Industrial Biotechnology is a central pillar of the knowledge-based bioeconomy with applications e.g. in the food & feed, biofuel, cosmetics and medical industries. To further strengthen this sector of industry, advances in biological research and molecular technologies are combined with novel synthetic biology and industrial production strategies to improve the quality of existing product, increase the sustainability and commercial viability of product generation and to generate novel product lines.

Complementing the traditional heterotrophic bacteria- and yeast-based systems, photosynthetic hosts offer great additional potential, since these hosts can use sunlight energy as the sole energy source for biological product generation. Algae are ideal photosynthetic hosts in many respects. Algal growth is not restricted to arable land, can reach high biomass production rates and the cultivation conditions can be strictly controlled. Furthermore, and genetic tools and techniques for metabolic engineering are well established.

The conference program will include highly relevant topics from fundamental algal biology research to applied aspects of algal biotechnology, with a special focus on molecular biology. Distinguished invited speakers from academia and industry will present current prospects and furthermore, short talks selected from the submitted abstracts will complete the oral presentation section of the conference.

The Conference aims to give a broad overview of the challenges facing the exploitation of microalgae and cyanobacteria for industrial biotechnology, from biofuels to high value products and chemicals. Application form & program will be available at https://www.cebitec.uni-bielefeld.de/icrc-2020

Conference venue: Center for Interdisciplinary Research (ZiF), Methoden 1, 33615 Bielefeld, Germany.