

CV Stefan Pelz

Prof. Dr. Stefan K. Pelz (Diploma in Forest & Wood Science, University of Freiburg and University of Washington State) received his PhD 2002 in Wood Technology at the University of Freiburg. 2003 he was appointed Full Professor at the University of Applied Sciences Rottenburg. Beside the chair of Forest Utilization – Wood Technology and Wood Energy, he is in charge of the master program Sustainable Energy Competence (M.Sc. SENCE), which covers investigation, implementation, technical and economic aspects of renewable energy systems.



In 2014 he took over the task of the scientific director of the institute of applied science, which is the coordinating body of all research activities of the University.

His research, teaching and consulting activities are strongly focused on various approaches regarding the Optimization of Efficiency along the Biomass supply and value chain, especially in terms of providing raw material and bio-fuel as a renewable feedstock for a sustainable Bio-Economy. In this context he leads the solid biomass and combustion research group (SBC) at the University based on a completely equipped Biomass Conversion Laboratory. Current research projects center at improving the quality of different biofuels and at an increasing efficiency and reduced emissions in the conversion (combustion) processes along the supply & conversion chain.

Due to his research achievements in 2014 he was appointed as a member of Baden-Württemberg Center of Applied Research (BW-CAR), which gathers the strongest researchers of Baden-Württemberg's Universities of Applied Research and which also covers a PhD program. With his research activities he is belonging to the research area "energy systems & resource efficiency".

In his actual projects, he is supervising three PhD Students and

His current consulting projects are dealing with process engineering topics regarding procurement of raw material and industrial conversion processes and with development of integrated renewable energy concepts.

Recent publications

Wöhler, Marius; Jaeger, Dirk; **Pelz, Stefan K.***; Thorwarth, Harald (2017): Potential of integrated emissions reduction systems in a firewood stove under real life operation conditions. In: *Energy & Fuels*. DOI: 10.1021/acs.energyfuels.7b00803

Wöhler, Marius; Jaeger, Dirk; Reichert, Gabriel; Schmidl, Christoph; **Pelz, Stefan K.*** (2017): Influence of pellet length on performance of pellet room heaters under real life operation conditions. In: *Renewable Energy* 105, S. 66–75. DOI: 10.1016/j.renene.2016.12.047

BACHMAIER, H., H. OEHLER, H. HARTMANN, M. RÖNNBÄCK, H. PERSSON, M. G. JESPERSEN, J. H. JENSEN, C. SCHMIDL, G. REICHERT, **S. K. PELZ** und M. WÖHLER (2017): BEREAL - Method for Pellet Stoves: Field Test and Round Robin. In Proceedings of 25th European Biomass Conference and Exhibition 2017

Gehrig, Matthias; Jaeger, Dirk; **Pelz, Stefan K.***; Kirchhof, Rainer; Thorwarth, Harald; Haslinger, Walter (2016): Influence of a Direct Firebed Cooling in a Residential Wood Pellet Boiler with an Ash-Rich Fuel on the Combustion Process and Emissions. In: *Energy & Fuels* 30 (11), S. 9900–9907. DOI: 10.1021/acs.energyfuels.6b02177

Gehrig, Matthias; Jaeger, Dirk; **Pelz, Stefan K.***; Weissinger, Alexander; Groll, Andreas; Thorwarth, Harald; Haslinger, Walter (2016): Influence of firebed temperature on inorganic particle emissions in a residential wood pellet boiler. In: *Atmospheric Environment* 136, S. 61–67. DOI: 10.1016/j.atmosenv.2016.04.018

Wöhler, M., Andersen, J.S., Becker, G., Persson, H., Reichert, G., Schön, C., Schmidl, C., Jaeger, D., **Pelz, Stefan K.** (2016): Investigation of real life operation of biomass room heating appliances—Results of a European survey. In: *Applied Energy* 169, S. 240–249. DOI: 10.1016/j.apenergy.2016.01.119

WÖHLER, M. und **S. K. PELZ** (2016): Advanced Testing Methods for Better Real Life Performance of Biomass Heating Appliances. Oral presentation at Pellet Stove Design Challenge, Brookhaven National Laboratory, New York, USA, 2016. URL: <http://www.forgreenheat.org/decaathlon/panel.html>. (abgerufen am: 24.5.2017).

Gehrig, M.; **Pelz, Stefan K.**; Jaeger, D.; Hofmeister, G.; Groll, A.; Thorwarth, H.; Haslinger, W. (2015): Implementation of a firebed cooling device and its influence on emissions and combustion parameters at a residential wood pellet boiler. In: *Applied Energy*, doi:10.1016/j.apenergy.2015.08.133 159, S. 310–316.

Rottenburg, 31th of May 2017

