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Líneas de Investigación		
<p>Química ambiental (Electroquímica ambiental)</p> <ol style="list-style-type: none"> 1. Oxidación electroquímica avanzada en el tratamiento de efluentes 2. Estudio fisicoquímico de procesos de electrocoagulación 3. Celdas híbridas de electrodiálisis-intercambio iónico (EDI) 4. Modelado y simulación de celdas electroquímicas 5. Recuperación electroquímica de metales. 		
Publicaciones		
<ol style="list-style-type: none"> 1. Eligio P. Rivero, Martín R. Cruz-Díaz, Francisco J. Almazán-Ruiz, Ignacio González, "Modeling the effect of non-ideal flow pattern on tertiary current distribution in a filter-press-type electrochemical reactor for copper recovery" <i>Chemical Engineering Research and Design</i> 100, 422-433 (2015). 2. R. Plascencia-Jatomea, F. J. Almazán-Ruiz, J. Gómez, E.P. Rivero, O. Monroy, I. González, "Hydrodynamic study of a novel membrane aerated biofilm reactor (MABR): Tracer experiments and CFD simulation" <i>Chemical Engineering Science</i>, 138, 324-332 (2015). 3. F.J. Almazán-Ruiz, F. Caballero, M.R. Cruz-Díaz, E.P. Rivero, J. Vazquez-Arenas, I. González, "Nickel recovery from an electroplating rinsing effluent using RCE bench scale and RCE pilot plant reactors: The influence of pH control" <i>Chemical Engineering Research and Design</i>, 97, 18-27 (2015). 4. F.A. Rodríguez, E.P. Rivero, L. Lartundo-Rojas, I. González, "Preparation and characterization of Sb₂O₅-doped Ti/RuO₂-ZrO₂ for dye decolorization by means of active chlorine" <i>Journal of Solid State Electrochemistry</i>, 18, 3153-3162 (2014). 		



5. Martín R. Cruz-Díaz, **Eligio P. Rivero**, Francisco J. Almazán-Ruiz, Ángel Torres-Mendoza, Ignacio González, "Design of a new FM01-LC reactor in parallel plate configuration using numerical simulation and experimental validation with residence time distribution (RTD)" *Chemical Engineering and Processing Process Intensification*, **85**, 145-154 (2014).
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8. **Eligio P. Rivero**, Fernando F. Rivera, Martín R. Cruz-Díaz, Elvia Mayen, Ignacio González, "Numerical simulation of mass transport in a filter press type electrochemical reactor FM01-LC: Comparison of predicted and experimental mass transfer coefficient" *Chemical Engineering Research and Design*, **90**:11, 1969-1978 (2012).
9. Martín Cruz-Díaz, Fernando Rivera, **Eligio P. Rivero**, Ignacio González, "The FM01-LC reactor modeling using axial dispersion model with a reaction term coupled with a continuous stirred tank (CST)", *Electrochimica Acta*, **63**, 47-54 (2012).
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11. **Pastor Rivero**, Rafael Herrera, "Modeling the kinetics of anionic polymerization in cyclohexane as a non-complexing solvent", *Journal of Polymer Research*, **18**:4, 519-526 (2011).
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13. Fernando F. Rivera, Martín R. Cruz-Díaz, **Eligio P. Rivero**, Ignacio González, "Analysis and interpretation of residence time distribution experimental curves in FM01-LC reactor using axial dispersion and plug dispersion exchange models with closed-closed boundary conditions", *Electrochimica Acta*, **56**:1, 361-371 (2010).



TUTORES DEL PROGRAMA

MAESTRÍA Y DOCTORADO EN CIENCIAS QUÍMICAS



14. **E.P. Rivero**, P. Granados, F.F. Rivera, M. Cruz, I. González, “Mass transfer modeling and simulation at a rotating cylinder electrode (RCE) reactor under turbulent flow for copper recovery”, *Chemical Engineering Science*, **65**:10, 3042-3049 (2010).
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