

## **Accreditation of Higher Education Institution Laboratories. Comparing the Brazilian and German status with focus on Energy sector.**

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According to the International Organization for Standardization (ISO), "accreditation of Laboratories facilitates cooperation between Laboratories and other Organizations, assists in the exchange of information and experiences, as well as in the harmonization of standards and procedures. Acceptance of results between countries is facilitated if the Laboratories are accredited." In Germany, according to Deutsche Akkreditierungsstelle (DAkkS), there are 2961 Laboratories ISO/IEC 17025 accredited (General requirements for the competence of testing and calibration Laboratories), of which 128 are University Laboratories, 4,3% of the total. In addition, with 425 High Education Institution and 128 accredited Laboratories, Germany has a high rate of accreditation. On the other hand, in Brazil, accreditation of University Laboratories is not widely practiced. According to the National Institute of Metrology, Quality and Technology (INMETRO), there are 1612 accredited Laboratories in Brazil, of which 38 are of University, 2,4% of the total, or 44% less than Germany. Considering the 2537 High Education Institution, there are only 38 accredited Laboratories. Focusing on Energy and Fuel sector, the Brazilian Educational System offers 7 accredited Laboratories, while Germany offers just 2. This numbers should be as high as possible, but initiatives are needed to increase the amount of accreditation in this areas, resulting in more cooperation and researches between German and Brazilian Universities, promoting solutions involving environmental issues.