

CHEMICAL HYDROLYSIS AS A STAGE TO PREPARE FERMENTATION OF LIGNOCELLULOSE: A REVIEW

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The golden age of fossil fuels is going to be finished. The landfill and seas are flooded with wastes. We need to find a new source of energy carrier and everyday-life products. An option is use of lignocellulosic wastes and releasing landfills from biowastes. In Poland, lignocellulosic wastes constitute 43% of municipal wastes (4.41 mln mg). However, they must be pre-treated in order to allow fermentation process. Here, the methods of lignocellulose pre-treatment before fermentation processes are presented. Anaerobic digestion and dark fermentation are sustainable methods (technologies) responding to increasing demand for energy and products. The most efficient pre-treatment method seems to be chemical hydrolysis if compared to physical, biological, thermochemical ones and thus the review is concerned utmost with chemical methods.

Biography

Gaweł Sołowski has completed his Master Degree from Silesian University of Technology at Gliwice in 2014. Now, he is a PhD student at Institute of Fluid-Flow Machinery Polish Academy of Science. He has been serving as an Assistant Editor in *Open Chemistry* by de Gruyter and published three papers in highly reputed journal.

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