

**43rd ACS Junior Technical Meeting
28th Puerto Rico Interdisciplinary Scientific Meeting (PRISM)**

ABSTRACTS FOR POSTER SESSIONS

(Arranged in alphabetical order by field and presenter's last name)

- Chemistry
- Education
- Engineering
- Environmental Sciences
- Geosciences
- Life Science
- Mathematics
- Physics

Chemistry

[Chemistry-01]

Alicea, Ismael, UPR-RIO PIEDRAS; Castillo, Betzaida, Chemistry, UPR-Rio Piedras; Pagán, Miraida, Chemistry, UPR-Rio Piedras; Barletta, Gabriel, Chemistry, UPR-Humacao

Enzyme Storage Stability In Organic Solvents: Alpha-Chymotrypsin As A Case Study

[Chemistry-02]

Arroyo-Ramírez, Lisandra, UPR-RIO PIEDRAS; Raptis, Raphael G., Chemistry, UPR-Rio Piedras; Cabrera, Carlos R., UPR-Rio Piedras

Self-formation of Nanostructures from Palladium-Cobalt Precursor on HOPG

[Chemistry-03]

Aviles, Edward, UPR-RIO PIEDRAS; Aviles, Edward, Chemistry, University of Puerto Rico; Marrero, Jeffry, Chemistry, University of Puerto Rico; Rodriguez, Abimael, Chemistry, University of Puerto Rico

Chemical Modifications and Biological Evaluation of Marine Natural Products from the Caribbean Sponge Hymeniacidon sp.

[Chemistry-04]

Betancourt, Jose, UPR-RIO PIEDRAS; Rivera, José M., Department of Chemistry, University of Puerto Rico, Río Piedras Campus

Synthesis And Supramolecular Properties Of Dendronized 8-Aryl-2'-Deoxyguanosine Analogues

[Chemistry-05]

Cardona, Rocío del A., UPR-RIO PIEDRAS; Cardona-Couvertier, Rocío del A.; Montes, Ingrid; Guadalupe, Ana R.; Chemistry, University of Puerto Rico, Rio Piedras Campus

UV-Visible Characterization of 1-ferrocenyl-3-(p-nitrophenyl)prop-2-en-1-one: Toward Labels Construction

[Chemistry-06]

Cartagena, Michelle M, UPR-RIO PIEDRAS; Carballeira, Nestor M., Chemistry Department, UPR Rio Piedras; Vazquez, Soleyl, Chemistry Department, UPR Rio Piedras

Total Synthesis Of The Novel 2,6-docosadiynoic acid

[Chemistry-07]

Casañas, Barbara, UPR-RIO PIEDRAS; Santiago, Mitk'El B.; Morales, Mara; Miller, Andrismary; Montes, Ingrid; Colón, Jorge L.; Department of Chemistry, UPR-Rio Piedras

Chemical And Electrochemical Characterization Of Ferrocene Derivatives Intercalated Into Inorganic Layered Materials Of Zirconium Phosphate

[Chemistry-08]

Contés-de Jesús, Enid, UPR-RIO PIEDRAS; Santiago-de Jesus, Diana; Cabrera, Carlos R.; Chemistry Department, University of Puerto Rico - Rio Piedras Campus

Single Wall Carbon Nanotubes As Support For Electrodeposited Platinum Nanoclusters

[Chemistry-09]

Das, Soma, UPR-RIO PIEDRAS; Chakraborty Indranil, Department of Chemistry, University of Puerto Rico, San Juan, PR 00931; Raptis Raphael, Department of Chemistry, University of Puerto Rico

Water-Soluble Fe₈-Clusters as Potential MRI Contrast Agents

[Chemistry-10]

Echevarría, Ileabett, UPR-RIO PIEDRAS; Daunert, Sylvia, Department of Chemistry, University of Kentucky; Moschou, Elizabeth, Department of Chemistry, University of Kentucky; Turner, Kendrick, Department of Chemistry, University of Kentucky

Development Of Glucose-Responsive Hydrogels Based On A Genetically Engineered Dimer Of Glucose Binding Protein (GBP)

[Chemistry-11]

Enríquez, Yanira, UPR-RIO PIEDRAS; Rivera Rivero, Christia M.; Guadalupe, Ana R.; Montes, Ingrid; Chemistry Department, UPR Rio Piedras Campus

Spectrophotometric Characterization of Novel Ferrocene Derivatives

[Chemistry-12]

Feliciano, Ileana, UPR-RIO PIEDRAS; Caban, Miguel & Cabrera, Carlos R.; Chemistry, UPR Rio Piedras

Covalent Immobilization of Alcohol Dehydrogenase in L-Cysteine Self Assembled Monolayer over Palladium Surface

[Chemistry-13]

Feliciano, Raquel, UPR-MAYAGUEZ; Ferrer, Edmy & Castro, Miguel; Chemistry, UPRM

The Effect of NO₂ In Fluorescence Quantum Dots and Blinking Behavior

[Chemistry-14]

Flores, Giselle, UPR-RIO PIEDRAS; Sola, Ricardo, Chemistry, UPR Rio Piedras; Almenas, Mariangely, Biology, UPR Rio Piedras, Griebenow, Kai, Chemistry, UPR Rio Piedras

Mechanism of Moisture Induced Solid Phase Aggregation of Pharmaceutical Proteins

[Chemistry-15]

García, María del Mar, UPR-RIO PIEDRAS; Cardona, Rocío; Montes, Ingrid;; Guadalupe, Ana R.; Chemistry Graduate Program, UPR-RP

Cyclic Voltammetry Studies of Ferrocene Derivatives

[Chemistry-16]

García, Marilyn, UPR-RIO PIEDRAS; García-Arriaga, Marilyn; Hoblely, Gerard; Rivera, José M.; University of Puerto Rico, Río Piedras Campus, Chemistry Dept.

Synthesis and Self-Assembly of a Guanine Derivative in Aqueous Media

[Chemistry-17]

Guzman, Rolando, UPR-RIO PIEDRAS; Carlos R. Cabrera, Chemistry, University of Puerto Rico; Esteban R. Fachini, Chemistry, University of Puerto Rico

Influence Of Ceria On Commercial Platinum Based Catalysts For Methanol Oxidation

[Chemistry-18]

Hernández, Griselle, UPR-RIO PIEDRAS

Polymer Modified Glassy Carbon Electrode for Determination for Fe(II) Ions

[Chemistry-19]

Martin, Mariana, UPR-RIO PIEDRAS; Gubala, Vladimir; Rivera, Jose M.; Department of Chemistry, University of Puerto Rico, Río Piedras Campus

Supramolecular Structure and Thermal Stability of 8-Aryl-2'- deoxyguanosine Analogues in the Presence of Different Metal Cations

[Chemistry-20]

Montalvo-Ortiz, Brenda Liz, UPR-RIO PIEDRAS; Sosa, Brian, Chemistry, UPR-Rio Piedras; Vélez, Denisse, Chemistry, UPR-Rio Piedras; Griebenow, Kai, Chemistry, UPR-Rio Piedras

Protein Co-Lyophilization With Methyl- α -Cyclodextrin Generates Spherical Protein Nano-Particles

[Chemistry-21]

Montano, Rubenier, UPR-RIO PIEDRAS; Raptis, Raphael G., UPR-Rio Piedras

The Use of Molecular Precursors for the Preparation of Pd/Co and Pd/Cu-Alloy Nanoparticles

[Chemistry-21]

Morales, Moraima, UPR-RIO PIEDRAS; Chevres, Migdalia, Department of Biochemistry, School of Medicine, University of Puerto Rico; Chorna, Nataliya E., Department of Chemistry, Rio Piedras Campus, University of Puerto Rico, San Juan, Puerto Rico; González, Fernando A., Department of Chemistry, Rio Piedras Campus, University of Puerto Rico, San Juan, Puerto Rico

Low Serum Conditions Cause Upregulation of P2X7 Receptor In Human SH-SY5Y Neuroblastoma Cells

[Chemistry-22]

Morales, Mara, UPR-RIO PIEDRAS; Casana, Barbara, Chemistry, UPR; Montes, Ingrid, Chemistry, UPR

Synthesis Of Ferrocenyl Alkenes Compounds

[Chemistry-23]

Morales-García, Flavia, UPR-RIO PIEDRAS; Mayol-Bracero, Olga L., Institute for Tropical Ecosystem Studies, University of Puerto Rico, San Juan, Puerto Rico; Metzger, Swen, Department of Atmospheric Chemistry, Max Planck Institute for Chemistry, Mainz, Germany; Lelieveld, Jos, Department of Atmospheric Chemistry, Max Planck Institute for Chemistry, Mainz, Germany

Hygroscopicity of atmospheric particles in the Caribbean

[Chemistry-24]

Nieves, Karinel, UPR-RIO PIEDRAS; Haberaecker, Walter; Buchan, Zachery; Koreeda, Masato, Chemistry and Medicinal Chemistry, University of Michigan

Hydration of Alkynes: Gold (I) and Mercury (II)- Catalized Transformations of Alkynes into Alkanones

[Chemistry-25]

Otaño, Myrna, UPR-RIO PIEDRAS; Cruz, Alejandra, Chemistry, UPR- Rio Piedras; Díaz, Cristina, Chemistry, UPR-Rio Piedras; Montes Ingrid, PhD., Chemistry, UPR-Rio Piedras, Guadalupe, Ana PhD., Chemistry, UPR - Rio Piedras

Synthesis and Characterization of Ferrocenyl Chalcones

[Chemistry-26]

Pacheco, Yamaris, UPR-RIO PIEDRAS; Griebenow, Kai, Chemistry, UPR- Río Piedras

Encapsulation Of Different Formulations Of Subtilisin Carlsberg Using The Solid In Oil In Oil (S/O/O) Encapsulation Technique

[Chemistry-27]

Pagan, Miraida, UPR-RIO PIEDRAS; Sola, Ricardo J., Chemistry, UPR-Rio Piedras; Griebenow, Kai, Chemistry, UPR-Rio Piedras

Influence Of Modulated Protein Structural Flexibility On The Stability And Function Of Subtilisin-Like Proteases

[Chemistry-28]

Parga, Kenia, UPR-RIO PIEDRAS; Raptis, Raphael, Graduate Dept. of Chemistry, University of Puerto Rico-RP

Synthesis of targeted-MRI contrast agents

[Chemistry-29]

Quiñones, Jennifer, UPR-RIO PIEDRAS; Anna Molina; Laurimer Kuilan; Osvaldo Rosario, University of Puerto Rico, Río Piedras Campus, Chemistry Department

Development of Method for the Analysis of Pharmaceutical Compounds in Natural Waters

[Chemistry-30]

Rentas, Jaileen, UPR-RIO PIEDRAS; Prieto, J. A., Chemistry, UPR-Rio Piedras

Epoxide Based Methodology For The Elaboration Two Precursor Fragments For The Synthesis Of The Scytophycin C Polypropionate Chain

[Chemistry-31]

Rivera, Eladio, UPR-RIO PIEDRAS; Cindy Barbosa, University of Puerto Rico, Río Piedras; Rafael Torres, University of Puerto Rico, Río Piedras; Jorge L. Colón, University of Puerto Rico, Río Piedras, Tyler W. Green, University of Cincinnati, Ohio; William B. Connick, University of Cincinnati, Ohio

Chemosensing Applications Of Binuclear Platinum(II) Complex Intercalated Into Zirconium Phosphate Layers

[Chemistry-32]

Rivera, María Del C., UPR-RIO PIEDRAS; Ivonne Andujar de Sanctis, Chemistry, University of Puerto Rico-Río Piedras; Vladimir Gubala, Senior Research Officer, Biomedical Diagnostics Institute at Dublin City University; Gerard Hopley, Chemistry, University of Puerto Rico-Río Piedras, José M. Rivera-Ortíz, Chemistry, University of Puerto Rico-Río Piedras

Insights On The Self-Assembly Of 8-Heteroaryl-2'-Deoxyguanosine Derivatives

[Chemistry-33]

Sanchez-Pomales, Germanie, UPR-RIO PIEDRAS; Santiago-Rodriguez, Lenibel, Department of Chemistry, UPR-Rio Piedras; Rivera-Velez, Nelson E., Department of Chemistry, UPR-Rio Piedras; Pagan-Miranda, Coral, Department of Chemistry, UPR-Rio Piedras, Cabrera, Carlos R., Department of Chemistry, UPR-Rio Piedras

Non-Covalently Functionalized Carbon Nanotubes Assembled On Gold Surfaces

[Chemistry-34]

Santiago, Diana, UPR-RIO PIEDRAS; Rodríguez-Calero, Gabriel G., Chemistry, UPR-Río Piedras; López, Diana, General Science, UPR-Río Piedras

Electrochemical, Chemical and Physical Characterization of Pt/C Nano-Catalysts

[Chemistry-35]

Suazo, Dámaris, UPR-RIO PIEDRAS; Cabrera, Carlos R., Chemistry Department, University of Puerto Rico-Rio Piedras Campus

Platinum Surface Decorated with Ruthenium a Model for Methanol Oxidation

[Chemistry-36]

Valentin, Elizabeth, UPR-RIO PIEDRAS; Prieto, Jose A., Department of Chemistry, University of Puerto Rico, Rio Piedras; Rosa, Kellymar, Department of Chemistry, University of Puerto Rico, Rio Piedras

Convergent Epoxide-Based Polypropionate Synthesis

[Chemistry-37]

Vallejo, Pamela, UPR-RIO PIEDRAS; Gioda, Adriana, Chemistry Department, UPR; Mayol-Bracero, Olga, Chemistry Department, UPR

The influence of African dust particles on the chemical composition of rainwater at El Verde, Puerto Rico: Evaluation of the NADP historical data from 1985 to 2007

[Chemistry-38]

WU, JAVIER, UPR-RIO PIEDRAS; Wu, Javier, Physics, UPR Rio Piedras; Cabrera, Carlos, Chemistry, UPR Rio Piedras

Mechanical Study Of Pt Thin Film Electrode For Fuel Cell Applications

Education

[Education-01]

Fajardo, Johanna, UPR-RIO PIEDRAS; Cabello, Charlotte; Ramos, Rafael; Pruna, Linnette; Montes, Ingrid; Ph.D., Chemistry/ Natural sciences

How The Affective Aspects Of Students With Different Learning Styles Influence Their Achievement In The Organic Chemistry Course

Engineering

[Engineering-01]

Barrera, Carola, UPR-MAYAGUEZ; Herrera, Adriana, Department of Chemical Engineering, University of Puerto Rico, Mayagüez; Latorre, Magda, Department of Chemical Engineering, University of Puerto Rico, Mayagüez; Rinaldi, Carlos, Department of Chemical Engineering, University of Puerto Rico, Mayagüez, Torres-Lugo, Madeline, Department of Chemical Engineering, University of Puerto Rico

Surface Modification of Magnetic Nanoparticles with Poly(ethylene) oxide

[Engineering-02]

Calero, Victoria, UPR-MAYAGUEZ; Rinaldi Carlos, Ing. Quimica, UPRM

Ligand Exchange Using Alkylsilanes On Oleic Acid-Cobalt Ferrite Nanoparticles

[Engineering-03]

Cameron, Ana Raquel, UPR-MAYAGUEZ

Electrorheological properties of poly (ethylene glycol)/ silica suspensions

[Engineering-04]

Cordoba, Maria F., UPR-MAYAGUEZ; Sepulveda, Nelson, Electrical and Computer Engineering, UPR Mayaguez

Design, Fabrication And Testing Of A Vanadium Dioxide Microwave Switch

[Engineering-05]

Giordano, Mauricio, UPR-MAYAGUEZ; Gutierrez, Gustavo, Mechanical Engineering Department, UPRM

Study of the Bioheat Equation Using Monte Carlo Simulations For Local Magnetic Hyperthermia

[Engineering-06]

Gomez, Rodney, PUPR

Techniques for Determining the Relative Weights of Spatial Harmonics Induced in Truncated Periodic Structures

[Engineering-07]

Herrera, Adriana, UPR-MAYAGUEZ; Barrera, Carola; Ayala, Vanessa; Latorre, Magda; Torres-Lugo, Madeline; Rinaldi, Carlos; Chemical Engineering, UPR-Mayaguez

Magnetite Nanoparticles Coated with Aminopropyl-silane and Carboxymethyl-dextran for Cancer Treatment.

[Engineering-08]

Hidalgo-Hernandez, Ruth, UPR-MAYAGUEZ; Callejo-Canal, Alberto, Engineering Science and Materials Dept., UPRM; Plaza-Rodrigues, Nayomi, Mechanical Engineering Dept., UPRM

Micro- Characterization of Al-B-Cu-Mg Composites subject to Mechanical Wear and Abrasion

[Engineering-09]

Huertas, Javier, UPR-MAYAGUEZ; Quiñones, Leonel, Chemical Engineering, UPR-Mayaguez; Martínez-Iñesta, María, Chemical Engineering, UPR-Mayaguez

Monte Carlo Simulations of the Adsorption of Platinum and Nickel Ions in Cancrinite and Mordenite Zeolites for the Templated Synthesis of Metal Nanowires

[Engineering-10]

Lugo, Katherine, PUPR; Gomez, Rodney A., Electrical Engineering, PUPR; Farahat, Nader, Electrical Engineering, PUPR

FDTD Analysis of an Antenna Covered by a Dielectric Woodpile EBG Superstrate

[Engineering-11]

Mondragon, Maria Victoria, UPR-MAYAGUEZ; Godoy, Luis A.; Acosta, Felipe; Pando, Miguel; Civil Engineering; UPR Mayaguez

Computer Simulation of Interphase Damage in Composites

[Engineering-12]

Obando, Juan, UPR-MAYAGUEZ; Pando, Miguel, Dept of Civil Engineering, UPR Mayaguez; Suarez, Marcelo, Dept of Mechanical Engineering, UPR Mayaguez; Acosta, Felipe, Civil Engineering and Surveying, UPR Mayaguez, Godoy, Luis, Civil Engineering and Surveying, UPR Mayaguez

A Micromechanics Study of the Environmental Degradation Effects on the Mechanical Properties of Glass Fiber Reinforced Polymers

[Engineering-13]

Obregón, Luis Guillermo, UPR-MAYAGUEZ; Velazquez Figueroa, Carlos, University of Puerto Rico-Mayaguez, Chemical Engineering Dept

Experiments on Granular Mixing Due to Shear Stress in a Cavity

[Engineering-14]

Quinones, Leonel, UPR-MAYAGUEZ; Huertas Javier, Chemical Engineering-University of Puerto Rico Mayaguez; Martínez-Iñesta María, Chemical Engineering-University of Puerto Rico Mayaguez

Synthesis and Characterization of Templated Ni Nanowires using Zeolites

[Engineering-15]

Reyes, Damian, UPR-MAYAGUEZ; Estremera, Miguel A., Chemical Engineering; Mendez, Rafael, Chemical Engineering

Bifunctional Materials for the Catalytic Conversion of Cellulose into Soluble Feedstocks: A Sustainable Source of Renewable Biorefinery Feedstock

[Engineering-16]

Rivera, Sindia, M., UPR-MAYAGUEZ; Arturo J. Hernandez-Maldonado, Chemical Engineering, UPRM-Mayaguez

Nickel II Grafted MCM-41: A Novel Sorbent for the Removal of Naproxen from Water

[Engineering-17]

Rivera-Ramos, Milton E., UPR-MAYAGUEZ; Hernández-Maldonado, Arturo J., Chemical Engineering, UPR-Mayaguez

Separation of CO₂ from Light Gases Mixtures using Ion-Exchanged

[Engineering-18]

Rodriguez, Hector, UPR-MAYAGUEZ; Latorre, Magda, Chemical Engineering; Rinaldi, Carlos, Chemical Engineering; Torres-Lugo, Madeline, Chemical Engineering

Studies of Ferrite Based Magnetic Nanoparticle Transport Mechanisms and Magnetocytolysis Effects on a Model Cell Culture

[Engineering-19]

Roman, Ruth, UPR-MAYAGUEZ; Mejia, Irene, Acosta, Felipe; Pando, Miguel, Godoy, Luis; Dept of Civil Engineering and Surveying, UPR Mayaguez

Environmental Effects on Deformation, Strength, and Degradation of Glass Fiber Reinforced Polymers

[Engineering-20]

Ruiz, Gerardo, UPR-MAYAGUEZ; Sridhar, Lakshmi, Chemical Engineering, UPRM

Design and Analysis in Modeling Reactive Separation Processes

[Engineering-21]

Santos, Nilmarie, UPR-MAYAGUEZ; Janet Méndez, Chemical Engineering, UPR-Mayaguez; Margarita Licha, PhD, Chemical Engineering, UPR-Mayaguez; Madeline Torres-Lugo, PhD, Chemical Engineering, UPR-Mayaguez

Examination of the Effects of PEG-Rich Matrixes in Multi Drug Resistance-Associated Protein (MRP) and Multi Drug Resistance (MDR) Substrates Transport Utilizing the CACO-2 Cell Model

[Engineering-22]

Sola, Juan, UPR-MAYAGUEZ; Couvertier, Isidoro, ECE Department, UPR-Mayaguez

A Protocol Offload Framework Applied to a TCP Offload Engine and Web Traffic

[Engineering-23]

Soto, Denisse, UPR-MAYAGUEZ; Rinaldi, Carlos, Chemical Engineering, UPR-Mayaguez

Brownian Dynamics Simulation of Simultaneous Brownian and Neel Relaxation Mechanisms in Ferrofluids

Environmental Sciences

[Enviromental Sciences-01]

Betancourt, Luz Stella, TURABO UNIV; Dr Cesar Lozano, Environmental Chemistry , Doctoral Program, School Science and Technology, Turabo University

Characterization Of Heavy Metal In The Leachate Of Two Municipal Solid Waste Disposal Landfills Of Puerto Rico And Evaluation Of Its Groundwater Impact

[Enviromental Sciences-02]

Bonilla-Rivera, Carmen E., TURABO UNIV; Perez-Jimenez, Jose R

Diversity and Abundance of sulfate-reducing bacteria in the Elfin Forest in Puerto Rico

[Enviromental Sciences-03]

Burgos, Sofia, UPR-RIO PIEDRAS; Ramirez, Alonso; Institute for Tropical Ecosystem Studies, University of Puerto Rico, San Juan, Puerto Rico

Biodiversity And Ecosystem Function In Tropical Streams: Watershed Land Use Effects And Benthic Biofilms Communities

[Environmental Sciences-04]

Cardona Cardona, Vanessa, UPR-MAYAGUEZ; Rios Velazquez, Carlos, Biology, University of Puerto Rico Mayaguez

First report of Vogesella sp. in Puerto Rico

[Environmental Sciences-05]

Hernandez, Pablo J, UPR-RIO PIEDRAS; Omar Pérez-Reyez, Biology Department, University of Puerto Rico, Río Piedras Campus; L. Alonso Ramirez, Institute for Tropical Ecosystem Studies, University of Puerto Rico, Río Piedras Campus

Biodiversity Of Benthic Macroinvertebrates In Puerto Rican Stream: The Effect Of Land Use

[Environmental Sciences-06]

Malavé, Josué, UPR-MAYAGUEZ; Borglin E., Sharon, Center for Environmental Biotechnology, Lawrence Berkely National Lab, Berkely, CA; Rios-Velazquez, Carlos, University of Puerto Rico-Mayaguez; Biology Dept.; Hazen, Terry, Center for Environmental Biotechnology, Lawrence Berkely National Lab, Berkely, CA

Study of Microbial Community Structure Using Phospholipid Fatty Acid Analysis (PLFA) on Chromium Contaminated Site Before Lactate Injection

[Environmental Sciences-07]

Maldonado, Yaritza, UPR-MAYAGUEZ; Rodriguez Rodriguez Nydia J., Marine Sciences Department; Zaidi Baqar R., Marine Sciences Department, UPR-Mayaguez

Distribution of Polyaromatic Hydrocarbon (PAH's) Degrading Bacteria in coastal sediments of Puerto Rico

[Environmental Sciences-08]

Padilla, Luis, UPR-MAYAGUEZ; Mendez,Rafael, Natural Sciences Department, UPR-Carolina; Matos,Israel, National Weather Service

Regional Analysis of Heavy Precipitation over Puerto Rico during 1975-2005

[Environmental Sciences-09]

Padilla-Luciano, Yeira, UPR-MAYAGUEZ; Bogere, Moses N., Department of Chemical Engineering, University of Puerto Rico, Mayaguez; Ogden, Kimberly, Department of Chemical and Environmental Engineering, University of Arizona

Bioremediation of Copper from Chemical Mechanical Planarization (CMP) Wastewater

[Environmental Sciences-10]

Rodriguez, Nydia, UPR-MAYAGUEZ; Baqar R. Zaidi, Marine Sciences Department, UPR Mayaguez

Patterns of Multiple Antibiotic Resistant of Enterococcus species in waters and sediments of Barceloneta-Manatí, Puerto Rico

[Environmental Sciences-11]

Silva, Jessica, UPR-RIO PIEDRAS; Abelleira, Oscar, Biología, Universidad de Puerto Rico; USDA-FS; Lugo, Ariel, Biología, Universidad de Puerto Rico; USDA-FS

Castilla elastica in a Secondary Forest of Puerto Rico

[Environmental Sciences-12]

Silva, Jessica, UPR-RIO PIEDRAS; Martinez, Noraida & Aide, Mitchell; Biology Dept, UPR Rio Piedras

Structure, Density and Plant Species Composition of Secondary Forests in Vieques, Puerto Rico

Geosciences

[Geosciences-01]

Cuevas, David, UPR-MAYAGUEZ; Sherman, Clark, Dept. Marine Sciences, UPR-Mayaguez; Ramirez, Wilson, Dept. Geology, UPR-Mayaguez; Hubbard, Dennis, Dept. Geology, Oberlin College, Oberlin OH

The Mid-Holocene Cañada Honda Fossil Reef Of The Enriquillo Basin, Southwestern Dominican Republic: Evidence For Coral Growth And Reef Accretion At Great Depth And High Siltation Prior To Anthropogenic Disturbance

Life Sciences

[Life Sciences-01]

Acevedo, Julio, UPR-MAYAGUEZ; Maldonado Ramírez, Sandra L., PhD., Department of Biology, University of Puerto Rico, Mayagüez, P.R.

Temporal Distribution of mycelial fungi in the industrial zone at Mayagüez, Puerto Rico

[Life Sciences-02]

Conde-Costas, Carlos, UPR-RIO PIEDRAS; Jorge Ortiz-Zayas; University of Puerto Rico, Río Piedras

Nitrogen Dynamics in a Tropical Cave Stream

[Life Sciences-03]

Delgado, Manuel, UPR-RIO PIEDRAS; Lugo-Chinchilla, Ana, Department of Natural Sciences, Interamerican University; Lizardo, Luis, University of Puerto Rico, Biology Department; Morales, Irmarié, University of Puerto Rico, Biology Department, Robles, Yarelis, Department of Natural Sciences, Interamerican University; Bruno, Nimaris, University of Puerto Rico, Biology Department; Renaud, Fernando L, University of Puerto Rico, Biology Department

Chronic Exposure Of Human Macrophages In Vitro To Morphine And Methadone Induces A Putative Tolerant/Dependent State

[Life Sciences-04]

González, Rosalyn, UPR-RIO PIEDRAS; Clarivel Lasalde; Alfredo León; Carlos I. González; Department of Biology, University of Puerto Rico-Río Piedras Campus

Effects of Upf1 Phosphorilation Mutants In Saccharomyces Cerevisiae Nonsense-Mediated Mrna Decay (NMD) Pathway

[Life Sciences-05]

Loperena, Yaliz, UPR-MAYAGUEZ; Ruiz-Acevedo, Alejandro, Rios-Velazquez, Carlos; Biology Dept, UPR Mayaguez

Isolation of Peptides that Recognize Cryptococcus gattii Using T7 Phage Display of Human's Brain and Lungs cDNA Libraries

[Life Sciences-06]

Lozada, Chad, UPR-MAYAGUEZ; Ballantine, David L.

Phylogeny of Rhodymeniales (Rhodophyta) reported from Puerto Rico

[Life Sciences-07]

Olivera, Lening, Ponce School of Medicine; Mueller, Devin, Departments of Psychiatry and Anatomy and Neurobiology, University of Puerto Rico School of Medicine, San Juan, Puerto Rico ; Pine, Daniel, Section on Development and Affective Neuroscience, National Institute of Mental Health Intramural Research Program, Bethesda, MD; Quirk, Gregory, Departments of Psychiatry and Anatomy and Neurobiology, University of Puerto Rico School of Medicine, San Juan, Puerto Rico 00931

The Effects Of Amphetamine And Yohimbine On Extinction Of Auditory Fear Conditioning

[Life Sciences-08]

Pantoja-Feliciano, Ida Gisela, UPR-RIO PIEDRAS; Pérez, María Egleé, Universidad de Puerto Rico, Río Piedras; Vargas Pinto, Greta, Hospital Boliviano Japonés, Sucre, Bolivia; Domínguez-Bello, María Gloria, Universidad de Puerto Rico, Río Piedras

Gender Differences in Antibiotic Resistance in a Rural Community in Bolivia

[Life Sciences-09]

Perez Casanova, Antonio, Ponce School of Medicine; Rivera Amill, Vanessa, Microbiology, Ponce School of Medicine; Noel, Richard, Biochemistry, Ponce School of Medicine; Hussain, Kasim, Pharmacology, Ponce School of Medicine, Kumar, Anil, Pharmacology, University of Missouri-Kansas City School of Pharmacy

Alcohol Abuse & Oxidative Stress In Macaque Model Aids

[Life Sciences-10]

Rodriguez, Carlos A., UPR-RIO PIEDRAS; Alberto Lopez, Manejo, UMET; Dr. Rafael Joglar, Biology, UPR-RP; Hector J. Claudio, Derechos, UPR-RP

Green Iguanas (Iguana iguana) in Puerto Rico: Is it Time for Management

[Life Sciences-11]

Ruiz, Francheska, UPR-RIO PIEDRAS; Rios, Neftalí, Biology, UPR-Humacao

Is There Parental Care In Eleutherodactylus Juanariveroi? The Evolutionary Significance

[Life Sciences-12]

Torres, Hernán, UPR-MAYAGUEZ; Schizas, Nikolaos, Marine Sciences, UPR-Mayaguez

Sympatric Mitochondrial Lineages in Two Marine Benthic Species With Different Life Histories

[Life Sciences-13]

Vega, Juan, UPR-MAYAGUEZ; Santos Yelixa, Biology UPR-Mayaguez; Ríos-Velazquez Carlos, Biology UPR-Mayaguez

The Ability Of Anoxigenic Purple Non-Sulfur Phototrophic Bacteria Isolated From Bromeliad's Phytotelmata To Grow In Biodiesel As Sole Carbon Source

Mathematics

[Mathematics-01]

Hernandez, Mariely, UPR-RIO PIEDRAS; Dra. María Egleé Pérez ; University of Puerto Rico at Rio Piedras, Department of Mathematics

Statistical Methods For Conservation Of Species

[Mathematics-02]

Pinero, Fernando, UPR-RIO PIEDRAS

Some Applications of Coding Theory

Physics

[Physics-01]

Arias, Melvin, UPR-RIO PIEDRAS; Pantojas, Victor, Department of Physics-Mathematics, University of Puerto Rico at Cayey; Rivera, Adamari, Department of Physics-Mathematics, University of Puerto Rico at Cayey; Rodriguez, Diego, Department of Physics, University of Puerto Rico at Río Piedras, Santiago, Jorge., Department of Electrical and System Engineering, University of Pennsylvania

Scanning Probe Microscopy for the characterization of fibers and other morphologies

[Physics-02]

Arroyo, Edwin, UPR-RIO PIEDRAS; S. Basu, Department of Physics, University of Puerto Rico Rio Piedras; Fouad Aliev, Department of Physics, University of Puerto Rico Rio Piedras

Relaxation Process and Phase Transitions in Nanoconfined Liquid Crystals

[Physics-03]

Betancourt, Jesuan, UPR-RIO PIEDRAS; Fonseca, Luis F, Physics Department, University of Puerto Rico Rio Piedras; Zypman, Fredy R, Physics Department, Yeshiva University, New York

Mechanical Spectroscopy Of Radiation-Induced Surface Roughness in SiO₂ Nanorods

[Physics-04]

Biaggi, Azlin, UPR-RIO PIEDRAS; Sola, Francisco, Physics, UPR-Rio Piedras; Resto, Oscar, Physics, UPR-Rio Piedras; Fonseca, Luis F., Physics, UPR-Rio Piedras, Gonzalez-Berrios, Adolfo, Physics, UPR-Cayey; De Jesus, Joel, Physics, UPR-Rio Piedras; Morell, Gerardo, Physics, UPR-Rio Piedras

Nanocrystalline Silicon as the Light Emitting Component of a Field Emission Display Device

[Physics-05]

Burgos, Juan, UPR-RIO PIEDRAS; Zelevinsky, Vladimir, Department of Physics and Astronomy

Unstable Quantum Systems Coupled Via Continuum And Super Radiance

[Physics-06]

Colon, Luis M, UPR-RIO PIEDRAS

Foundations towards understanding Gravitation Theories and General Relativity

[Physics-07]

Correa, Margarita, UPR-RIO PIEDRAS; Kumar Ashok; Katiyar Ram; Physics, UPR-RP

Strain Induced Relaxor Behavior in $PbSc_{0.5}Nb_{0.25}Ta_{0.25}O_3$ Thin Films: A Comparison With The Nanoceramics

[Physics-08]

Escobar, Mauricio José, UPR-MAYAGUEZ; Escobar Medina, Mauricio Jose, Physics, UPR-Mayaguez; Kim, Yong-Jihn, Physics, UPR-Mayaguez

Tracing The Evolution Of Two Energy Gaps Of MgB_2 With Increasing Disorder

[Physics-09]

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Touching the Moon and the Stars-Workshop

[Physics-10]

Karan, Naba, UPR-RIO PIEDRAS; Saavedra Jose. J; Pradhan D; Melgerajo Ricardo; Thomas; Reji; Department of Physics, University of Puerto Rico

Structural and Electrochemical Characrization of Chemical Solution Derived $LiMn_{0.5}Ni_{0.5}O_2$

[Physics-11]

Lopez, Ivan Joel, UPR-RIO PIEDRAS; Dolidze, Vladimir; Aliev, Fouad; Department of Physics, UPR-RP

Interfacial And Random Field Effects In Polymers Filled With Nanoparticles

[Physics-12]

Medina, Olga, UPR-RIO PIEDRAS; Morell Gerardo, Física, UPR - RIO PIEDRAS; Avalos Javier, Física, UPR - RIO PIEDRAS; Weiner Brad, Química, UPR - RIO PIEDRAS, Merced Triana, Ciencia y Tecnología, Universidad Metropolitana; Rodríguez Samely, Física, UPR - RIO PIEDRAS

Ellipsometric Characterization of E. Coli and C. Xerosis Bacteria Films on Nanocomposite Carbon Surfaces

[Physics-13]

Mendoza, Frank, UPR-RIO PIEDRAS; Fernandez Felix, Physics UPR-MAYAGUEZ; Mendoza Frank, Physics UPR-RIO PIEDRAS

Electrical Properties of VO₂ Thin Films Grown By PLD

[Physics-14]

Mosquera Vargas, Edgar E, UPR-RIO PIEDRAS; Marín, Carlos; Department of Physics, University of Puerto Rico-Rio Piedras

Using Raman Spectroscopy to Detect Early-Nucleation Nanosize Phases in Freezing Liquids of n-Alkanes, C₁₂ – C₁₆

[Physics-15]

Nocua, Jose, UPR-RIO PIEDRAS; Morell, Gerardo, Institute for Functional Nanomaterials, Depto Fisica

Synthesis And Characterization of Stoichiometric Boron Nitride Nanostructures

[Physics-16]

Ortega, Nora Patricia, UPR-RIO PIEDRAS; Kumar Ashok, Department of Physics - University of Puerto Rico; Katiyar Ram S., Department of Physics - University of Puerto Rico

Multilayer Pb(Zr,Ti)O₃ /CoFe₂O₄ Epitaxialy Thin Films

[Physics-17]

Perez, Kenneth, UPR-RIO PIEDRAS; Fonseca, Luis, Universidad de Puerto Rico, Recinto de Rio Piedras

Photoluminescence studies of Si particles embedded in ZrN and Al₂O₃ matrices

[Physics-18]

Samanta, Kousik, UPR-RIO PIEDRAS; Bhattacharya Pijush, Department of Physics, Fisk University, Nashville TN 37209; Katiyar Ram, Department of Physics, University of Puerto Rico, San Juan, PR 00931; Rettori Carlos, Instituto de Fisica "Gleb Wataghin," UNICAMP, 13083-970, Campinas-SP, Brazil, Rao K V, Department of Material Science, Royal Institute of Technology, Stockholm, Sweden

Room Temperature Ferromagnetism In Nano-Crystalline Dilute Magnetic Semiconductor Zn_{1-x}Mnx Thin Films

[Physics-19]

Sanchez, Jorge, UPR-MAYAGUEZ; Rinaldi Carlos; Department of Chemical Engineering, University of Puerto Rico, Mayagüez

Rotational Brownian Motion of Non-interacting Magnetic Ellipsoids in D.C. and A.C. Magnetic Fields

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Growth and Characterization of Graphite like a-C:H nanostructures Arrays

[Physics-21]

UPPIREDDI, KISHORE, UPR-RIO PIEDRAS; Brad R Weiner, IFN; Dept of Chemistry, UPR-RIO PIEDRAS; Gerardo Morell, IFN; Dept of Physics, UPR-RIO PIEDRAS

Spectroscopic ellipsometry studies of ultrananocrystalline diamond deposited by DC plasma assisted HFCVD

[Physics-22]

Valentin, Luis, UPR-RIO PIEDRAS; Fonseca Luis, Physics, UPR-Rio Piedras; Resto Oscar, Physics, UPR-Rio Piedras

Synthesis and field emission properties of CrSi₂ nanowires.

[Physics-23]

YILMAZ, HULUSI, UPR-RIO PIEDRAS; Park, Yumi, Schools of Material Engineering, Purdue University; Strachan, Alejandro, Schools of Material Engineering, Purdue University; Morell, Gerardo, Dept. of Physics, University of Puerto Rico

Reactive Force Field Parametrization of Group IV-A Elements