



Novel Approaches for Assessment and Control of Gaseous Emission Levels at Animal Production Facilities

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Message from the Guest Editors

Gaseous emissions from animal houses play an increasingly crucial role in the societal acceptance of livestock production. Thereby it is important to have sufficiently reliable estimations of the respective emission levels (NH_3 , CH_4 , N_2O) at both standard housing systems and systems equipped with emission reduction techniques. Quantifying emission levels under practice conditions still proves to be very challenging and the complexity of the emission (reduction) processes still poses important knowledge gaps. Uncertainties remain very significant, especially for naturally ventilated barns, litter based systems and outside yards. There is an urgent need for tackling these uncertainties starting from a better understanding of the emission (reduction) processes and gas transport occurring at these important sources.

This special issue focusses on three aims: 1. novel approaches to improve our understanding of emission (reduction) processes; 2. deducing better assessment tools to produce sufficiently reliable estimations of gaseous emission levels at animal houses and/or exercise yards; 3. suggesting pathways towards innovation and optimization of emission reduction techniques





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Message from the Editor-in-Chief

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