Dr. Katharina Ludwig, M.Sc.(born Meixner)
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Date of birth	19th March 1987
Nationality	Austrian

Positions

2019 – present	FH Campus Wien, External Lecturer
2016 – present	BEST – Bioenergy and Sustainable Technologies GmbH, Bioconversion and Biogas Systems; Head of Lab Tulln
2016 – present	Austrian Biotech University of Applied Sciences, Campus Tulln, External Lecturer
2019 – 2022	University of Natural Resources and Life Sciences, Vienna; IFA-Tulln, Institute for Environmental Biotechnology, Post-Doc
2010 – 2018	University of Natural Resources and Life Sciences, Vienna; IFA-Tulln, Institute for Environmental Biotechnology; Researcher

Formal Education

2012 – 2018	Doctorate: University of Natural Resources and Life Sciences, Vienna; IFA-Tulln, Institute for Environmental Biotechnology "*Integrating cyanobacterial poly(3-hydroxybutyrate) production into biorefinery concepts*"
2009 – 2011	Master's program: University of Applied Sciences Wr. Neustadt, Campus Tulln; Focus: Active Substances, Environmental Analysis and Monitoring
2006 – 2009	Bachelor's program: University of Applied Sciences Wr. Neustadt, Campus Tulln; Focus: Bioplastics, Food analytics

Focus and Skills

Cyanobacteria / microalgae biotechnology, digestate treatment, anaerobic digestion, biorefinery

English (fluent), driver's license B, first aid course

Internships (selection)

Master's project September 2010 – May 2011	University of Natural Resources and Life Sciences, Vienna; IFA-Tulln, Institute for Environmental Biotechnology "*Evaluating digestate treatment technologies for thin stillage digestate*"
Bachelor's project January – April 2009	Dynea Austria GmbH "*Production of particle boards with sugar-based binders*"
Internships October 2015	Universidad Nacional de Cuyo, Mendoza, Argentina – OeAD students exchange Cultivation of *Chlorella sp*. for the production of bio-compounds

Reviewer for Scientific Journals

Journal of Applied Phycology, Bioresource Technology Reports, Energy, Sustainability and Society, Industrial Biotechnology, Engineering in Life Sciences

Scientific Publications (state 2022)

Meixner, K; Daffert, C; Bauer, L; Drosg, B; Fritz, I. (2022) PHB Producing Cyanobacteria Found in the Neighborhood-Their Isolation, Purification and Performance Testing. BIOENGINEERING-BASEL. 2022; 9(4), 178; https://doi.org/10.3390/bioengineering9040178

Meixner, K; Daffert, C; Dalnodar, D; Mrazova, K; Hrubanova, K; Krzyzanek, V; Nebesarova, J; Samek, O; Sedrlova, Z; Slaninova, E; Sedlacek, P; Obruca, S; Fritz, I. (2022) Glycogen, poly(3-hydroxybutyrate) and pigment accumulation in three *Synechocystis* strains when exposed to a stepwise increasing salt stress. J APPL PHYCOL. 2022; 34(3): 1227-1241; https://doi.org/10.1007/s10811-022-02693-3

Drosg, B., Neubauer, M., Marzynski, M., Meixner, K. (2021) Valorisation of Starch Wastewater by Anaerobic Fermentation. Appl. Sci. 2021, 11(21), 10482; https://doi.org/10.3390/app112110482

Bauer, L., Ranglova, K., Masojidek, J; Drosg, B; Meixner, K. (2021) Digestate as Sustainable Nutrient Source for Microalgae-Challenges and Prospects. APPL SCI-BASEL. 2021; 11(3), 1056; https://doi.org/10.3390/app11031056

Obruca S., Sedlacek P., Slaninova E., Fritz I., Daffert C., Meixner K., Sedrlova Z., Koller M. (2020) Novel unexpected functions of PHA granules. Appl Microbiol Biotechnol. 2020; 104(11):4795-4810; https://doi.org/10.1007/s00253-020-10568-1

Sabapathy P. C., Devaraj S., Meixner K., Anburajan P., Kathirvel P., Ravikumar Y., Zabed H. M., Qi X., (2020) Recent developments in Polyhydroxyalkanoates (PHAs) production - A review. Bioresour Technol. 2020; 306:123132; https://doi.org/10.1016/j.biortech.2020.123132

Meixner K., Kubiczek M., Fritz I. (2020) Microplastic in soil–current status in Europe with special focus on method tests with Austrian samples. AIMS Environmental Science, 7(2), 174-191; ISSN 2372-0344; https://doi.org/10.3934/environsci.2020011

Panuschka S., Drosg B., Ellersdorfer M., Meixner K., Fritz I. (2019) Photoautotrophic production of poly-hydroxybutyrate - First detailed cost estimations. ALGAL RES. 2019; 41, 101558; https://doi.org/10.1016/j.algal.2019.101558

Troschl C., Meixner K., Fritz I., Leitner K., Palacios Romero A., Kovalcik A., Sedlacek P., Drosg B. (2018) Pilot-scale production of poly-β-hydroxybutyrate with the cyanobacterium *Synechocytis* sp. CCALA192 in a non-sterile tubular photobioreactor. Algal Research. 2018; 34:116-125; https://doi.org/10.1016/j.algal.2018.07.011

Meixner K., Kovalcik A., Sykacek E., Gruber-Brunhumer M., Zeilinger W., Markl K., Haas C., Fritz I., Mundigler N., Stelzer F., Neureiter M., Fuchs W., Drosg B. (2018) Cyanobacteria Biorefinery – Production of poly(3-hydroxybutyrate) with *Synechocystis salina* and utilisation of residual biomass. J BIOTECHNOL.. 2018; 265:46-53; https://doi.org/10.1016/j.jbiotec.2017.10.020

Kovalcik A., Meixner K., Mihalic M., Zeilinger W., Fritz I., Fuchs W., Kucharczyk P., Stelzer F., Drosg B. (2017). Characterization of polyhydroxyalkanoates produced by *Synechocystis salina* from digestate supernatant. International Journal of Biological Macromolecules. https://doi.org/10.1016/j.ijbiomac.2017.04.054

Troschl C., Meixner K., Drosg B. (2017). Cyanobacterial PHA Production — Review of Recent Advances and a Summary of Three Years' Working Experience Running a Pilot Plant. Bioengineering, 4(2), 26. https://doi.org/10.3390/bioengineering4020026

Meixner K., Kovalcik A., Sykacek E., Fritz I., Drosg B. (2017): Combining Photoautotrophic Polyhydroxybutyrate Production by Cyanobacteria with Anaerobic Digestion for Providing Nutrients and Utilizing Residual Biomass. In: Erik Meers, Evi Michels, Eva Clymans, Stefanie Scheidl, Bruno Deremince (Eds.), Communication in Agricultural and Applied Biological Sciences - Special Issue: Advances & Trends in Biogas and Biorefineries 82(4); Faculty of Bioscence Engineering, Ghent University, 9000 Gent (Belgium); ISBN 1379-1176

Meixner K., Fritz I., Daffert C., Markl K., Fuchs W., Drosg B. (2016) Processing recommendations for using low-solids digestate as nutrient solution for poly-beta-hydroxybutyrate production with *Synechocystis salina*. J BIOTECHNOL. 2016; 240: 61-67; https://doi.org/10.1016/j.jbiotec.2016.10.023

Wagner J., Bransgrove R., Beacham T. A., Allen M. J., Meixner K., Drosg B., Ting V. P., Chuck C. J. (2016) Co-production of bio-oil and propylene through the hydrothermal liquefaction of polyhydroxybutyrate producing cyanobacteria. BIORESOURCE TECHNOL. 2016; 207: 166-174;

https://doi.org/10.1016/j.biortech.2016.01.114

Meixner K., Fuchs W., Valkova T., Svardal K., Loderer C., Neureiter M., Bochmann G., Drosg B. (2015): Effect of precipitating agents on centrifugation and ultrafiltration performance of thin stillage digestate. SEP PURIF TECHNOL. 2015; 145: 154-160; https://doi.org/10.1016/j.seppur.2015.03.003

Drosg B., Fuchs W., Meixner K., Waltenberger R., Kirchmayr R., Braun R., Bochmann G. (2013) Anaerobic digestion of stillage fractions - estimation of the potential for energy recovery in bioethanol plants. WATER SCI TECHNOL. 2013; 67(3): 494-505; https://doi.org/10.2166/wst.2012.574