Suppplementary information

Alternating pulse approach for electrochemical production of struvite as an alternative for phosphorous recovery

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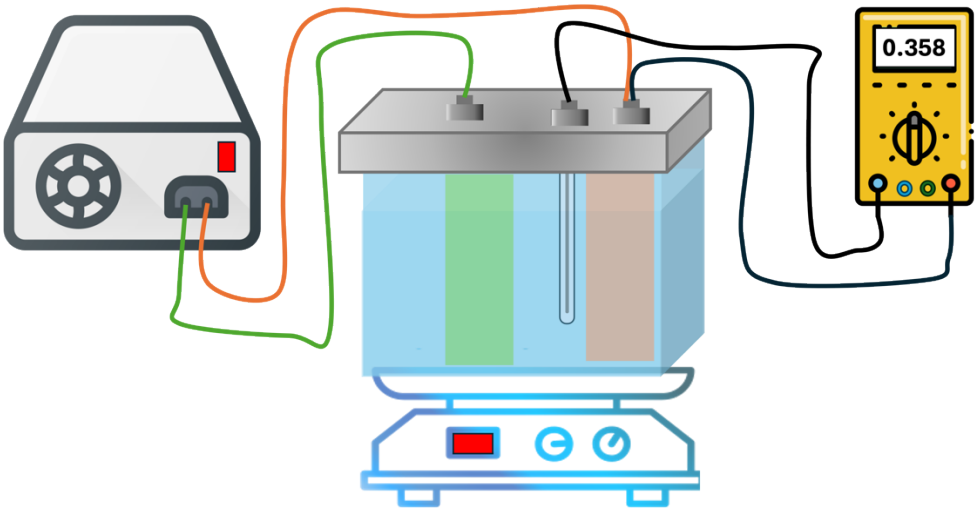
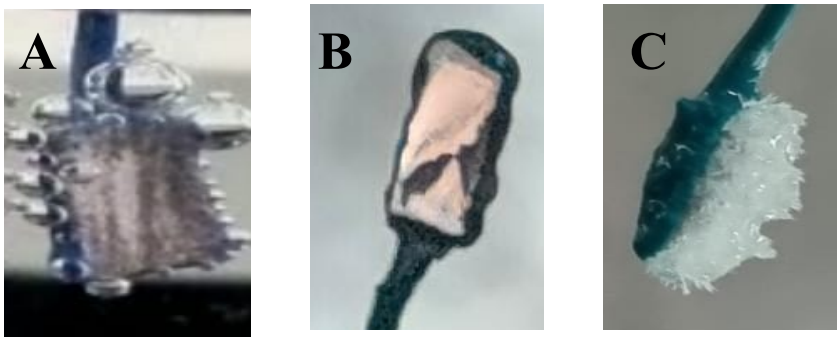
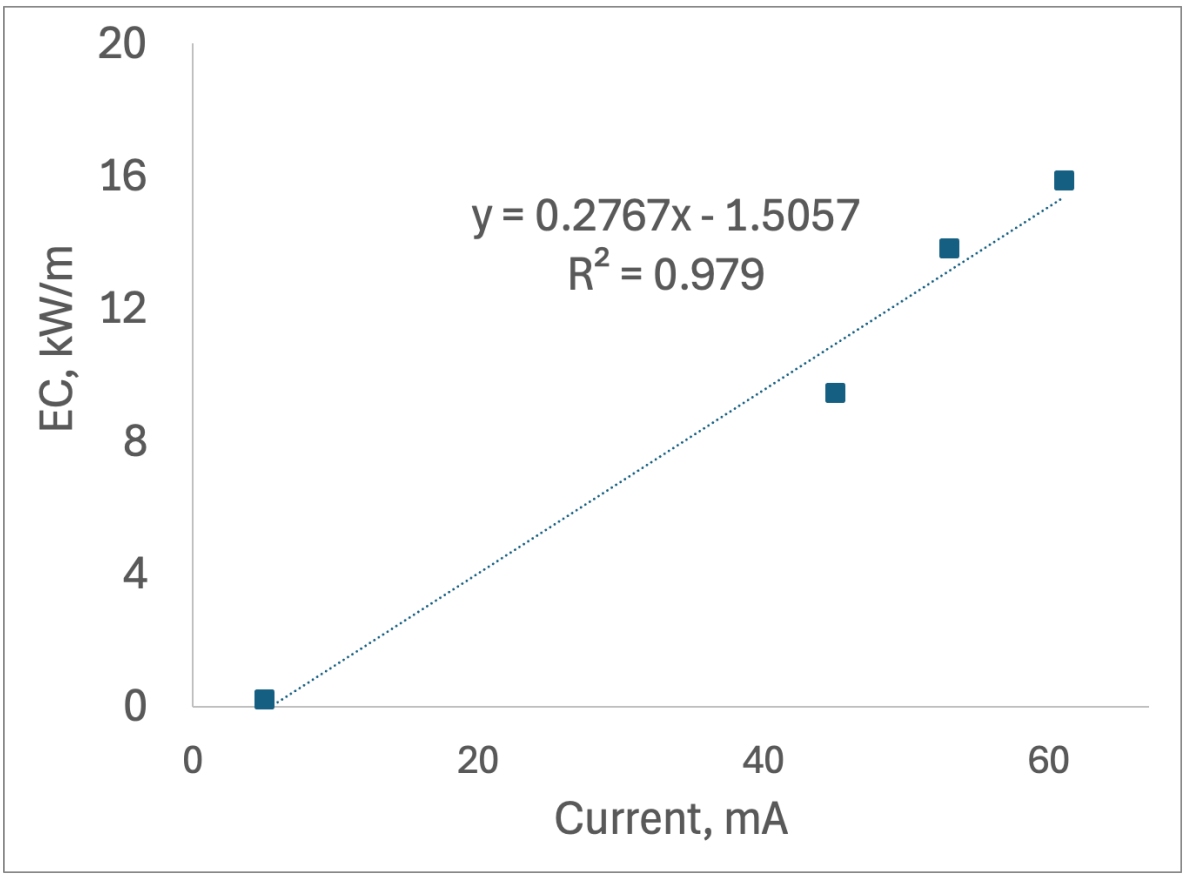
SI1. Scheme of the set up in the electrochemical cell for the measurement of potential in the working electrode, by accoupling a reference electrode and a multimeter



SI2. Images of the different stages and changes observed in the working during the linear voltammetry. A. Bubbling zone, small bubbles are formed in the surface of the working electrode. B. Change from a smooth surface to an irregular. C. Formation of a white film in the electrodes surface.



SI3. Correlation of applied current and Electrical consumption in the system



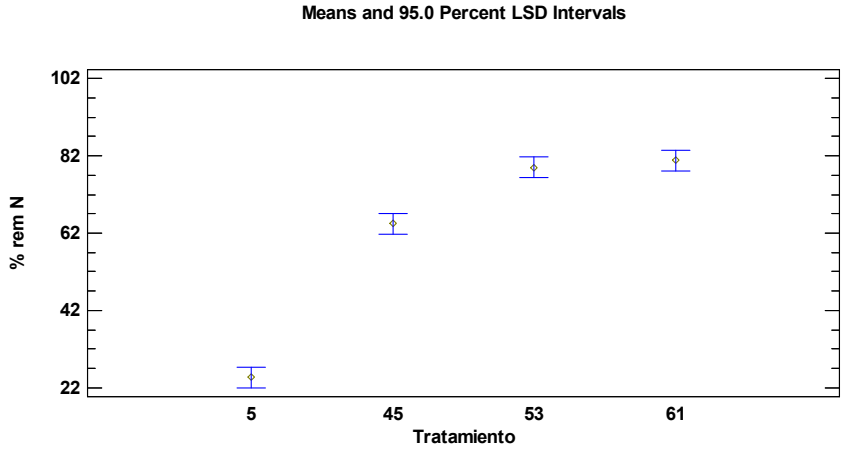
SI4.A One-way ANOVA for difference of means using a Tukey's test with 95% of confidence.

i, mA	n	Mean		Group	
		N- NH_4^+	P- PO_4^{3-}	N- NH_4^+	P- PO_4^{3-}
5	4	69.43	78.88	A	A
45	4	34.55	26.69	B	B
53	4	21.04	23.17	B C	B
61	4	19.15	9.15	C	C
Mean square		2721.12	3735.80		
F ratio		224.06	593.88		

*Indicates that there is not a significant difference

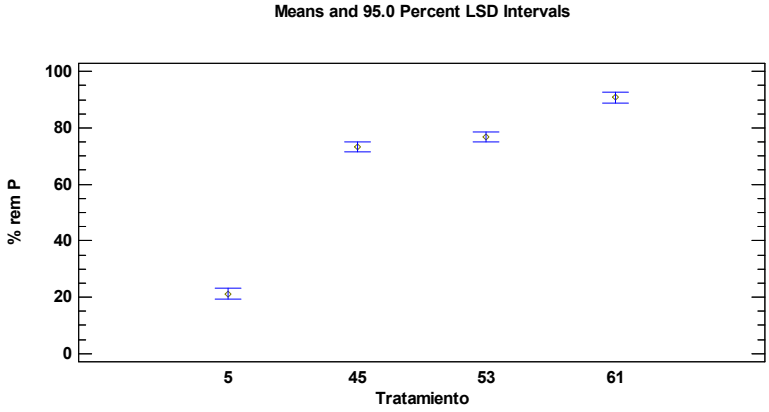
SI4.B. ANOVA analysis with 95% of confidence N- NH_4^+

Source	*Sum of Squares*	*Df*	*Mean Square*	*F-Ratio*	*P-Value*
Between groups	8163.37	3	2721.12	224.06	0.0000
Within groups	145.737	12	12.1447		
Total (Corr.)	8309.1	15			



SI4.C. ANOVA analysis with 95% of confidence P- PO_4^{3-}

Source	*Sum of Squares*	*Df*	*Mean Square*	*F-Ratio*	*P-Value*
Between groups	11207.4	3	3735.8	593.88	0.0000
Within groups	75.4863	12	6.29053		
Total (Corr.)	11282.9	15			



SI 5. Linear regression of concentration of $(PO_4)^{3-}$ as NaH_2PO_4 vs absorbance and ammonia as NH_4Cl vs absorbance.