

Journal of the Mexican Chemical Society

Volume Index 58, 2014

Articles

Kinetic Modeling of the Alkaline Decomposition and Cyanidation of Argentian Plumbojarosite

Francisco Patiño, Mizraim Uriel Flores, Iván Alejandro Reyes, Hernán Islas, Martín Reyes, and Guillermo Juárez*

3-10

Thermodynamic Studies of Ion Association of *s*-Acetylthiocholine Halides and Perchlorate in Methanol Solutions

Nasr Hussein El-Hammamy, Marwa Nasr El-Hammamy, and Aida Ibrahim Kawana*

11-15

Liquid Chromatography for the Analysis of Hydrophilic Drugs in the Presence of Ionic Liquids

*Marsela Garza Tapia, Abelardo Chávez Montes, Encarnación Moyano Morcillo, Ma. Teresa Galceran i Huguet, Noemí H. Waksman de Torres, and Rocío Castro Ríos**

16-21

Convenient Reductive Amination of Aldehydes by NaBH₄/Cation Exchange Resin

Davood Setamidéh, and Farhad Sepehraddin*

22-26

The Rhodathiabenzene and Rhodaoxabenzene: Structure and Bonding and Density Functional Calculations

Reza Ghiasi, and Mozhdeh Abdoli*

27-35

On the Antioxidant Activity of the *Ortho* and *Meta* Substituted Daidzein Derivatives in the Gas Phase and Solvent Environment

*Meysam Najafi**

36-45

A Theoretical Study of Lithium-intercalated Pristine and Doped Carbon Nanocones

*Ali Ahmadi Peyghan, and Maziar Noei**

46-51

Camphor Sulfonic Acid-hydrochloric Acid Codoped Polyaniline/polyvinyl Alcohol Composite: Synthesis and Characterization

Jorge Enrique Osorio-Fuente, Carlos Gómez-Yáñez, María de los Ángeles Hernández-Pérez, and Fidel Pérez-Moreno*

52-58

Effect of Multiwalled Carbon Nanotubes on the Properties of PMMA/PEO Blends

Khalid Saeed, and Nasib Khan*

59-64

Behavior of Two and Three Electrode Configuration and Different Mediators in Working Electrode on Development of Disposable Screen-Printing Biosensors for Determination of Free Cholesterol

Nevin Turan, Bayram Gündüz,* Hanifi Körkoca, Ragıp Adıgüzel, Naki Çolak, and Kenan Buldurun*

65-75

N-Bromosuccinimide Catalyzed Three Component One-Pot Efficient Synthesis of 2,4,5-Triaryl-1*H*-imidazoles from Aldehyde, Ammonium Acetate, and 1,2-Diketone or α -Hydroxyketone

Behrooz Maleki, and Samaneh Sedigh Ashrafi*

76-81

Product Prediction: Intermediates Formed During Rare Earth Reactions

Rodrigo Castañeda, Elizabeth Chavira, and Oscar Peralta*

82-87

NMR and Theoretical Studies on the Conformational Preferences of Some Non-metal Coordinated *N*-Enoyl Systems Attached to Common Chiral Auxiliaries

*Rosmarbel Morales-Nava, Alejandro Ramírez-Solís, and Mario Fernández-Zertuche**

89-94

The Effect of NaOH and KOH on the Characterization of Mesoporous AlOOH Nanostructures in the Hydrothermal Route

Nahid Haghnazari, Mozaffar Abdollahifar, and Farahnaz Jahani*

95-98

Plackett-Burman Factorial Design for the Optimization of a Spectrophotometric Flow Injection Method for Phenol Determination in Tap and Bottled Water Using 4-Aminoantipyrine

*E. G. Carrillo-Cedillo, M. P. Haro-Vázquez, G. C. Díaz Trujillo, and M. P. Cañizares-Macías**

99-105

Exploration of Diverse Interactions of Some Vitamins in Aqueous Mixtures of Cysteine

Mahendra Nath Roy, and Palash Chakraborti*

106-112

New Energetic Materials Derived from Pentaerythritol, Diethanolamine, and Chloramphenicol

*Miguel Ángel Romero**

113-118

Polyethylene-Waste Tire Dust Composites Via In Situ Polymerization

*Yadira Karina Reyes Acosta, Rosa Idalia Narro Céspedes, María Guadalupe Neira Velázquez, José Díaz Elizondo, Francisco Enríquez-Medrano, Luis Alejandro Valencia López, María Elena Ramos Aguiñaga, Hened Saade Caballero, and Ramón Díaz de León**

119-125

Novel Organo Soluble Polyimides and Polyimide Nanocomposites Based on 1,4-bis((4-aminophenyl)-1,3,4-oxadiazolyl)benzene, BAOB, via BAOB-modified Organoclay

Yagoub Mansoori, and Kamran Darvishi

126-136

Determination of Trace Amount of Lead in Industrial and Municipal Effluent Water Samples Based on Dispersive Liquid-Liquid Extraction <i>Hamid Shirkanloo, Kaveh Sedighi, and Hassan Zavvar Mousavi*</i>	137-141	Role of Iron(III)-salen Chloride as Oxidizing Agent with Thiodiglycolic Acid: The Effect of Axial Ligands <i>Perumal Subramaniam,* Thangadurai Vanitha, Thiruttimuthu Kodispatti, and Chandra Raj Shanmuga Sundari</i>	211-217
Synthesis, Chemical Structure Elucidation and Biological Studies on the Effect of Some Vital Metal Ions on Lisinopril <i>M. Zaky, Mohamed Y. El-Sayed, and Samy M. El-Megharbel</i>	142-151	Triterpenes and other Metabolites from <i>Tibouchina urvilleana</i> <i>Ana-Lidia Pérez-Castorena</i>	218-222
A Green Approach to the Production of 2-pyridone Derivatives Promoted by Infrared Irradiation <i>Fernando Hernández, Fabiola De la Cruz, Julio López, Eduardo Peña, Francisco Delgado, Yolanda Alcaraz, Juvencio Robles, Minerva Martínez-Alfaro, and Miguel A. Vázquez*</i>	152-158	A Comparison of the Accuracy of Semi-empirical PM3, PDDG and PM6 methods in Predicting Heats of Formation for Organic Compounds <i>Yang-Yang Wu, Feng-Qi Zhao, and Xue-Hai Ju*</i>	223-229
“In Situ” Generated “HCl”: A Highly Efficient Catalyst for One-Pot Synthesis of 1 <i>H</i> -Indazolo [1,2-b]phthalazine-1,6,11-triones and 1 <i>H</i> -pyrazolo[1,2-b]phthalazine-5,10-diones under Solvent-Free Conditions <i>Behrooz Maleki*, and Samaneh Sedigh Ashrafi</i>	159-167	Zn(BH ₄) ₂ /Ac ₂ O/DOWEX(R)50WX4: A Novel System for Acylation of Aldehydes <i>Davood Setamdideh</i>	230-234
One-pot Synthesis of Benzo[c]acridine Derivatives Using SBA-Pr-SO ₃ H as Nano Catalyst <i>Ghodsi Mohammadi Ziarani,* Somayeh Mousavi, Mahshid Rahimifard, and Alireza Badiei</i>	168-172	Song and Mason Equation of State for Refrigerants <i>Farkhondeh Mozaffari</i>	235-238
Synthesis, Spectroscopic Characterization, Thermal Analysis and Antibacterial Activity of Ni(II), Cu(II) and Zn(II) Complexes with Schiff bases Derived from β-Diketones <i>Razieh Ahmadzadeh, Mohammad Azarkish, and Tahereh Sedaghat*</i>	173-179	Electrooxidation of Diclofenac in Synthetic Pharmaceutical Wastewater Using an Electrochemical Reactor Equipped With a Boron Doped Diamond Electrode <i>Gabriela Coria, José L. Nava,* and Gilberto Carreño</i>	303-308
Determination of Nitrites in Commercial Sausages by Anthocyanins Degradation. Experimental Design and Optimization <i>Carlos Andrés Galán-Vidal, Araceli Castañeda-Ovando,* Ma. Elena Páez-Hernández, and Elizabeth Contreras-López</i>	180-184	Carbonaceous and Protein Constituents in Dairy Wastewater Lead to a Differentiated Current Generation in Microbial Fuel Cells (MFCs) <i>Bibiana Cercado,* Ana Laura Vega-Guerrero, Francisco Rodríguez-Valadez, José Luis Hernández- López, Luis Felipe Cházaro-Ruiz, Marie-Line Délia, and Alain Bergel</i>	309-314
Comparison Between Antioxidant Activities of Phenolic Extracts from Mexican Peanuts, Peanuts Skins, Nuts and Pistachios <i>Patricia Rosales-Martínez, Sofía Arellano-Cárdenas, Lidia Dorantes-Álvarez, Felipe García-Ochoa, and Ma. del Socorro López-Cortez*</i>	185-193	Advanced Electrochemical Oxidation of Methyl Parathion at Boron-Doped Diamond Electrodes <i>Eulalio Campos-González, Bernardo A. Frontana-Uribe, Rubén Vásquez-Medrano, Samuel Macías-Bravo, and Jorge G. Ibáñez*</i>	315-321
Synthesis and Characterization of NBR’s by RAFT Technique and their use as Rubber Precursor in ABS Type Resins <i>Francisco Javier Enríquez-Medrano, Florentino Soriano-Corral, Pablo Acuña-Vázquez, Edgar N. Cabrera-Álvarez, Hened Saade-Caballero, Adalí Castañeda-Facio, Luis Valencia López, and Ramón Díaz de León-Gómez*</i>	194-201	Construction and Testing of a Novel in-situ Photoelectro-Fenton System Based on an Arrangement of a Carbon Sponge and a Carbon Steel Plate <i>Ivonne Arely González Reyes, M. E. de Anda Reyes, Francisco J. Rodríguez Valadez, Juan Manríquez, Erika Bustos, Adrián Rodríguez, and Luis A. Godínez*</i>	322-325
Eremophilanes and Pyrrolizidine Alkaloids of Senecioneae Species <i>Ana L. Pérez-Castorena,* Amira Arciniegas, José Luis Villaseñor, and Alfonso Romo de Vivar</i>	202-204	Electrochemical Behavior of Metamitron Herbicide at the Interface of Two Immiscible Electrolyte Solutions <i>Alma Grisel Reyes-Reyes, Judith Amador-Hernández, and Miguel Velázquez-Manzanares*</i>	326-331
New Polynuclear Nonfused Bis(1,3,4-Oxadiazole) Systems <i>Yagoub Mansoori, and Raana Sarvari</i>	205-210	Influence of EDTA on the Electrochemical Removal of Mercury (II) in Soil from San Joaquín, Querétaro, México <i>I. Robles, T. Serrano, J. J. Pérez, G. Hernández, S. Solís, R. García, T. Pi, and E. Bustos*</i>	332-338
		Electrochemical Oxidation of 4-Chlorophenol Over a Carbon Paste Electrode Modified with ZnAl Layered Double Hydroxides <i>Daniel Hernández-Fuerte, Manuel Palomar-Pardavé,* Teresa de Jesús Licona-Sánchez, Mario Romero-Romo, and Jaime S. Valente</i>	339-342

Compost Aided Electrokinetic Remediation of an Hydrocarbon Polluted Soil <i>Ivonne Duarte Medina, Erika Bustos Bustos, and Margarita Teutli León*</i>	343-347	Poly(Methacryloxy- <i>o</i> -Benzoic Acid) as Drug Carrier for Controlled Release <i>Víctor Gómez-Reséndiz, Aracely Serrano-Medina, Eugenia Gabriela Carrillo-Cedillo, Manuel Cornejo, and José Manuel Cornejo-Bravo*</i> 424-430
Electrochemical Hydrogen Peroxide Production in Acidic Medium Using a Tubular Photo-reactor: Application in Advanced Oxidation Processes <i>Juan M. Peralta-Hernández,* and Luis A. Godínez</i>	348-355	Volatile Constituents Identified in Hexane Extract of <i>Citrus sinensis</i> Peel and Anti-Mycobacterial Tuberculosis Activity of Some of its Constituents <i>Patricia C. Esquivel-Ferriño, Aldo F. Clemente-Soto, Mayela Y. Ramírez-Cabriales, Elvira Garza-González, Laura Álvarez, and María del Rayo Camacho-Corona*</i> 431-434
Use of Combined Electrochemical Approaches for Mineralization and Detection of Hydroquinone Using PbO ₂ Electrodes <i>Alexsandro Jhones dos Santos, Daniela Karla de Souza Xavier, Djalma Ribeiro da Silva, Marco Antonio Quiroz, and Carlos A. Martínez-Huitle*</i>	356-361	Biocompatibility Evaluation of Electrospun Scaffolds of Poly (L-Lactide) with Pure and Grafted Hydroxyapatite <i>Luis Jesús Villarreal-Gómez, Ricardo Vera-Graziano, María Raquel Vega-Ríos, José Luis Pineda-Camacho, Horacio Almanza-Reyes, Paris Astrid Mier-Maldonado, and José Manuel Cornejo-Bravo*</i> 435-443
Removal of Color and Chemical Oxygen Demand Using a Coupled Coagulation-Electrocoagulation-Ozone Treatment of Industrial Wastewater that Contains Offset Printing Dyes <i>Gabriela Roa-Morales,* Carlos Barrera-Díaz, Patricia Balderas-Hernández, Francisco Zaldumbide-Ortiz, Horacio Reyes Perez, and Bryan Bilyeu</i>	362-368	Use of Mass Spectrometry for Identification and Quantitation of Tensoactive Agents in Synthetic Latex Samples <i>Cristina Fonseca-Corona, Luz Elena Vera-Avila, and José-Luis Gallegos-Pérez*</i> 444-451
Synthesis and Photodynamic Activity of 5,10,15-Tris(<i>p</i> -chlorophenyl)-20-(2-hydroxy-3-methoxyphenyl)-21H,23H-porphyrin <i>Eder Arredondo-Espinosa, Susana López-Cortina, and Isaías Balderas-Rentería*</i>	369-373	Chemical Composition and Antibacterial Activity of Essential Oils Extracted from Plants Cultivated in Mexico <i>Crescencio Rodríguez Flores, Alizé Pennec, Caroline Nugier-Chauvin, Richard Daniellou, Luis Herrera-Estrella, and Anne-Laure Chauvin*</i> 452-455
Flavonoids and Triterpenoids from the Roots of <i>Rosa laevigata</i> <i>Shiping Li, Xiangyu Zhai, Tianming Wang, Wei Ma, Jun Hu, Shuangshuang Wang, Ning Li,* and Kaijin Wang*</i>	374-377	Reviews
Biodiesel Synthesis from <i>Pongamia pinnata</i> oil over Modified CeO ₂ Catalysts <i>Venkatesh, Sathgatta Zaheeruddin Mohamed Shamshuddin,* Manjunatha Shyamsundar, and Vanagoor Thammannigowda Vasanth</i>	378-385	Electro-Fenton, UVA Photoelectro-Fenton and Solar Photoelectro-Fenton Treatments of Organics in Waters Using a Boron-Doped Diamond Anode: A Review <i>Enric Brillas*</i> 239-255
Efficient Synthesis of Peptides with 4-Methylpiperidine as Fmoc Removal Reagent by Solid Phase Synthesis <i>Cristian Francisco Vergel Galeano, Zuly Jenny Rivera Monroy, Jaiver Eduardo Rosas Pérez, and Javier Eduardo García Castañeda*</i>	386-392	Electrochemical Advanced Oxidation Processes: An Overview of the Current Applications to Actual Industrial Effluents <i>C. Barrera-Díaz, P. Cañizares, F. J. Fernández, R. Natividad, and M.A. Rodrigo*</i> 256-275
Rare Earth Conversion Coatings Grown on AA6061 Aluminum Alloys. Corrosion Studies <i>Silvia Beatriz Brachetti-Sibaja, Miguel Antonio Domínguez-Crespo,* Aidé Minerva Torres-Huerta, Edgar Onofre-Bustamante, and Wencel De La Cruz-Hernández</i>	393-410	Application of Electrochemical Technology for Water Treatment of Brazilian Industry Effluents <i>Camila Carvalho de Almeida, Patricia Rachel Fernandes da Costa, Maria Jucilene de Macedo Melo, Elisama Vieira dos Santos, and Carlos A. Martínez-Huitle*</i> 276-286
Analytical Microsystem for the Monitoring and Analysis of Cobalt in Aqueous Solutions Using LTCC Technology <i>Olga Natalia Bustos López,* Francisco Valdés Perezgasga, Héctor Aurelio Moreno Casillas, Julián Alonso Chamorro, and Hesner Coto Fuentes</i>	411-415	Electrochemical Dehalogenation of Organic Pollutants <i>Dennis G. Peters,* Caitlyn M. McGuire, Erick M. Paschak, Angela A. Peverly, Lauren M. Strawsine, Elizabeth R. Waggoner, and J. Tyler Barnes</i> 287-302
A Theoretical Study of Chemical Reactivity of Tartrazine Through DFT Reactivity Descriptors <i>Luis Humberto Mendoza-Huizar</i>	416-423	Editorial 1, 239
		Volume index 457
		Author index 461