CURRICULUM VITAE

By
FH-Prof. DI Dr. Peter Zeller

INFORMATION ABOUT THE PERSON

First name/Last name	Peter Zeller
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EDUCATION

1993-2000	PhD thesis, TU Vienna, "Experimental investigation of arc motion and structure of magnet blast arcs with special respect to gas dynamics in longitudinal arc chambers"
1987-1993	Master of Science in Electrical Engineering (Dipl. Ing.), TU Vienna Master thesis: "Adoption of test equipment for the investigation of arc motion between divergent electrodes at a peak current up to 6 kA "
1982-1987	Technical high school (Electrical Engineering, HTL, Paul Hahn Straße Linz)
1981-1982	Technical school for Electrical Engineering (HTL, Paul Hahn Straße Linz)
1977-1981	Secondary school Linz / Austria
1973-1977	Elementary school Linz / Austria

WORK EXPERIENCE

since 01/2023	Academic head of the technical department at the Energy Institut the Johannes Kepler University, Linz / Austria
2016-2023	University of Applied Sciences Upper Austria, Wels / Austria Head of Studies Electrical Engineering

2015-2016	University of Applied Sciences Upper Austria, Wels / Austria Head of Studies Sustainable Energy Systems and interim Head c Studies Electrical Engineering
2007-1015	University of Applied Sciences Upper Austria, Wels / Austria Head of Studies Eco Energy Engineering
2003-2007	University of Applied Sciences, Upper Austria, Wels / Austria Head of Studies Automation Engineering
2002-2003	University of Applied Sciences Upper Austria, Wels / Austria Professor at the University of Applied Sciences, Wels, College of Engineering for Sensors and Microsystems
2001-2002	”Hochschule für Technik Wirtschaft und Verwaltung”, Zürich / Switzerland
1999-2002	ABB, Wettingen / Switzerland Head of the Surge Arrester Development Department
1993-1999	Technical University of Vienna, Vienna / Austria Research assistant at the Institute for High Voltage Engineering and Switching Devices

PUPLICATIONS

E. Hetzmannseder, K. Berger, P. Zeller, “High Speed Break Arc Movies of Contactors and Circuit Breakers”, 19th International Conference on Electrical Contacts, Nürnberg, Germany, 1998

P. Zeller, W. Rieder, „Arc structure, arc motion and gas pressure between laterally enclosed arc runners“, Proc. 44th IEEE Holm Conf. on El. Contacts, 1998.

E. Hetzmannseder, K. Berger, P. Zeller, „Break Arc Movies of Electrical Power Relays and Circuit Breakers“, Proc. 27th NARM Relay Conference, 1999

Peter R. Zeller, Werner F. Rieder, "Arc Structure, Arc Motion, and Gas Pressure Between Laterally Enclosed Arc Runners", IEEE Transactions on Components and Packaging Technologies, Vol. 24, 2001.

Bernhard Richter, Peter Zeller, " Lightning and leakage currents through MO-surge arresters in distribution systems", Proc of ILCP, 2002.

Peter Zeller, Bernhard Richter, "Protection of Medium Voltage Transformers against Overvoltages- calculation of transferred voltages -"", Proc of ILCP, 2002.

Jens Thiede, Peter Zeller, “Niederspannungsbegrenzer für Gleichstrombahnen”, Elektrische Bahnen, 2002.

Peter Zeller, Michael Rabl, „Application of Miniature Pressure Gauges for fast, transient Pressure Measurement in Arc Chambers“, Sensors Messe im Mai 2003, Nürnberg.

Peter Zeller, Michael Stanek, „Intelligente Komponenten in der Energieversorgung“, Vortrag an der Mechatronik Cluster Tagung in Linz Oberösterreich, Juni 2004

Christian Danninger, Michael Rabl, Peter Zeller, „Arc Current Density Observation with a Hall Probe Matrix”, Proc. of internat. IEEE Conference on Sensors and Microsystems, Technical University Vienna 2004.

Peter Zeller, “Modell zur numerischen Simulation der thermischen Stabilität von Ableitern”, Proc. of “FEMLAB Anwendertreffen”, Düsseldorf, 2005.

Peter Zeller, „Hallsensormessung zur Bestimmung von Stromverteilung“, Symposium der Automatisierungstechnik, Mannheim, 2005.

Peter Zeller, „Femlab als Simulationstool für multiphysikalische Problemstellungen“, Symposium der Automatisierungstechnik, Düsseldorf, 2006.

Peter Zeller, „Simulation von Antriebssystemen in der Automatisierungstechnik“, Proc. Mechatronik Forum Antriebstechnik, Ansfelden, 2006.

Peter Zeller, Klaus Schiefermayr, „Berechnung der Bewegung eines magnetisch angetriebenen Ankers“, Proc. FEMLAB Anwendertreffen, Frankfurt, 2006.

Peter Zeller, „Numerical Simulation versus Experiments and Analytical Computation for Design Optimization”, invited paper, proc. COMSOL Conference, Grenoble, 2007.

Peter Zeller, “Zukunftsperspektiven der individuellen elektrischen Mobilität”, Präsentation in der Vortragsreihe “Innokontakte” an der Fachhochule Oberösterreich, Campus Wels, 2008.

Peter Zeller, „Simulation von Wärmepumpensystemen“, Proc. Österreichisches Forschungsforum der Fachhochschulen, 2008.

Peter Zeller, „Aspekte zur Optimierung des Speichers von Elektrofahrzeugen“, Proc. Österreichisches Forschungsforum der Fachhochschulen, 2009.

Peter Zeller, „A Simple Arc Model for the Simulation of the Clearing Time of Drawn Arcs with a Commercial Electronics Simulation Tool“, Proc. Of the 55th IEEE Holm Conference on Electrical Contacts, 2009

Peter Zeller, Hastings M. Libati, “Utilization of Solar Energy for Electrical Power Supply in Rurall African Areas”, Proc. Africon, Nairobi, 2009

P. Zeller, T. J. Schoepf, 2010, "Advanced Arc Model for Computation of Low Current Arc Characteristics", Proc. of the 56th IEEE Holm Conference on Electrical Contacts

A. Paar, R. Schneider, P. Zeller, G. Reiter, P. Würzinger, M. Wöls, S. Paul, 2012, "Einfluss ausgewählter elektrischer Parameter auf den Elektroschlacke-Umschmelzprozess", Proceedings of the 19th International Student's Day of Metallurgy, Freiberg

R. Schneider, M. Mülleder, P. Zeller, P. Würzinger, G. Reiter, S. Paul - Effects of low frequency alternating currents on the electro-slag remelting process - Proc. of the 2015 Int. Symposium on Liquid Metal Processing and Casting, Leoben, Austria, 2015, pp. 18-26

A. Paar, R. Schneider, P. Zeller, G. Reiter, S. Paul, P. Würzinger - Effect of electrical parameters on type and content of non-metallic inclusions after electro-slag-remelting - steel research international, Vol. 85, No. 4, 2014, pp. 570-578

C. Schüller, R. Schneider, M. Mülleder, P. Zeller, S. Paul, G. Reiter, P. Würzinger - Effects of increased MgO and SiO2-contents in the slag on energy consumption and polarisation at the ESR-process - Proceedings of the XXI. Int. Students' Day of Metallurgy, Clausthal-Zellerfeld, Germany, 2014, pp. 122-127

M. Mülleder, R. Schneider, C. Schüller, P. Zeller, S. Paul, G. Reiter, P. Würzinger - Influence of frequency on the energy consumption and polarisation effects during electro-slag-remelting - Proceedings of the XXI. Int. Students' Day of Metallurgy, Clausthal-Zellerfeld, Germany, 2014, pp. 115-121

R. Schneider, M. Mülleder, P. Zeller, P. Würzinger, G. Reiter, S. Paul - Effects of low frequency alternating currents on the electro-slag remelting process - Proc. of the 2015 Int. Symposium on Liquid Metal Processing and Casting, Leoben, Austria, 2015, pp. 18-26

Dionne Soto, Ruturaj Soman, Mike Sloderbeck, and Michael Steurer, Peter Zeller, High-Speed Camera Imaging of Arc Faults Anticipated in Fault Current Limited MVDC Systems, Advanced Machinery Technology Symposium 2016, Philadelphia

P. Zeller, “Switching” Arc Phenomena in Inverter Fed Systems, Speech at the Current Zero Club, Erlangen 2017

P. Zeller, Safety / Electrical Arcing Aspects in Micro Grids with DC Systems, IEEE International Conference on DC Microgrids, Nuremberg, 2017

P. Zeller, DC grids and protection of DC grids, invited speech, ICEI International Conference on Engineering Innovation, Bangkok, 2018

P. Zeller, Analyzation of Glowing Contacts and Electric Arcs at Low Contact Gaps, Low Current and Different Material’s at DC, Speech at the Current Zero Club, Erlangen 2019

P. Zeller, Challenges for Future Renewable Electric Energy Supply and Solutions, Regional Leadership Conference, Sao Paulo, 2019

P. Zeller, Entwicklung eines Mittelspannungs- Batteriespeicherkonzeptes. Elektrotech. Inftech. 137, 25–32 (2020). https://doi.org/10.1007/s00502-020-00785-x

P. B. Erazo, U. Schichler, P. Zeller, Design Challenges of a ±50 kV Battery Energy Storage System (BESS) for MVDC Grids, 2020, VDE High Voltage Technology, Nov 2020

P. Zeller, Series electric plasma discharges of failing contacts up to 10 A at various materials, accepted and uploaded Paper at the ICEC 2021 – Switzerland 30th International Conference on Electrical Contacts