



Alexander von Humboldt
Stiftung / Foundation

Humboldt Kolleg

**“Breaking Paradigms: Towards a Multi-,
Inter- and Transdisciplinary Science”**
**In commemoration of the 250th
Anniversary of Alexander von Humboldt**

Poster PROGRAM

February 21th – 24th, 2019
Ibarra, Ecuador

Humboldt Kolleg
 “Breaking paradigms: towards a Multi-, Inter- and Transdisciplinary science”
 250th birthday of Alexander von Humboldt

22 February 2019

	Title	Authors	Affiliation
1	“The aggregated induced emission effect in diaminodicyanoquinodimethanes derivatives”.	Edison Rafael Jiménez Granda and Hortensia Rodríguez.	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
2	Cellulose-based membrane as an effective adsorbent of heavy metal ions	Freddy Figueroa 1 , Isaac Bravo 1 , Frank Alexis 1	School of Biological Sciences and Engineering, Yachay Tech University, Urcuquí, Ecuador
3	“Determination of Atmospheric Black Carbon in Mexico”.	Bruno Sandoval Collins, Harry Álvarez Ospina, Oscar Augusto Peralta Rosales, Dara Salcedo and Sandra Hidalgo.	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
4	Economics of Prison: Modeling the Dynamics of Recidivism	Alejandra Lopez 1 Naomi Moreira 2 Ariana Rivera 3 Bechir Amdouni 1 Baltazar Espinoza 1 Christopher M Kribs 4 Francisco Alvarez Botas3	1. Arizona State University 2. St. Joseph's College 3. School of Biological Sciences and Engineering, Yachay Tech University, Urcuquí, Ecuador 4. University of Texas at Arlington
5	Modified carbon nanotube based biosensors for the electrochemical detection of hydrogen peroxide	Andrés Moreno Barreno1*, Marlon Jerez Masaquiza2, Lenin Guerrero León2, Antonio Díaz Barrios1, Gottfried Suppan Flores1, Gema González Vásquez2-3, Patricio Espinoza Montero4, Lenys Fernández4	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
6	Cytokines in the physiopathology of depression	María Belén Paredes, María Eugenia Sulen	Yachay Tech University
7	Title: Triphasic agglomerate clay-hydroxiapatite- iron oxide to the gas sweetening of natural gas.	Nelson S. Luna C.1, José A. Rivera O.1, Dario A. Viloria V1.	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
8	“Antimalarial evaluation of different bis-thiadiazine derivatives using murine model by Plamodium berghei ANKA and P. yoelii 17XL strains.	Katherine S. Loachamin1, Lilian M. Spencer1 and Hortensia M. Rodríguez2.	1School of Biological Sciences and Engineering. 2School of Chemistry and Engineering. Yachay Tech University. Ecuador.
9	“Silver nanostructures morphology tunned by reducing and capping agent involved in its green synthesis”.	Lourdes Araceli Granja Alvear1, Thibault Terencio1, Floralba López González1 and Gema González2.	1School of Chemical Science and Engineering. 2School of Physics Science and Nanotechnology. Yachay Tech University. Ecuador.
10	Phage Display Technology: Current Status, Molecular Principles, Medical Applications and Future Expectations	Karen Elizabeth Sánchez Blacio1, Marlon Steven Zambrano-Mila1 and Nelson Santiago Vispo1	1 School of Biological Sciences and Engineering, Yachay Tech University, San Miguel de Urcuquí, Ecuador;
11	“Drug Delivery Systems (DDS) based on Chemical Conjugation”	Danna Belén Castillo and Hortensia Rodriguez.	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
12	“Heavy Metals Removing by using low cost bio-adsorbents”.	Dolores Parra, Gottfried Supan, Thibault Terencio	School of Chemical Science and

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		and Floralba López. Ecuador.	Engineering. Yachay Tech University. Ecuador.
13	“Study of the Concentration and Composition of Ice Nucleating Particles in Rain Water Samples from the Locations Quito, Mexico City, and Altzomoni”.	Diana L. Pereira ¹ , Luis A. Ladino ² , Rocio García ² , Sandra Hidalgo ¹ , Javier Juárez ² , Carlos Bermejo ² , and Marlon Zambrano ¹ .	1School of Chemical Science and Engineering. Yachay Tech University. Ecuador. 2Atmospheric Science Center. National Autonomous University of Mexico. Mexico.
14	Study of high-valent iron intermediates in a biological system.	Airina Valentina Cordova Torres (airina.cordova@yachaytech.edu.ec) 1 Ph. D. Juan Pablo Saucedo-Vázquez (jsaucedo@yachaytech.edu.ec). 2 Ph. D. Wilhelm Hansberg	School of Chemical Sciences and Engineering. Yachay Tech.; 2 Instituto de Fisiología Celular. UNAM. CDMX
15	Effect of LoSal waterflooding on emulsion stability	Jordy Sarmas Farfan [1], Antonio Díaz Barrios [2]	Yachay Tech University School of Chemical Sciences and Engineering
16	Ni doped Cu-BTC based materials for CO ₂ adsorption and catalysis	Zenteno J.*, Terencio T.*	School of Chemical Sciences and Engineering
17	Titaniferous Ti sands of Ecuador as adsorbents of acid gases in the hydrocarbon industry	Shary Francisca Mosquera Baca, Marvin José Ricaurte Fernández, Dario Alfredo Viloria Vera.	: School of Chemical Sciences and Engineering
18	Estimation of the population size of white-tailed deer by means of direct and indirect methods	Henry Herrera, Markus Tellkamp	1 School of Biological Sciences and Engineering, Yachay Tech University, San Miguel de Urcuquí, Ecuador;
19	CRISPR-Cas9: From bacterial immune system to genomic tool	Jorge Simón Tanquero, Angel S Rodríguez, Nelson Santiago Vispo	1 School of Biological Sciences and Engineering, Yachay Tech University, San Miguel de Urcuquí, Ecuador;

23 February 2019

1	“Extracción de licopenos con capacidad antioxidante a partir de <i>Solanum betaceum</i> ”	Danae Fernández Rivero, Orestes Darío López Hernández y Christian Fabián Pérez Sánchez. Ecuador.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato.
2	“Micro encapsulación de licopenos provenientes de residuos agroindustriales del tomate de árbol (<i>Solanum betaceum</i>)”.	Danae Fernández Rivero, Orestes Darío López Hernández, Christian Fabián Pérez Sánchez, y Jhonatan Alexander Vásquez Calero.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador
3	“Micro encapsulación de antocianinas extraídas a partir de Mora (<i>Rubus glaucus</i>)”.	Vanessa Monserrath Bastidas Bastidas, Orestes Darío López Hernández, Kelly Paola Guanoquiza Zambrano,	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador.

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		Jhonatan Alexander Vásquez Calero y Esteban Emiliano Suárez Manzano.	
4	“Evaluación de diferentes polímeros en la microencapsulación de antocianinas extraídas a partir de papa morada variedad Yanashungo”.	Kelly Paola Guanoquiza Zambrano, Orestes Darío López Hernández, Vanessa Monserrath Bastidas Bastidas, Jhonatan Alexander Vásquez Calero y Esteban Emiliano Suárez Manzano.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador.
5	“Microesferas con actividad antioxidante a partir de extractos de <i>Muelembekia tamnifolia</i> ”.	Jhonatan Alexander Vásquez Calero, Orestes Darío López Hernández y Yunis Pérez Betancourt.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador.
6	“Micro encapsulación de levadura <i>Saccharomyces cerevisiae</i> como fuente de probióticos”.	Esteban Emiliano Suárez Manzano y Orestes Darío López Hernández.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador.
7	“Extracción y micro encapsulación de carotenoides con actividad antioxidante a partir de la planta <i>Ducus carota</i> ”.	Henry Alexis Fiallos Yanez, Orestes Darío López Hernández y Jhonatan Alexander Vásquez Calero.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador.
8	“Micro encapsulación de antocianinas extraídas de la col morada (<i>Brassica oleracea</i> var. <i>Capitata f. rubra</i>)”.	Eliana Catalina Ramos Lalaleo, Orestes Darío López Hernández, Esteban Emiliano Suárez Manzano y Jhonatan Alexander Vásquez Calero.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador.
9	“Micro encapsulación de metabolitos con actividad antioxidante, extraídos de cáscaras de naranja”.	Leonardo Sebastián Gutiérrez, Orestes Darío López Hernández, Esteban Emiliano Suárez Manzano y Jhonatan Alexander Vásquez Calero.	Facultad de Ciencia e Ingeniería en Alimentos. Universidad Técnica de Ambato. Ecuador.
10	“Optical Glasses and Glass Ceramics, and their applications”.	Andréa Simone Stucchi de Camargo Álvarez Bernárdez y colaboradores.	Instituto de Física de Sao Carlos. Universidad de Sao Paulo. Brasil
11	“Cu(II) complexes with potential as low-cost antenna for dye sensitized solar cells”.	Jorge S. Gancheff y colaboradores.	Facultad de Química. Universidad de la República. Uruguay.
12	“Current prevalence and risk factors related to Chagas disease in Bolivia”.	Tania Alba Medrano.	Departamento de Biología. Universidad Mayor de San Simon. Bolivia.
13	“Geometría 3D y estructura de la cuenca Cauto-Guacanayabo, Cuba”.	Yaniel Misael Vázquez Taset.	Escuela de Ciencias de la Tierra, Energía y Ambiente. Yachay Tech University. Ecuador.
14	Comparación del efecto de la radiación solar visible y ultravioleta en plantas con su equivalente en humanos	Graciela M Salum ¹ , Levis Zerpa Morloy ² , Mariela A. Perez Cárdenas ¹ , Sofia D. Carvalho ³ , Andrés S Alcivar Carmignani ¹ and David F Clavijo Calderón ¹ ,	1Escuela de Ciencias Biológicas e Ingeniería, Universidad Yachay Tech 2Escuela de Ciencias Matemáticas y Computacionales, Universidad Yachay Tech3 Universidad San Francisco de Quito
15	Computational chemistry at Yachay Tech	Thibault Terencio	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
16	Peptide CIGB - 300 a hope in the fight against cancer	Dario F. Castro 1 and Diana E. López 1	YachayTech University1, ESPE University2

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17	Synthesis and characterization of cellulose-based hydrogels for antibiotic delivery against Leishmaniasis	Carolina Serrano-Larreal, Frank Alexis1, Javier Santamaría-Aguirre2,3	1. School of Biological Sciences and Engineering, Yachay Tech, San Miguel de Urcuquí, Ecuador 2. Instituto de Investigación en Salud Pública y Zoonosis (CIZ), Quito, Ecuador 3. Universidad Central del Ecuador
18	Natural Cellulose as a Solution to Remediate VOCs in Air Pollution	Isaac Bravo 1, Freddy Figueroa 1, Maria Swasy 3, Mohamed Attia 4, Mohamed Ateia 5, Domenica Encalada1, Karla Vizuete 2, Alexis Debut 2, Daniel C. Whitehead 3, and Frank Alexis 1, #	1. School of Biological Sciences and Engineering, Yachay Tech University, Urcuquí, Imbabura, Ecuador Center of Nanosciences and Nanotechnology, Universidad de las Fuerzas Armadas ESPE, Sangolquí, Ecuador Chemistry Department, College of Sciences, Clemson University, Clemson, South Carolina, USA Bioengineering Department, College of Sciences, Clemson University, Clemson, South Carolina, USA Environmental Engineering and Earth Sciences Department, College of Sciences, Clemson University, Clemson, South Carolina, USA #. BiodiverseSource, San Miguel de Urcuquí 100651, Ecuador
19	The Tau-protein and its importance in the development of Alzheimer	E. Crespo.1 , K. Ibarra1	School of Biological Sciences and Engineering, Yachay Tech University, Urcuquí, Ecuador
20	Keratin Extraction and its use in the synthesis and functionalization of silver nanoparticles	Emerson A. Mena1 and Floralba López2	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
21	Camelids and sharks antibodies biomedical applications	Maily González y Esther Matamoros	Universidad Yacha Tech

24 February 2019

1	“Obtaining and characterization of moringa oleifera seed powder and its properties for the obtaining of drinking water”.	Soto-Villegas C. 1, Páez-Lara A. 1, Rivera-Ortega J. Á. 1, Rubio-Rosas E. 2, López-González F. 1.	1School of Chemical Sciences and Engineering. Yachay Tech University. Ecuador. 2Centro Universitario de Vinculación y Transferencia de Tecnología, Benemérita Universidad Autónoma de Puebla. México.
2	Pembrolizumab and Nivolumab in the treatment of Non-small cell lung cancer (NSCLC)/ Pembrolizumab and Nivolumab en el tratamiento de células no pequeñas de cáncer de pulmón	Camila Lisset Velastegui Gamboa, Dayanara Lissette Yanez Arcos	1 School of Biological Sciences and Engineering, Yachay Tech University, San Miguel de Urcuquí, Ecuador;
3	“Synthesis of hierarchical silica monolith by Pickering emulsions to encapsulate photosynthetic plant cells for CO ₂ adsorption”.	Andrea Vaca1, Jérémie Causse2, Lourdes Ruiz Peralta3 and Alicia Sommer Márquez1.	1School of Chemical Science and Engineering. Yachay Tech University. Ecuador. 2Institut de Chimie Séparative de Marcoule. France. 3Universidad Autónoma de Puebla. Mexico.
4	Interleukin 2: A step further in	Leandro Santiago1, Nicole	Yachay Tech, Ecuador1

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	cancer immunotherapy.	Lovato1, Frank Camacho2, Oliberto Sánchez2	Universidad de Concepción, Chile2
5	“Algae encapsulation into silica monolith synthesized by HIPE”.	Nadia López and Alicia Sommer Márquez.	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
6	Reconstructing the Phylogeny of Papillomavirus using the E2 Gene	Cristian Guzmán Arias, Paolo Vallejo-Janeta, Alonzo Alfaro-Núñez	School of Biological Sciences and Engineering, Yachay Tech University.
7	“Comparison of tropospheric ozone and nitrogen dioxide concentration levels in Ecuador and other latitudes”.	Manuel A. Andino-Enríquez1, Sandra P. Hidalgo-Bonilla1 and Luis A. Ladino2.	1School of Chemical Sciences and Engineering, Yachay Tech University. Ecuador. 2Center of Atmospheric Sciences. National Autonomous University of Mexico. Mexico.
8	Synthesis of glycodendritic system with antiviral potential activity	Fernanda Romero, Alfonso Pérez and Nazario Martín*	Universidad Yacha Tech
9	Economics of Prison: Modeling the Dynamics of Recidivism	Alejandra Lopez - Naomi Moreira - Ariana Rivera -Bechir Amdouni - Baltazar YT advisor: Francisco Alvarez BotasChristopher M Kribs University of Texas at ArlingtonEspinoza - Arizona State University	Arizona State University St. Joseph’s College School of Biological Science and Engineering
10	Molibdenum-polyammine based inorganic biomimetics of the FeMo cofactor of nitrogenase enzyme.	Steven Javier Jiménez Guaila , PhD. Juan Pablo Saucedo-Vázquez	School of Chemical Sciences and Engineering
11	CRISPR-Cas as antimicrobial: A Novel Technique to Treat Bacterial Antibiotic Resistance	Selena L. Tinoco, Katlheen N. Sarmiento, Brian M. Merchán	Universidad Yachay Tech
12	Isolation and characterization of nitrogenase enzyme from diazotrophic bacteria of sugar cane.	Michelle Beatriz Chicaiza Lema, PhD. Juan Pablo Saucedo-Vázquez	School of Chemical Sciences and Engineering
13	Gangliosides and their relationship with different types of cancer	Pasquel Daniela and Yanez Sabrina.	Universidad Yacha Tech
14	Magnetic properties of cobalt and nickel complexes with perezone, a quinone of natural origin.	Rosa Cecilia Medina Chalacan; María Emilia Iglesias Moncayo; Cinthya Anabel Anrango Camacho PhD. Juan Pablo Saucedo-Vázquez	School of Chemical Sciences and Engineering
15	Potential effects of SGT-53 nanotherapy combined with three different standard treatments in human cancers	Cristina Picón; Ariana Rivera	Universidad Yacha Tech
16	“Desing of a plant for the production of ethanol from sugarcane”.	Santiago Luna, Shary Mosquera, Jordy Sarmas, Jeremee Zenteno, Alfredo Viloria and Marvin Ricaurte.	School of Chemical Science and Engineering. Yachay Tech University. Ecuador.
17	Synthesis of new Fatty Acid Synthase inhibitors with cytotoxic properties	Nicolás Montesdeocaa, Javier Arizab, Dolors Serrac, Jordi Garcia, Laura Herrero, Marta López, Kamil Makowskia	aSchool of Chemical Sciences and Engineering, Yachay Tech University. Ecuador. bFaculty of Chemistry, University of Barcelona, Spain. cDepartment of Biochemistry and Physiology,

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			School of Pharmacy and Food Sciences, University of Barcelona, Barcelona, Spain
18	Synthesis of new Carnitine Palmitoyltransferase inhibitors derivatives of C75 with anorexigenic effect	Alicia Venegasa, Javier Arizab, Dolors Serrac, Jordi Garcíab, Laura Herreroc, Marta López, Kamil Makowskia*	aSchool of Chemical Sciences and Engineering, Yachay Tech University. Ecuador. bFaculty of Chemistry, University of Barcelona, Spain. cDepartment of Biochemistry and Physiology, School of Pharmacy and Food Sciences, University of Barcelona, Barcelona, Spain
19	Atmospheric deposition in natural and anthropized environments of the north of Ecuador	Jhoana Tugumbangoa, Jorge Peyb, Kamil Makowskia, Marta López*	aSchool of Chemical Sciences and Engineering, Yachay Tech University. Ecuador. b Araig, The Pyrenean Institute of Ecology, Spanish National Research Council (CSIC), Zaragoza, Spain
20	Rheological analysis of polyacrylonitrile / carbon nanotubes nanofibers	Doménica Bermeo 1 , Camilo Zamora 1, Christian Muñoz 2	<i>YachayTech University1, ESPE University2</i>