

**Declaration in accordance with the Doctoral Regulations of the Faculty  
09 in the version of 29.05.2019 § 17 (2)**

"I declare that the doctoral thesis here submitted is entirely my own work, written without any unauthorised help by a third party and solely with the assistance referred to in the thesis. I have indicated in the text those texts that have been quoted from already published sources, either verbatim or by analogy and all statements based on verbally conveyed information. During the research carried out by me and referred to in the doctoral thesis, I have at all times followed the principles of good scholarly practice as defined in the Statute of Justus Liebig University Giessen for Ensuring of Good Academic Practice."