

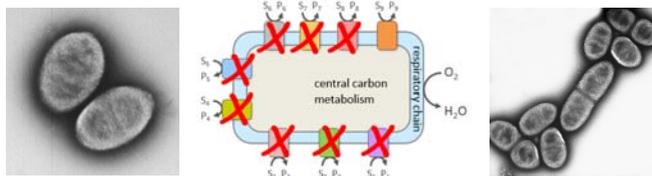
AAB2018

The 5th International Conference on Acetic Acid Bacteria from 04-07 Sept 2018 at the TUM School of Life Sciences Weihenstephan of the Technical University of Munich, Germany, follows a successful series of conferences on this topic held in Reggio Emilia, Italy (2005), Nagoya, Japan (2008), Cordoba, Spain (2012) and Taiyuan, P.R. China (2015).

The use of acetic acid bacteria (AAB) in ancient traditional processes is a cultural heritage all over the world. Besides being key microorganisms for the production of a great variety of vinegars, they contribute to kombucha, water kefir or cocoa fermentation and many more. Specific metabolic capacities, namely incomplete oxidation reactions or polysaccharide production, are further used in biotechnological processes for the production of (precursors of) pharmaceutical and food compounds. The growing industrial production and awareness of health from nutrition stipulates a deeper look into all aspects of the fermentations with AAB. The resulting science-based understanding of nutritionally enhanced, sensorially improved vinegar and beverage products with enhanced flavor, shelf life and added value functions helps to improve industrial production and quality of artisanal foods. Also, an enhanced scientific view of AAB properties and functions enables the development of novel biotechnological production processes.

Scope

The aim of this conference is to advance our understanding of AAB biodiversity, lifestyle, interaction with matrix, environment, and microbial communities in their natural habitats as well as in the vinegar and other biotechnological processes. It will aim to divulgate, to both the scientific community and industrial stakeholders, the most recent developments in scientific research on AAB, from a microbiological, biochemical, molecular, biological, technological and consumer point of view.



Preliminary Program

In addition to **keynote lectures** by world leaders in the field of AAB, the conference offers opportunities for **short oral** and **poster presentations** selected from the submitted abstracts. Scientific sessions:

Ecology and Biodiversity

AAB occur in various diverse natural niches such as flowers, fruits, insect digestive tracts, as well as in man-shaped habitats such as vinegars or other fermented foods. This session deals with the role of acetic acid bacteria in microbial consortia and the impact of major factors determining the microbiota dynamics and composition, including cell-to cell contact or exopolysaccharide and biofilm formation.

Genetics and Molecular Biology

Modern genetic and high-throughput *omics* methods have become instrumental to gain a deeper understanding of the molecular biology and gene regulation in AAB. In this session, their genomic biodiversity and plasticity is discussed with respect to pan- and core genomes, plasmidomes and mobile genetic elements including bacteriophages.

Physiology and Metabolism

The lifestyle of AAB in their natural habitats as well as in industrial production processes is supported by their unique metabolism (e. g. oxidative metabolism, incomplete glycolysis/TCA cycle, acid/sugar tolerance). This session is centered on AAB physiology and metabolism, including mechanisms of mutualistic interaction, competition and antagonistic activities

Vinegars, Beverages & Food, other Applications of AAB

Various AAB are used in different fields of application, from traditional food fermentations to industrial production of food ingredients, or compounds of interest for the chemical, cosmetics or pharmaceutical industries. In this session, areas of biotechnological application and bioprocess engineering are discussed, including existing and future industrial processes, process design, sensory evaluation of food products, or agricultural and medical applications.

The scientific program is accompanied by an **Industrial Exhibition**. Interested companies are invited to contact the conference organizers for further details.

www.aab.wzw.tum.de

Dates and Deadlines

Early registration	31 May 2018
Registration	15 July 2018
Abstract submission	30 June 2018
Notification Poster/Lecture	31 July 2018

On-site registration	04 Sept 2018, 15:00
Conference begin	04 Sept 2018, 17:00
Conference closing	07 Sept 2018, 13:00

Registration

Registration will be open from March 15, 2018. Early registration as well as early hotel booking is strongly recommended in light of the limited hotel capacity in the town of Freising.

The registration fee includes and a USB stick with the book of abstracts, catering during the conference, participation in the networking excursion and the conference dinner.

	Registration fee	
	early	regular
Academia	520 €	590 €
Student*	340 €	390 €
Industry	590 €	670 €

* Includes PhD students; student status must be properly justified

Payment is possible via bank transfer to the conference account, via PayPal or via credit card. For details, see the conference website.

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