Curriculum Vitae

Markus Hlusiak

Technical and scientific translator for English to German Native German speaker with background in Electrical Engineering

Personal details

Name:	Markus HLUSIAK
Email:	markus@mahltranslations.com
Phone:	+61 473 119 574
Location:	Adelaide, Australia
Time zone:	GMT+9:30 (April-September) GMT+10:30 (October-March)
Languages:	German (native language) English (near-native fluency) Norwegian, French, Mandarin Chinese (intermediate level)
Payment options:	Bank transfer to accounts in EUR, USD, GBP, AUD Paypal (most major currencies)

Employment history

05/2015 - present

Freelance Translator English to German

- Accredited as Professional Translator English-German by NAATI (Australia's National Accreditation Association for Translators and Interpreters).
- Specialising in technical and scientific documents such as patents, manuals, product documentation, scientific papers, journal articles and theses.
- Subject areas with in-depth knowledge include photovoltaics, semiconductor physics, metallurgy, vacuum deposition, renewable energies, modelling & simulation, optimisation software, electricity transmission grids, etc.

05/2014 - 01/2015, full time

Energy Market Consultant & Simulation Software Support, Energy Exemplar Pty Ltd Adelaide, Australia

- Designed, implemented and optimised electricity supply systems using Energy Exemplar's PLEXOS simulation software.
- In-depth analysis of the Australian National Electricity Market (NEM)
- Provided customer support and training for PLEXOS.

05/2013 – 04/2014

Freelance Technical Writer

- Authored research papers with previous employer on a freelance basis.
- Obtained Australian permanent residency and moved to Adelaide.

08/2011 - 04/2013, full time

Scientific Research Fellow, Reiner Lemoine Institut gGmbH

Berlin, Germany

- Conducted research in technology and economics of renewable energy sources and storages such as photovoltaics, wind energy, hydro power, concentrating solar power, renewable power methane and batteries.
- Modelled and simulated hybrid electricity supply systems using MATLAB. Optimised them for least cost while satisfying power demand.
- Published research results and presented them at conferences.
- Supervised interns and students compiling their master's theses.

05/2010 - 08/2011

• Travelled through Europe and China, studied Mandarin Chinese.

11/2005 – 04/2010, full time

Research Engineer, Q-Cells SE (now Hanwha Q CELLS Co. Ltd.) Bitterfeld-Wolfen, Germany

- Conducted high efficiency solar cell research:
 - Developed, simulated, processed and characterised experimental cell designs (new passivation layers, alternative geometries, solar grade Si).
 - Specified and supported the ramp-up of prototype processing tools.
 - Estimated economic benefits of introduction to mass production.
- Manager of joint project with photovoltaics research institute.
- Member of Q-Cells' patent committee.

2000 – 2004, part time

Auxiliary, Danet Internet Solutions GmbH (now Devoteam Danet GmbH) Stuttgart, Germany

- Migrated an existing Visual Basic based MS Excel accounting tool from Classic to .NET.
- Miscellaneous other administrative tasks.

Educational history

10/1998 - 10/2005

Studies of *Elektro- und Informationstechnik* (Electrical Engineering and Information Technology), University of Stuttgart

Stuttgart, Germany

- Graduated as *Diplom-Ingenieur* (equivalent to M.Sc.).
- *Diplomarbeit* (final thesis of six months) in 2005, "Determination of ionic diffusion constants in nanoporous networks".
- Six-month internship at Q-Cells in the process technology department in 2004/2005, worked on improving SiN:H passivation layers for Si solar cells.
- *Studienarbeit* (undergraduate thesis of three months) in 2002, "Light-scattering window layers for Cu(In,Ga)Se₂ solar cells".
- Studied at NTNU (Norwegian University of Science and Technology) in Trondheim, Norway for one semester in 2002.

08/1988 – 07/1997 Secondary education, Goethe-Gymnasium Ludwigsburg, Germany

08/1986 – 07/1988 Primary education, Grundschule Hoheneck Ludwigsburg, Germany

02/1982 – 06/1986 Primary education, Primary Study Centre Pokhara, Nepal

Publication history

Hybrid Photovoltaic (PV) - Concentrated Solar Thermal Power (CSP) Power Plants: Modelling, Simulation and Economics, 29th European Photovoltaic Solar Energy Conference, Amsterdam, 22nd–26th September 2014

Integrating End-User and Grid Focused Batteries and Long-Term Power-to-Gas Storage for Reaching a 100% Renewable Energy Supply, 7th International Renewable Energy Storage Conference and Exhibition (IRES), Berlin, 12th–14th November 2012

Übergang zu einer regionalen Elektrizitätsversorgung aus 100 % Erneuerbarer Energie am Beispiel des Allgäus, *6th Eurosolar-Conference Stadtwerke mit Erneuerbaren Energien, Heidelberg, 21st–22nd June 2012, also published in the magazine* Solarzeitalter *3/2012*

Optimising a Renewables Based Island Grid and Integrating a Battery Electric Vehicles Concept on the Example of Graciosa Island, Azores Archipelago, 6th European Conference on PV-Hybrids and Mini-Grids, Chambéry, 26th–27th April 2012

Patent history (as inventor)

Method for marking a solar cell and solar cell (WO002012013214A2)

Method for marking semiconductor wafer used in manufacturing process of solar cell, involves printing information including process parameters in edge of wafer (DE102010060908A1)

Power plant i.e. photovoltaic power plant, for generation of electric power from sunlight, has component storing thermal power in energy storage unit, and another component producing electrical power from thermal power (DE102010017762A1)

Solar cell e.g. wafer-based solar cell, has semiconductor substrate comprising substrate surface, and barrier layer arranged between two contact layers such that barrier layer prevents material mixture between two contact layers (DE102009044493A1)

Structured material layer manufacturing method for thin layer rear side contacting solar cell, involves applying material layer on substrate surface, and mechanically removing sacrificial structure such that layer is structured on surface (DE102009044323A1)

Wirkungsgradstabilisierungsverfahren für Solarzellen (DE102009025998A1)

Photovoltaikelement (DE102008054756A1)

Solar cell for solar module, has substrate with substrate surface, where electrically conducting layer is arranged on substrate surface for contacting semiconductor area of solar cell (DE102008043529A1)

Verfahren und Vorrichtung zum Transportieren eines Substrates (DE102008041471B3)

Drahtsystem zum elektrischen Kontaktieren einer Solarzelle (DE102007022877A1)

Carriersystem und Verfahren zum Prozessieren einer Mehrzahl von Substraten, die am Carriersystem fixiert sind (DE102007010710A1)

Wärmereservoir und Verfahren zur Bearbeitung eines mit einem Wärmereservoir thermisch gekoppelten Substrates sowie Verwendung eines Wärmetransportmediums (DE102007006455B4)

Emitter Wrap-Through-Solarzelle und Verfahren zur Herstellung einer Emitter Wrap-Through-Solarzelle (DE102006058267A1)

Verfahren und Vorrichtung zum Herstellen einer elektrischen Solarzellen-Kontaktstruktur an einem Substrat (DE102006055862B4)