

## Curriculum Vitae

Last updated: 07.03.2021

### PERSONAL INFORMATION

Name: M.Eng. Betz Andreas  
Nationality: German  
Date of birth: 13.09.1982



### EDUCATION AND TRAINING

Dates (from – to)	Name and type of the organization	Principal subjects	Title awarded
01/12 – dato	Austrian Institute of Technology GmbH / LKR Leichtmetallkompetenzzentrum Ranshofen GmbH, Austria	<ul style="list-style-type: none"> <li>Completion of the AIT Senior Research Engineer Career development program</li> <li>Personal Selling - das effektive Akquisitionsgespräch</li> <li>SPECTROMAXx, Messunsicherheit der Funkenspektrometrie in Theorie u. Praxis</li> </ul>	
04/12 – 5/12	ESI Group, Switzerland	<ul style="list-style-type: none"> <li>Solidification Course 2012</li> </ul>	
04/11	Georg-Simon-Ohm College Nuremberg, Germany	<ul style="list-style-type: none"> <li>Certificate “New Materials, Nano and Production Technologies”</li> </ul>	M.ENG.
10/10 – 03/11	Georg-Simon-Ohm College Nuremberg, Germany	<ul style="list-style-type: none"> <li>Master thesis: “Experimental determination of element-specific clay/clinker factors using inductively coupled plasma &amp; optical emission spectrometry (OES) on material samples from the brick industry”</li> </ul>	
10/09 – 09/10	Georg-Simon-Ohm College Nuremberg, Germany	<ul style="list-style-type: none"> <li>Master “New Materials, Nano and Production Technologies”, with specialization on high performance and high temperature metals</li> </ul>	
10/09	Georg-Simon-Ohm College Nuremberg, Germany	<ul style="list-style-type: none"> <li>Certificate “Material Technologies”</li> </ul>	B.ENG.
10/06–09/09	Georg-Simon-Ohm College Nuremberg, Germany	<ul style="list-style-type: none"> <li>Bachelor “Material Technologies”</li> </ul>	
09/03–03/05	University of Applied Sciences, Regensburg, Germany	<ul style="list-style-type: none"> <li>Diploma Study „Electrical and Information Technologies”</li> </ul>	
08/02–05/03	Caritas Altenheim “St. Konrad” Pfarrkirchen, Germany	<ul style="list-style-type: none"> <li>Non-military service, Caregiver in shift service, assistant in technical service</li> </ul>	



## WORK EXPERIENCE

<b>Dates</b>	<b>Name and type of employer</b>	<b>Position</b>	<b>Main activities and responsibilities</b>
04/18 – dato	Austrian Institute of Technology GmbH / LKR Leichtmetall-kompetenzzentrum Ranshofen GmbH, Austria	Team Leader	<ul style="list-style-type: none"> <li>• Casting Team Coordination and Administration</li> <li>• First instance contact person and thematic key account for acquisition, business development and technological support/consulting regarding Material and Process Development for Casting of light metal alloys</li> <li>• Overall Project Leader and Writing of Independent Research Program for Research Field &lt;Casting Processes for High Performance Materials&gt;</li> <li>• Contributing to AIT Strategy 2017-2023 Center for Low-Emission Transport – LKR Research Field &lt;Casting Processes for High Performance Materials&gt;</li> <li>• Project management, acquisition and work within the field of Casting Technologies</li> </ul>
01/15 – 03/18	Austrian Institute of Technology GmbH / LKR Leichtmetall-kompetenzzentrum Ranshofen GmbH, Austria	Deputy Team Leader	<ul style="list-style-type: none"> <li>• Casting Team Coordination support</li> <li>• Project management, acquisition and work within the field of Casting Technologies</li> <li>• Project Task Leader and Writing support of Independent Research Program for Research Field &lt;Casting Processes for High Performance Materials&gt;</li> </ul>
03/14 – dato	Austrian Institute of Technology GmbH / LKR Leichtmetall-kompetenzzentrum Ranshofen GmbH, Austria	Research Engineer	<ul style="list-style-type: none"> <li>• Project management, acquisition and work within the field of Casting Technologies</li> <li>• Support Management of LKR's IPR strategy</li> <li>• Proposal Writing and Coordination</li> <li>• Technological Leader of LKR's chemical analysis unit</li> </ul>
09/11 – 02/14	Austrian Institute of Technology GmbH / LKR Leichtmetall-kompetenzzentrum Ranshofen GmbH, Austria	Junior Scientist	<ul style="list-style-type: none"> <li>• Project Leader and Project Work within the field of Casting Technologies</li> <li>• Project management</li> <li>• Management of LKR's IPR strategy</li> </ul>
03/05 – 09/06	Betz Kunstgewerbe Pfarrkirchen, Germany	Employee	<ul style="list-style-type: none"> <li>• Individual project planning &amp; conceptual design</li> <li>• Digital photo montage for customer presentation</li> </ul>



			<ul style="list-style-type: none"> <li>• Surface processing &amp; refinement</li> <li>• Forming, casting, effect surfaces through specially evaluated polymer casting processes</li> <li>• Surface coating with composition gold</li> <li>• Paint, multi-coat &amp; trowel techniques, incl. Stucco and Venetian</li> <li>• Galvanic coatings, passivation with organic protective layers, painting, atmospheric or chemical, incl. black-finishing</li> <li>• Restoration of antiques and sacral art</li> <li>• Work with release, abrasive and binding agents</li> </ul>
05/03–09/03	Kreis – Caritasverband Rottal – Inn e.V. Pfarrkirchen	Employee	<ul style="list-style-type: none"> <li>• Surface-treatment and renovation of House St. Elisabeth</li> </ul>
05/99–12/03	Betz Computerservice	Self-employed	<ul style="list-style-type: none"> <li>• Trade with Hardware and Software components</li> <li>• Design &amp; sales of tailored PC systems</li> <li>• System Emergency Repair</li> <li>• Working as Subcontractor for consulting, sales, customer support and on-site service</li> </ul>

## TECHNICAL SKILLS (SOFTWARE) TOOLS, MACHINERY, EQUIPMENT, ETC.)

Technical skill	Level (basic, good, excellent)
Casting Technologies (VDCC, HDCC, HPDC, LPDC, Sand / Gravity Casting)	Excellent
Project Management (incl. PMSmart according to IPMA)	Excellent
Patent Management	Good
High-performance and high-temperature materials	Excellent
Risk Analysis and Assessment	Good
Internet of Things, Smart Flows, Logic Layering, Scripting (Lua, Java)	Excellent
Instrumentation, controlling and basic electrical engineering	Good
Business administration skills	Excellent
Microsoft Software Suite (Windows, Office 365)	Excellent
Corrosion, Tribology	Good
Environmental Engineering	Good
Element analyses, optical emission spectroscopy, instrumental analysis	Excellent
Forming and Welding Technologies	Good
Polymer and non-metallic inorganic material processing	Good



## LANGUAGES

Language	Reading / written / spoken	Level (basic, good, excellent)
German	Reading / written / spoken	Mother tongue
English	Reading / written / spoken	Excellent
French	Reading / written / spoken	Basic

## MEMBERSHIPS AND FUNCTIONS

Dates (from – to)	Organisation	Membership or function	Main activities and responsibilities
01/01–12/02	“Verein Haus der Jugend e.V.” Pfarrkirchen	1. Assoziation Chair	<ul style="list-style-type: none"> <li>• Organisation of youth and other events in cooperation with Rottal-Inn district</li> <li>• Management and planning of board meetings</li> <li>• Apprenticeship in “Food and Beverage Service”</li> <li>• Member of the security board of the town of Pfarrkirchen</li> </ul>
01/99–12/00	“Verein Haus der Jugend e.V.” Pfarrkirchen	Treasurer	<ul style="list-style-type: none"> <li>• Book-keeping, purchase planning, inventory auditing</li> <li>• Budget negotiations with the town administration of Pfarrkirchen</li> </ul>



## PATENTS

Year	Patent number	Publication title	Inventors
2021	WO 2021/005062	„Legierung mit feinskaligem, insbesondere nanoeutektischem, Gefüge und Herstellung derselben“	Stefan Gneiger, Clemens Simson, Simon Frank, Alexander Großalber, Andreas Betz
2021	EP 3763845	„Magnesiumlegierung und Verfahren zur Herstellung derselben“	Stefan Gneiger, Clemens Simson, Simon Frank, Alexander Großalber, Andreas Betz
2020	WO 2020/124112	„Verfahren zur Erhöhung einer Korrosionsbeständigkeit eines mit einer Magnesiumbasislegierung gebildeten Bauteiles gegen galvanische Korrosion sowie damit erhältliches korrosionsbeständiges Bauteil“	Stefan Gneiger, Simon Frank, Andreas Betz
2020	AT 521709	„Vorrichtung zum Zudosieren von Metallschmelze in eine Druckgusseinheit“	Simon Frank, Andreas Betz
2018	EP 3251767	„Verfahren zur Herstellung eines Profils aus einer Metalllegierung“	Rudolf Gradinger, Stefan Gneiger, Andreas Betz
2017	EP 3251766	„Verfahren und Extruder zur Herstellung eines Profils aus einer Metalllegierung“	Rudolf Gradinger, Stefan Gneiger, Andreas Betz
2017	AT 514717 B1	„Verfahren und Vorrichtung zum Fördern von Schmelze“	Patrick Luttinger, Andreas Betz
2016	EP 3015192	„Verfahren und Vorrichtung zum Stranggießen einer Leichtmetalllegierung“	Salar Bozorgi, Christoph Angermeier, Andreas Betz, Alois Birgmann, Christian Chimani

## JOURNAL/TECHNICAL MAGAZINE

Dates	Publication title
2016	A Betz, S. Gneiger, N. Ross, R. Gradinger: "Thixotrusion: A Novel Process for Continuously Producing Mg Alloy Extrudate"; Light Metal Age, April (2016), S. 51 - 52.



## CONFERENCE/PROCEEDINGS/POSTERS

Dates	Publication title
2019	<p>A Betz, E. Neunteufl: <i>"Horizontale und Vertikale Versuchsstranggießanlage"</i>; Poster: 25 Jahre LKR Leichtmetallkompetenzzentrum Ranshofen, Ranshofen; 17.09.2019.</p> <p>S. Frank, J. Roither, A. Harrison, A Betz, S. Bozorgi: <i>"Druckguss am LKR"</i>; Poster: 25 Jahre LKR Leichtmetallkompetenzzentrum Ranshofen, Ranshofen; 17.09.2019.</p> <p>S. Gneiger, S. Frank, N. Papenberg, A Betz: <i>"Brandbeständige Magnesiumlegierungen für Automobil und Luftfahrt"</i>; Poster: 25 Jahre LKR Leichtmetallkompetenzzentrum Ranshofen, Ranshofen; 17.09.2019</p> <p>S. Frank, E. Neunteufl, S. Gneiger, A Betz: <i>"Leichtbau-Entwicklungen / Tendenzen"</i>; Vortrag: 7. Jointventure Leichtbau-Workshop, Unterschleißheim / München (eingeladen); 22.07.2019 - 23.07.2019.</p>
2017	<p>S. Gneiger, R. Gradinger, A Betz: <i>"Manufacturing route for producing tailor-made magnesium wires for welding and ALM purposes"</i>; Vortrag: 2017 World Magnesium Conference, Singapore; 21.05.2017 - 23.05.2017; in: "Proceedings of the 2017 World Magnesium Conference", (2017), Paper-Nr. Session 5, Speaker 4.</p> <p>S. Gneiger, S. Frank, A Betz: <i>"Development of fire-resistant Magnesium Alloys for Automotive and Aerospace Applications"</i>; Vortrag: 25. Magnesium Automotive und Abnehmerseminar, Aalen (eingeladen); 22.10.2017 - 23.10.2017; in: "25. Magnesium Automotive und Abnehmerseminar", 25 (2017), Paper-Nr. 10.</p>
2016	<p>S. Gneiger, A Betz, P. Schäffler: <i>"A novel processing route for producing magnesium based metal matrix composites"</i>; Vortrag: World Powder Metallurgy Conference 2016, Hamburg; 09.10.2016 - 13.10.2016; in: "World Powder Metallurgy Conference 2016", European Powder Metallurgy Association (EPMA), Shrewsbury, United Kingdom (2016)</p> <p>S. Gneiger, S. Frank, A Betz: <i>"Untersuchung des Elementeinflusses von Ca und Y auf Magnesiumlegierungen"</i>; Vortrag: 9. Ranshofner Leichtmetalltage, Bad Ischl; 09.11.2016 - 10.11.2016; in: "Strategien für nachhaltige Entwicklungen im Leichtbau", (2016), S. 51 - 66.</p>
2015	<p>R. Gradinger, S. Gneiger, A Betz: <i>"Investigations on fire-resistant magnesium alloys for aerospace applications"</i>; Vortrag: Light Metals Technologies Conference 2015, Port Elizabeth; 27.07.2015 - 29.07.2015; in: "Light Metals Technologies Conference 2015", Materials Science Forum, 828-829 (2015).</p> <p>A. Horr, A Betz: <i>"Advanced fluid-thermal-mechanical casting simulation of lightweight alloys"</i>; Vortrag: Liquid metal Processing &amp; Casting Conference 2015, Leoben; 20.09.2015 - 24.09.2015; in: "Proceedings of the Liquid Metal Processing &amp; Casting conference 2015", A. Horr, A Betz (Hrg.); (2015), S. 490 - 497.</p>



- 2015 A. Horr, A Betz: *"Optimisation of Aluminium Casting Technology: Thermal Energy Approach"*;  
Vortrag: European Aluminium Congress 2015, Düsseldorf; 23.11.2015 - 24.11.2015; in: "Proceedings of the European Aluminium Congress", A. Horr, A Betz (Hrg.); Gesamtverband der Aluminiumindustrie e.V., 1 (2015), S. 1 - 13.
- R. Kretz, S. Gneiger, A Betz, C. Angermeier, H. Hubbauer: *"Magnesium extrusions billets - opportunities and risks"*; Vortrag: 10th International Conference on Magnesium Alloys and their Applications, Jeju; 11.10.2015 - 16.10.2015; in: "Proceedings of the 10th international conference on magnesium alloys and their applications", Korean Institute of Metals and Materials, Jeju (2015), S. 808 - 813.
- 2014 A. Horr, R. Kretz, A Betz, C. Chimani: *"Multi physical process simulation of continuous casting - full interactive simulation"*; Vortrag: ECCC 8th European Continuous Casting Conference 2014, Graz; 23.06.2014 - 26.06.2014; in: "ECCC 8th European Continuous Casting Conference 2014", ASMET, (2014).
- A Betz, H. Grün-Lutterotti et al.: *"Center crack detection during continuous casting of aluminium by laser ultrasonic measurements"*; Vortrag: SPIE Sensing Technology and Applications 2014, Baltimore; 05.05.2014 - 09.05.2014; in: "Proceedings of the SPIE", SPIE, (2014).

