

The EBC Brewing Science Group: Concept of scientific exchange and Report 2014-16



EBC Invited Symposium
World Brewing Congress
Denver, August 15th, 2016
Carsten Zufall



Historical background

- EBC founded in 1946
- The Barley & Malt Committee founded in 1949, Analysis Committee at congress 1953
- Specialized expert groups started to work from 1957 onwards, e. g.:
 - EBC Microbiology Group
 - EBC Biochemistry Group
- Opportunity for improvement in coordination of activities of independent groups and sub-groups
- EBC Brewing Science Group (BSG) called into being (as a successor to the Micro and Biochemistry Group) and had its first business meeting during the EBC congress 1995 in Brussels



Standard concept for congresses

Most technical and scientific congresses have a similar concept:

- Anybody may register and attend
- Anybody may present (provided quality requirements are met)
- The presented work becomes available to the designated public in the form of the Proceedings or copied presentations
- Copyright may be transferred to the congress-organizing entity and, eventually, the public domain



A different concept

The EBC Brewing Science Group meetings follow other guidelines:

- Most important principle is that presentations given are strictly confidential
- Consequently, attendance is restricted
- Participation is by membership only, similar to a club with a limited number of members
- This corresponds to the fact that globalization has decreased the number of industry research units and increased the requirements for restricting any presented information

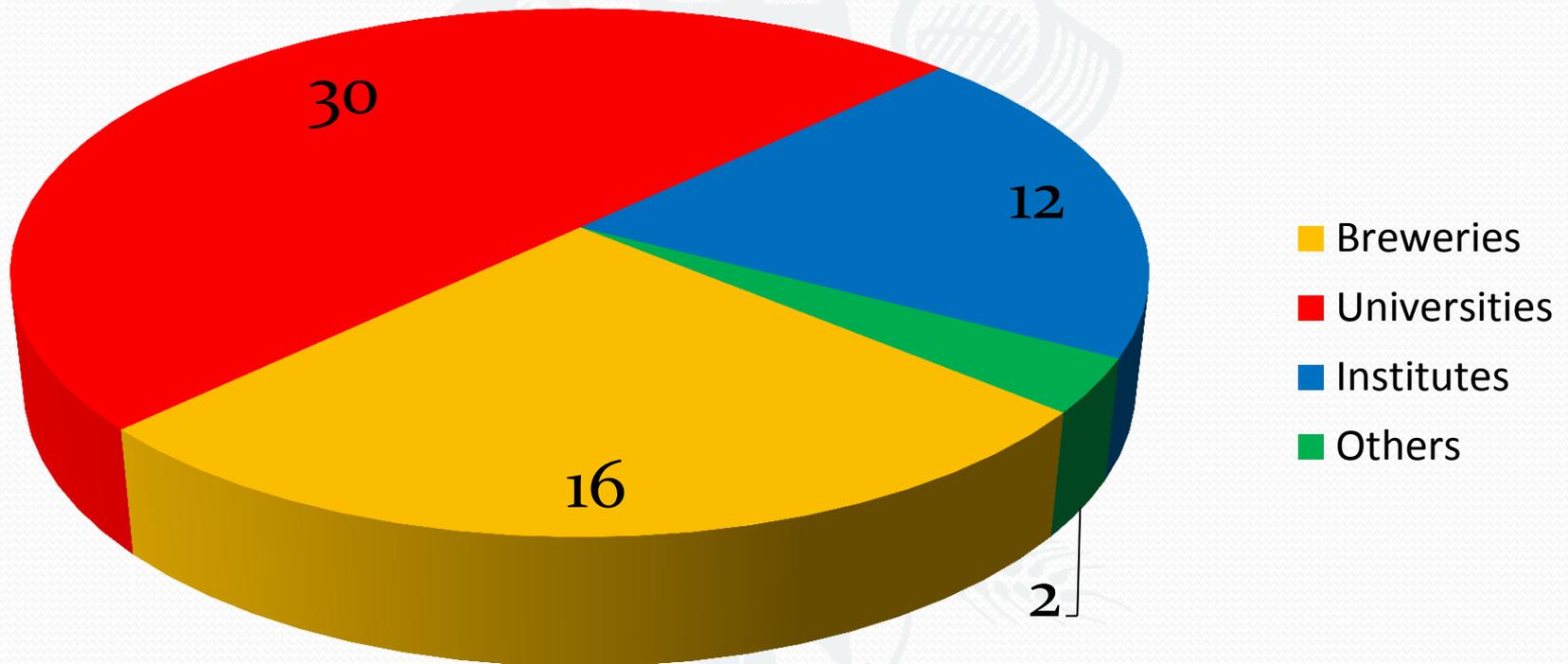


Benefits of the BSG concept

- BSG confidentiality enables industry researchers to discuss classified topics and seek expert opinions from fellow researchers both from other companies as well as from other research institutes
- Thus the EBC BSG is an ideal forum for scientific interchange between the brewing sector and universities and other research institutions, to the benefit of all parties
- The group serves as a potential “technology resource” to The Brewers of Europe and a think-tank for the Issue Management Teams established to address emerging topics relevant to the brewing sector



BSG membership structure





BSG meetings so far (1)

Year	Type	Venue	Country	Host
1995	Congress Meeting	Brussels	BE	EBC Congress
1996	Technical Meeting #1	Berlin	DE	VLB Berlin
1997	Congress Meeting	Maastricht	NL	EBC Congress
1998	Technical Meeting #2	Edinburgh	UK	ICBD / Heriot-Watt University
1999	Congress Meeting	Cannes	FR	EBC Congress
2000	Technical Meeting #3	Pilsen	CZ	Czech Institute for Beer & Malt
2001	Congress Meeting	Budapest	HU	EBC Congress
2002	Technical Meeting #4	Oporto	PT	Univ. of Oporto / APCV
2003	Congress Meeting	Dublin	IE	EBC Congress
2004	Technical Meeting #5	Lahti	FI	VTT
2005	Congress Meeting	Prague	CZ	EBC Congress



BSG meetings so far (2)

Year	Type	Venue	Country	Host
2006	Technical Meeting #6	Perugia	IT	CERB / Perugia University
2007	Congress Meeting	Venice	IT	EBC Congress
2008	Technical Meeting #7	Nottingham	UK	Nottingham Univ. Brewing Science
2009	Congress Meeting	Hamburg	DE	EBC Congress
2010	Technical Meeting #8	Wolnzach	DE	Hop Growers / TU Munich WZW
2011	Congress Meeting	Glasgow	UK	EBC Congress
2012	Technical Meeting #9	Copenhagen	DK	Scandinavian School of Brewing / Carlsberg
2013	Congress Meeting	Luxemburg	LU	EBC Congress
2014	Technical Meeting #10	Vienna	AT	Austrian Brewers' Federation
2015	Congress Meeting	Oporto	PT	EBC Congress
2016	Technical Meeting #11	Wroclaw	PL	Polish Brewers' Association



EBC Symposium 2014 in Vienna

- First EBC symposium on beer mix beverages
 - Attracted over 120 participants from breweries, soft drinks companies, juice and aroma suppliers as well as equipment manufacturers
- Selected topics
 - Market trends and consumer preference
 - Biological risks of beer mix beverages, especially in packaging
 - Non-biological stability of beer mix beverages
 - Flavour stability of beer mix beverages
 - Ingredients solubility issues
 - Analytical control of beer mix beverages and their stability
 - Beer mix beverages taster training
 - Inline process technology



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EBC BSG Meeting 2014 in Vienna



- 17 scientific presentations from industry and academy
 - Topics ranging from raw materials (gushing, gluten-free beer) over yeast and yeast breeding to fermentation themes, beer flavour stability and filtration/stabilisation of beer
- Joint effort: Identification of “hot topics” to become relevant for the brewing industry in a year’s time (until May 2015)
 - Industry and academy members were separately asked to list and prioritize relevant topics in different workgroups in parallel
 - Most named topics were subjected to an additional study in cooperation with Campden BRI
 - Nine new BSG members were elected (5 from universities, 3 from institutes and 1 from the brewing industry)

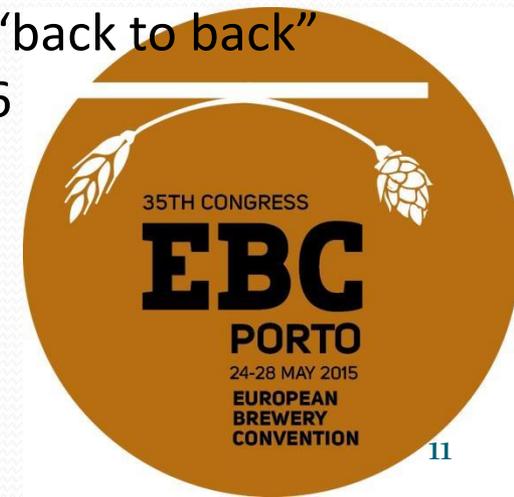


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EBC Congress 2015 in Oporto

- Keynote presentation by BSG members on “hot topics” and trends the industry is facing
 - The topics had been predicted a year ago at the Vienna BSG meeting
 - A thorough evaluation showed that over 90% of predictions were accurate, a clear evidence of the value of the Brewing Science Group expertise
- BSG meetings and symposiums
 - The highly successful combination of EBC symposia “back to back” with EBC BSG meetings has been confirmed for 2016
- BSG administration
 - BSG chairperson re-elected





EBC Brewing Science Group: Challenges

- Less research in the industry sector
 - Many of the large brewing groups have reduced their own research as well as their research funding
 - In a global scenario, publishing research is less attractive for the industry (but may be considered in the confidential BSG environment)
 - Some craft brewers are building own research units, but still too little to fill the gap left by the reduction of activity from the big groups
- Less research funding available for institutes and universities
 - Increasingly difficult to do research as well as attend congresses
 - BSG has very low fees for its meetings, even combined with EBC symposia, and can help find institutional and industry funding



EBC Brewing Science Group: Outlook

- Making sure that the EBC BSG will continue to attract top brewing experts from Europe and the world
- Maintain and promote BSG confidentiality, which enables researchers to discuss classified topics, making BSG *the* forum for scientific interchange between industry and academy
- Crucial to achieve balance between academy members from universities and institutes and industry members from breweries and maltings
- Next technical meeting:
September 20th-22nd in Wroclaw, Poland



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