

# Successful Participation in the 10th LfL Biogas Round Robin Test



*The Bavarian State Research Centre for Agriculture (LfL) organised its tenth biogas round robin test in June 2016. Successful participation of our PFI laboratory testified to the quality of our analyses.*

Monitoring and control of the process biology is of supreme importance for optimum performance of a biogas plant. Apart from the type of plant, the substrates used, for example renewable resources, liquid manure, or biowaste, differ considerably in their fermentation behaviour and their biogas generation potential. Incorrect dosage of substrates or a lack of trace nutrients necessary for bacterial growth can seriously interfere with the fermentation process. Such interference as well as non-optimum operation of the plant can have huge economic consequences for the plant operator. Regular monitoring of the substrates and the process are therefore strongly advised, both on-site and by external laboratories. A declaration in accordance with the Fertiliser Regulation is often required prior to spreading of the digestate.

Owing to the growing significance of trace elements and nutrients, this year our laboratory has focused its attention on elemental analysis and participated in the “minerals” and “nutrients in digestate” round robin test groups. Of interest were the contents of boron, cadmium, cobalt, chromium, copper, molybdenum, nickel, selenium, sodium, and zinc in the fermenter content, and the pH value and the dry matter content as well as the contents of ammonium, total nitrogen, phosphorus, magnesium, potassium, calcium, and sulphur in the digestate. In comparison with the other participants, our laboratory submitted excellent results for all parameters. The results confirm PFI’s high quality level in the area of analysis for biogas plants.

## **Further information:**

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