

CURRICULUM VITAE

Work Experience

Jun/2012 – Present

Research Fellow and Doctoral Student

Technische Universität Berlin (TU Berlin), Institute for Machine Tools and Factory Management, Berlin (Germany)

Apr/2016 – Present

Chair for Sustainable Corporate Development,
Head of Chair: Prof. Dr.-Ing. Holger Kohl

Jun/2012 – Mar/2016

Chair for Assembly Technology and Factory Management,
Head of Chair: Prof. Dr.-Ing. Günther Seliger

Education and Training

Oct/2006 – Feb/2012

**Diploma in Engineering and Business Administration
(Dipl.-Wirtsch.-Ing.)**

Otto-von-Guericke-University Magdeburg, Magdeburg (Germany)

Voluntary Commitment

May/2016 – Present

Elected member of the sustainability board at TU Berlin

Technische Universität Berlin, Berlin (Germany)

Tasks

- Consulting of the President and the Academic Senate of TU Berlin
- Promoting the sustainable development of research, teaching and operations at TU Berlin

Aug/2012 – Present

Member of the VDI expert committee FA201 – Lean production systems

The Association of German Engineers (VDI), Düsseldorf (Germany)

Task

Development of the guidelines VDI 2870 „Lean production systems “and VDI 2871 „Lean Leadership”

Experiences as Research Engineer and PhD Student

Main research areas

- Development of sustainable innovations and startups
- Sustainable design of products, processes, and business models
- Sustainability Assessment
- Bionics and in particular evolutionary algorithms
- Industry 4.0

Teaching

Dec/2016

Lecturer for the bachelor course “Technology and Sustainability Assessment” with more than 50 undergraduate students at TU Berlin

Nov/2016 – Present

Lecturer for the master course “Integrated product and business model development for the use case of a micro wind turbine” at the Vietnamese-German University, Ho Chi Minh City (Vietnam), with more than 20 graduate students

Jan/2016

Lecturer for the master course “Technology Management” with more than 40 undergraduate and graduate students at TU Berlin

Sep/2015 – Present

Project manager and Supervisor of the ERASMUS+ project “New Culture in Higher Education: Project-Oriented Learning Beyond Borders – European Engineering Teams”, the project addresses the development and implementation of a novel action-based and transnational master course for the development of sustainable innovations, funded by the European Union, Lectures have been given for the topics “Sustainable Value Creation” and “Startup Development”, www.engineering-team.net

Apr/2015 – Dec/2015

Lecturer at the Beuth University of Applied Sciences Berlin (Germany) for the supervision of a master thesis

Oct/2013 – Apr/2016

Lecturer at the University of Applied Sciences for Engineering and Economics in Berlin (Germany) for the supervision of a bachelor and a master thesis

Mar/2014 – Feb/2016

Coordinator of the master course “Manufacturing and Factory Planning” and lecturer in the field of factory planning, production management, and energy management with more than 200 graduate students at TU Berlin

Publications

2017

Haskins, C.; Stock, T.; Gładysz, B.; Urgo, M.: Development of a project-oriented and transnational master course for training the engineering competencies. In: Madni, A. M.; Boehm, B.; Erwin, D. A.; Ghanem, R.; Wheaton, M. J.; (eds.), Proceedings of the 15th Annual Conference on Systems Engineering Research, 2017, Accepted for Publication.

Stock, T.; Obenaus, M.; Slaymaker, A.; Seliger, G.: A model for the development of sustainable innovations for the early phase of the innovation process. In: Seliger, G.; Kohl, H.; Oosthuizen, T. (eds.), Procedia Manufacturing, 2017.

ISSN 2351-9789

2016

Jovane, F.; Seliger, G.; Stock, T.: Competitive Sustainable Globalization – General Considerations and Perspectives. In: Seliger, G.; Kohl, H.; Oosthuizen, T. (eds.), *Procedia Manufacturing*, 2017. ISSN 2351-9789

VDI FA201 GPS: VDI 2871 Blatt 1 Lean Production Systems – Lean Leadership/ Ganzheitliche Produktionssysteme – Führung. The Association of German Engineers (VDI), VDI Standard, Technical Rule, Beuth, 01/2017.

Link: http://www.vdi.eu/nc/guidelines/vdi_2871_blat_1-ganzheitliche-produktionssysteme-fuehrung/

Stock, T.; Seliger, G.: Methodology for the Development of Hardware Startups. In: Wulfsberg, J. P.; Fette, M.; Montag, T. (eds.), *Advanced Materials Research*, Vol. 1140, pp. 505-512, Trans Tech Publications Ltd, 2016.

Link: <http://www.scientific.net/AMR.1140.505>

DOI 10.4028/www.scientific.net/AMR.1140.505, ISSN 1662-8985

Stock, T.; Gladysz, B.; Haskins, C.; Jarzębowska, E.; Kohl, H.; Strandhagen, O.; Tolio, T.; Urgo, M.: Development of a project-oriented and transnational master course for training the engineering competencies required in an increasingly demanding work-life in Europe. In: *Proceeding of the 44th SEFI conference 2016, Engineering Education on Top of the World: Industry University Cooperation*, 2016.

Link: http://www.sefi.be/?page_id=7084#S

ISBN 978-28735201-44

Stock, T.; Seliger, G.: Opportunities of Sustainable Manufacturing in Industry 4.0. In: Seliger, G.; Kohl, H.; Mallon, J. (eds.), *Procedia CIRP*, Volume 40, pp. 536-541, Elsevier, 2016.

Link: <http://www.sciencedirect.com/science/article/pii/S221282711600144X>

DOI 10.1016/j.procir.2016.01.129, ISSN 2212-8271

VDI FA201 GPS: VDI 2871 Blatt 2 Lean Production Systems – Lean Leadership – List of Methods / Ganzheitliche Produktionssysteme – Führung – Methodenkatolog. The Association of German Engineers (VDI), VDI Standard, Technical Rule, Beuth, 12/2016.

Link: http://www.vdi.eu/nc/guidelines/entwurf_vdi_2871_blat_2-ganzheitliche-produktionssysteme-fuehrung-methodenkatolog/

2015

Bilge, P.; Lendzian, H.; Stock, T.: Standardisierung (Standardization). In: Dombrowski, U.; Mielke, T. (eds.), *Ganzheitliche Produktionssysteme (Lean Production Systems)*, pp. 66-80 Springer, 2015.

Link: <http://www.springer.com/de/book/9783662461631>

ISBN 978-3-662-46164-8

Stock, T.; Bietz, T.; Alva, D.; Swat, M.; Seliger, G.; Bähre, D.: Design and Control of Manufacturing Systems for Enabling Energy-Efficiency and -Flexibility. In: Setchi, R.; Howlett, R.J.; Salinas, I.E. (eds.), *KES Transactions on Sustainable Design and Manufacturing*, Vol 2, No 1, pp. 438-449, 2015.

Link: <http://nimbusvault.net/publications/koala/inimpact/papers/sdm15-040.pdf>

ISBN 978-1-911108-00-9

Swat, M.; Rebschläger, A.; Trapp, K.; Stock, T.; Seliger, G.; Bähre, D.: Investigating the Energy Consumption of the PECM Process for Consideration in the Selection of Manufacturing Process Chains. In: Kara, S. (ed.), Procedia CIRP, Volume 29, pp. 585-590, Elsevier, 2015.
Link: <http://www.sciencedirect.com/science/article/pii/S2212827115004874>

DOI 10.1016/j.procir.2015.02.173, ISSN 2212-8271

Stock, T.; Seliger, G.: Multi-objective Shop Floor Scheduling Using Monitored Energy Data. In: Seliger, G.; Yusof, N.M. (eds.), Procedia CIRP, Volume 26, pp. 510-515, Elsevier, 2015.

Link: <http://www.sciencedirect.com/science/article/pii/S2212827114012323>

DOI 10.1016/j.procir.2014.07.178, ISSN 2212-8271

2014

Stock, T.: Lean Production Systems in the Context of Social Trends: Job Satisfaction the Key Factor to Success. In: Merklein, M.; Franke, J.; Hagenah, H. (eds.), Advanced Materials Research, Volume 1018, pp. 509-516, Trans Tech Publications Ltd, 2014.

Link: <http://www.scientific.net/AMR.1018.509>

DOI 10.4028/www.scientific.net/AMR.1018.509, ISSN 1662-8985

2013

Swat, M.; Stock, T.; Bähre, D.; Seliger, G.: Monitoring production systems for energy-aware planning and design of process chains. In: Seliger, G. (ed.), Proceedings of the 11th Global Conference on Sustainable Manufacturing – Innovative Solutions, pp. 649-654, Universitätsverlag der TU Berlin, 2013.

Link: http://www.gscsm.eu/Papers/142/19.4_53.pdf

ISBN 978-3-7983-2609-5

Emec, S.; Stock, T.; Bilge, P.; Tufinkgi, P.; Kaden, C.; Seliger, G.: Analyse von Potenzialen der Material- und Energieeffizienz in ausgewählten Branchen der Metall verarbeitenden Industrie (Analyzing the energy- and material-efficiency potentials for selected sectors of the metal-working industry). Verlag VDI Zentrum Ressourceneffizienz, Study, Berlin, 2013.

Link: http://www.ressource-deutschland.de/fileadmin/user_upload/downloads/studien/Studie_e_web.pdf

Berlin, 24.02.2017