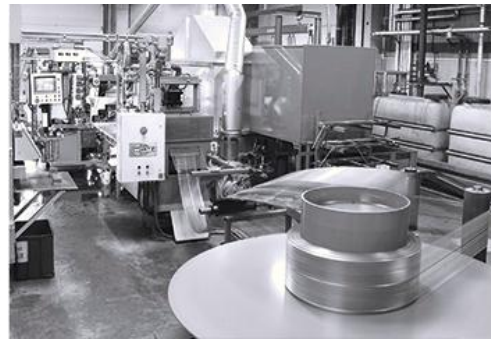


NAM Recipe Optimization for DCA & CR Variation

ALBA 2026 Mainz

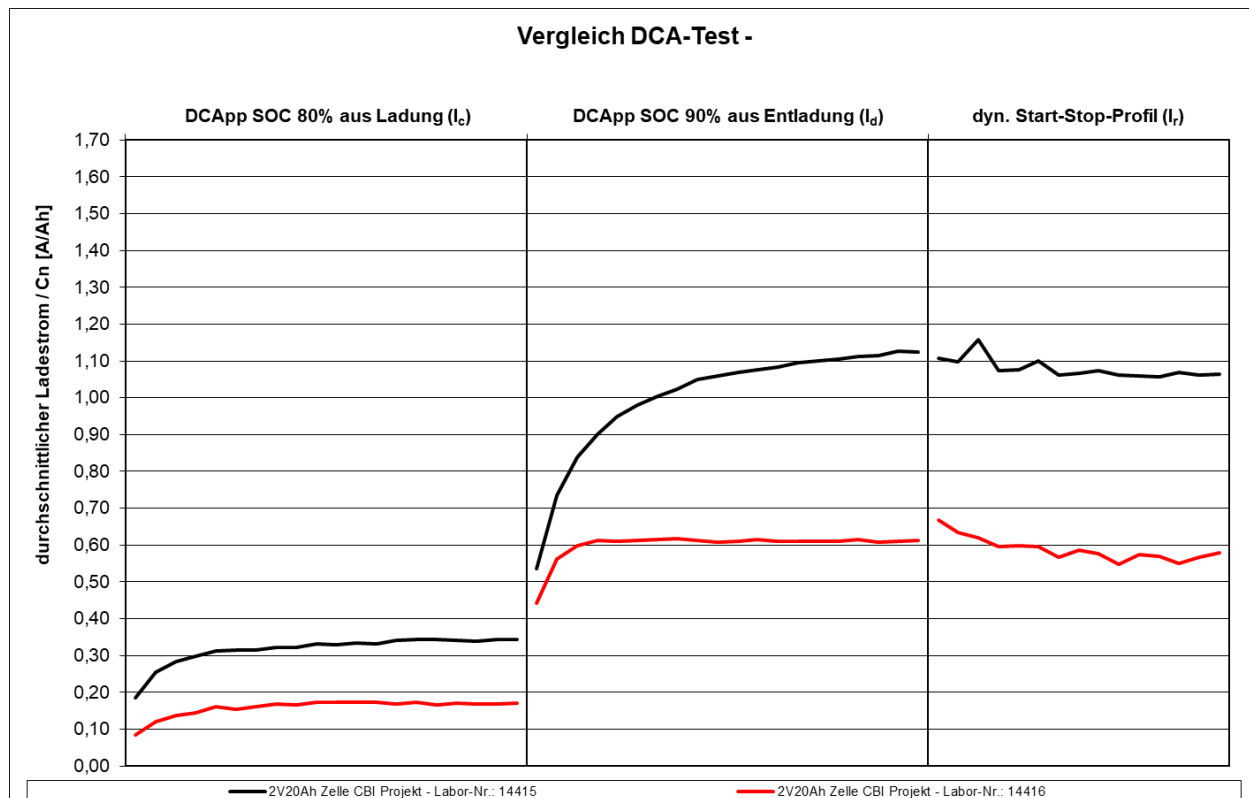
Markus Föhlisch



Additional Tests

- Within MOLL / Fraunhofer / Karden CBI project tests cells did not show expected variation in DCA or charge recovery
- Chosen carbon / Vanisperse combination was figured out to be cause of issue
- Additional samples with MOLL carbon + Vanisperse were prepared to verify DoE-approach for DCA-CR-comparison:
 - Carbon 50-100m²/g, MOLL-type Vanisperse
 - Sample 1: 2% carbon + 0,05% Vanisperse
 - Sample 2: 0,25% carbon + 0,35% Vanisperse

Test Results – MOLL carbon + Vanisperse



Sample 1:

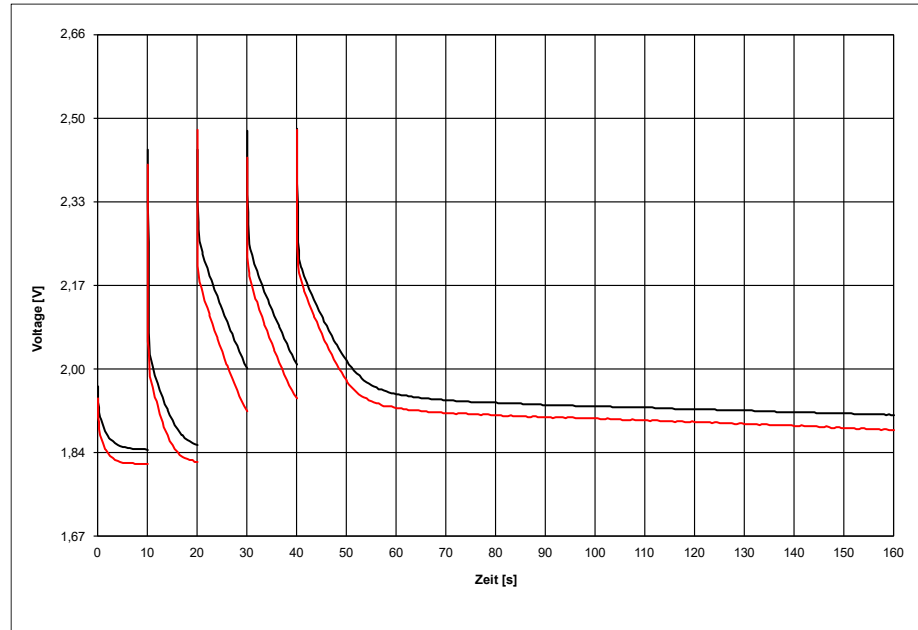
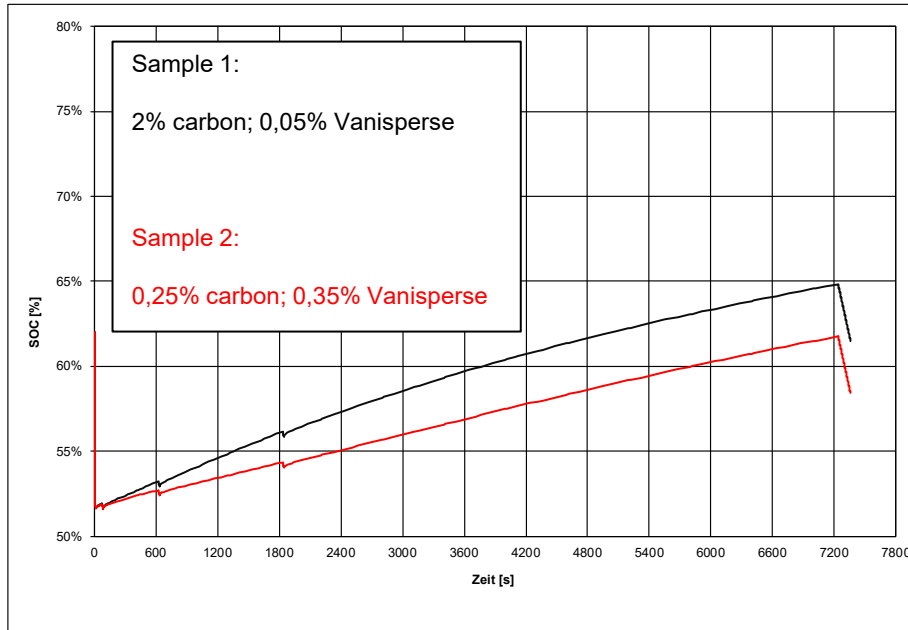
2% carbon; 0,05% Vanisperse

Sample 2:

0,25% carbon; 0,35% Vanisperse

	I_c	I_d	I_r	I_{DCA}
Sample 1	0,317 A/Ah	1,004 A/Ah	1,079 A/Ah	0,4404 A/Ah
Sample 2	0,159 A/Ah	0,600 A/Ah	0,589 A/Ah	0,1626 A/Ah

Test Results – MOLL carbon + Vanisperse



- DCA-trend translates into CR-trend
- ➔ Further samples will be manufactured using this carbon / Vanisperse combination to repeat DoE-approach