Sigal4NRG Sino-German Laboratory for Algal Bioenergy





The initiative

Biodiesel and hydrogen from algae - a promising contribution to the environmental protection.

The department Plant Biochemistry/Photobiotechnology of the Ruhr-University Bochum und the Single Cell Center of the Qingdao Instititute of BioEnergy & Bioprocess Technology of the Chinese Academy of Sciences are experts in the field of algal biotechnology.

In a joint project they aim to develop environmentally friendly energy from algae. Energy production by the means of microalgae in the form of biodiesel with Nannochloropsis oceanica and in the form of biohydrogen with Chlamydomonas reinhardtii is the ambitious aim of the joint project Sigal4NRG.

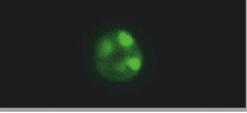
Sigal4NRG stands for Sino-German lab for algae bioenergy. Within this laboratory the screening technologies and the expertise in genome editing of the Chinese Single Cell Center is ought to be linked to the expertise in mass spectrometry and metabolite analyses of the German Plant Biochemistry/Photobiotechnology group.

Scientific goal of the undertaking is the development of superior algal strains without limiting features like the oxygen sensitivity. These strains shall contribute to an ecological and sustainable energy production. Thereby, bioenergy production with algae can become a competitor for conventional processes.

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Top: Chlamydomonas reinhardtii and Nannochloropsis oceanica. **Middle:** Investigation of microalgae at the Ruhr-University Bochum. **Bottom:** Logos of the joint project and the Federal Ministry of Education and Research.