1 Experiment

1.1 Purpose of experiment

1.2 Conclusions

2 Chemistry

Chemical Equation Not Defined

Chemical	Type	Mol Weight	Stoic. Coeff	Actual Moles	Actual Amount	Conc.	Notes
Eu(NO3)3 in EtOH	Other	50 g/mol	-	0	0 g	100 w/w%	
Pyridine	Other	79.102 g/mol	-	0	0 g	100 w/w%	
Al(NO3)3 in H2O	Other	50 g/mol	-	0	0 g	100 w/w%	
Acac	Other	50 g/mol	-	0	0 g	100 w/w%	
KHCO3 in H2O	Other	50 g/mol	-	0	0 g	100 w/w%	
Ca(NO3)2 Eu(NO3)3 in H2O	Other	50 g/mol	-	0	0 g	100 w/w%	
(NH4)2HPO4	Other	50 g/mol	-	0.4	20 g	100 w/w%	
Ca(NO3)2 Ce(NO3)3	Other	50 g/mol	-	0.1	5 g	100 w/w%	

3 Setup

EasyMax 102	Description
Device	EasyMax 102 (Serial #: 5130503127 / Firmware: 5.2.1.0)
Reactor	50 ml
Stirrer	Magnetic
Other	Dosing Unit 1 (10 ml) Tr Sensor

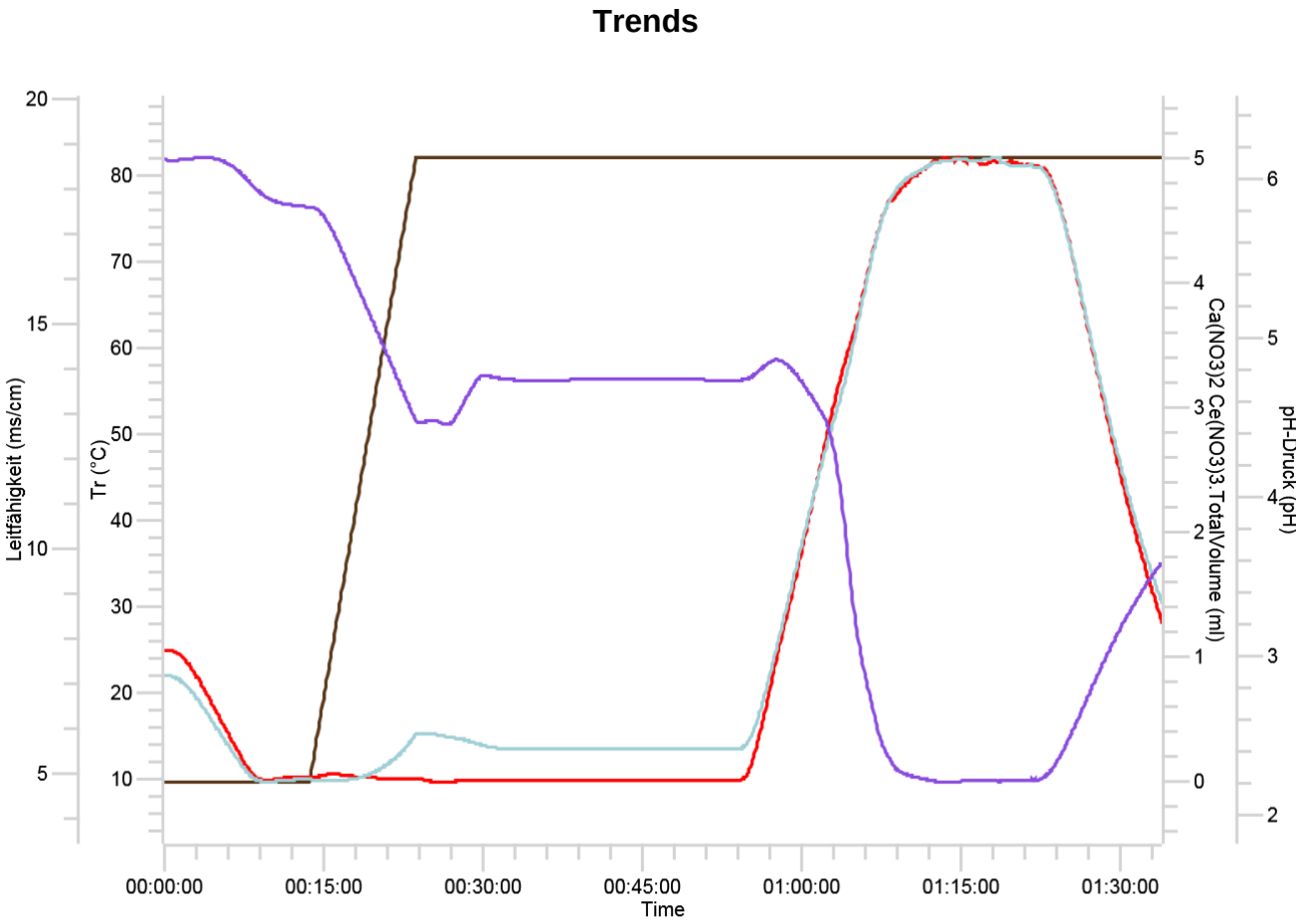
UCB	Description
Inputs	Conductivity at 25℃, InLab1022-1, Default pH, Defau lt Redox

4 Recipe

#	Action / Annotation	Start Time	End Time
1	Start of experiment on 30.09.2016 at 11:08:24 with Tj set to 25 C and stirrer off, (NH4)2HPO4=20 ml	00:00:00	00:00:05
2	Ramp stirrer speed to 200 rpm over 3 sec	00:00:05	00:00:11
3	Cool Tr to 10 ℃ at 5 K/min	00:00:11	00:03:13
4	Dose 5 ml of Ca(NO3)2 Ce(NO3)3 at 0.5 ml/min using DU1	00:13:13	00:23:46

5	Heat Tr to 75 ℃ at 5 K/min	00:53:46	01:06:49
6	Heat Tr to 80 ℃ at 1 K/min	01:06:49	01:11:52
7	Cool Tr to 20℃ at 5 K/min	01:21:52	01:33:54
8	End of experiment on 30.09.2016 at 12:42:17 with Tj set to 25 ℃ and stirrer off	01:33:54	01:33:59

5 Trend Graphs



Trend	Color	Units
Tr		℃
Leitfähigkeit		ms/cm
pH-Druck		pH
Ca(NO3)2 Ce(NO3)3.TotalVolume		ml

6 Yield and Analysis