter Screening</i> | |

TEACHING

2010-2013	Ruhr-Universität Bochum	Germany
	■ WS: Advanced methods in electroanalytical chemistry I	
	■ SS: Advanced methods in electroanalytical chemistry II	
2011	Int. Max-Planck Research School	Germany
	■ Fundamentals of electrochemistry	
2006-2009	Technische Universität München	Germany
	■ Assistant for exercises and lab course in PC department	

ADDITIONAL WORK EXPERIENCE

2006	NBC Defense Group	Austria
	■ Compulsory army service; Military-Scientific Advisor	
2000	Ballard Power Systems	Germany
	■ 3 months internship; electronic laboratory	
1998	Chemetall GmbH	Germany
	■ 3 months internship; analytical-research laboratory	
1996	Omya AG	Austria
	■ 2 months internship; quality assurance laboratory	

PROFESSIONAL MEMBERSHIPS

- ISE – International Society of Electrochemistry
- ECS – The Electrochemical Society
- GDCH – German Chemical Society
- GÖCH – Austrian Chemical Society
- AGEF – AG Elektrochemischer Forschungsinstitutionen NRW
- GECATS – German Catalysis Society