Innovation level:	VH Berlin applied R&D road map 2015 – 2020 in the yeast production, with focus on COFALEC. Status 03/2016 completed studies/projects, actual research projects (RP) in bold letters, ideas/future projects in cursive letters)		
High:		**Evolutionary engineering / Biocatalyses:** *Catalytic enzymes:* *Yeast enzymes for sugar catalysis / inversion in fermentation reactors* *(new study / collaborative RP ?)* GSH enrichment in yeasts (RP ZIM VP (ILU) 2013 ff.)	**System biology / model control:** **"yeast scent"** a proxy for metabolic modelling **(RP e-Bio transfer (IAMB) 2015 -2017.)** *Biomarkers:* *(Single) yeast cell aging analysis* *(new study / collaborative RP ?)*
Average:		**Process analytical technology (PAT):** **NIR 1.7 YCA** yeast spectrometer (beta test 2013 ff. + molasses 2015) Electronic nose for yeast flavors (RP ZIM KF 2014)	**Process optimisation:** *Absorption chillers in yeast productions* *Excess energy analysis for Ab - chilling application* *(new study / collaborative RP ?)* **Drying / coatings:** **Functional YCW, to replace gelatine in coating** **(RP AIF/IGF (FhG IVV) 2016 ff.)**
Low:	**HACCP Methods:** **"Compact dry plate" detection"** **(accredited 2014)** Baking as killing step evaluation (study 2014)	**QM Methods:** **Raising power probe (RPP)** **(beta test 2014 ff.)** MALDI-TOF yeast strain identification (RP ZIM KF 2014) *Lane Eynon semi-automatic titrator* *Molasses quality analysis* *(new study / collaborative RP ?)*	**Fermentation recipies / substrates:** *Organic molasses grown yeast delays* *in cold dough applications* *(new study / collaborative RP ?)*
Improvement potential:	**Low**	**Average**	**High**