Supplementary file 1: screenshot of electrochemical procedure in Maccor cycler.

Build Test - [C:\Maccor\Procedur\STA_NMC_Gr_ELCELL.000]

File   Edit   Options   Window   Help

Description

STA studies, condition and charge a cell.

Step	Type	Mode	Value	Limit	Value	End Type	Op	Value	Goto	Report Type	Value	Options	Step Note (80 character maximum)
1	Rest					Step Time	=	00:00:05	002	Step Time	00:00:01	ANNN	
						Voltage	>=	4.3	011				
						Thermocouple	>=	1 / 50.0	011				
2	Rest					Step Time	=	00:01:00	003	Step Time	00:00:10	ANNN	Collect OCV of a fresh cell
3	Do1												
4	Charge	Current	0.05C	Voltage	4.2	Current	<=	0.02C	005	Step Time	00:01:00	ANNN	
						Step Time	=	30:00:00	005	Voltage	0.1		
5	Rest					Step Time	=	01:00:00	006	Step Time	00:01:00	ANNN	
										Voltage	0.1		
6	Discharge	Current	0.05C			Voltage	<=	3.0	007	Step Time	00:01:00	ANNN	
						Step Time	=	30:00:00	007	Voltage	0.1		
7	Rest					Step Time	=	01:00:00	008	Step Time	00:01:00	ANNN	
										Voltage	0.1		
8	Loop1					Loop Count	=	2	009				Charge-Discharge 2 times
9	Charge	Current	0.05C	Voltage	4.2	Current	<=	0.02C	010	Step Time	00:01:00	ANNN	Final charge
						Step Time	=	30:00:00	010	Voltage	0.1		
10	Rest					Step Time	=	01:00:00	011	Step Time	00:01:00	ANNN	
										Voltage	0.1		
11	End												
12													