

XVIII SYMPOSIUM OF MEXICAN STUDIES AND STUDENTS IN THE UK

SYNERGY, THE LINK TO THE FUTURE

01- 02 JULY, 2021



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Campus Guanajuato | División de Ciencias Sociales y Humanidades



Welcome to the XVIII Symposium of Mexican Studies and Students in the UK

On behalf of the Society of Mexican Students in the United Kingdom, we are delighted to welcome you all to the XVIII Symposium of Mexican Studies and Students in the UK in a friendly, dynamic, diverse and inclusive platform.

The Symposium of Mexican Studies and Students in the United Kingdom, an annual multidisciplinary event that brings together more than 250 researchers. The Symposium is a space for scientific and academic dissemination intended for students, researchers, research centres and companies interested in the scientific, technological and multidisciplinary development to promote collaborations between Mexico and the United Kingdom. The symposium will feature a wide range of keynote talks, inter-disciplinary panel discussions, oral presentations, academic posters, and networking opportunities.

This year, the symposium will be hosted by the Mexican Society at the University of Nottingham. Our main theme is 'Synergy, the Link to the Future'. The Oxford dictionary defines the word "synergy" as the collaboration of two or more agents to produce a combined effect greater than the sum of their separate effects. The organising committee decided to use this word to highlight the importance of the interaction between the disciplines. We are stronger together and our knowledge works better when we share it, discuss it, integrate it and apply it. We believe that indeed, working together (in synergy) is the right path to a better future.

This event has the support of the Mexican government through the Embassy of Mexico in the United Kingdom, the National Council of Science and Technology (CONACyT), the University of Nottingham, UK, the Mexican Cultural Centre (MCC) in the United Kingdom, the Centre for Mexican Studies of the UNAM in the United Kingdom, among other major academic and cultural institutions.

Jorge A. Llamas Orozco

Chair of the Organising Committee



General Information

Venue

Gathertown

Etiquette for virtual symposium

Test your setup.
Mute microphone when joining the event,
doing this cuts down on distracting
background noise.

Language of the Symposium

The official language of the Symposium is English; however, some sessions might be in Spanish.

Refreshment breaks

Coffee break rooms will be available on the platform.

Certificate of attendance

A certificate of attendance will be sent by email to you in the week following the Symposium.



Get involved at MXSymposium21

Facebook Live!

@symposiumMXinUK



We will be talking to our speakers throughout the week to get their thoughts and reactions on the debates and discussions at the Symposium, so make sure you follow us on Facebook and invite colleagues, partners and networks to join the conversation from afar!

Social media

@MX_Symposium



Engage at the Symposium on social media by sharing interesting links, images and videos using #mixinUK21.

All your tweets will be shared on Instagram and Twitter wall, highlighting the latest messages and insights in real-time!

PROGRAMME THURSDAY 1 JULY

13:00 Room 1 **Opening Ceremony, Welcome to Symposium 2021**

H.E. Josefa González Blanco Ortiz Mena

Mexican Ambassador to the United Kingdom

TBC

CONACYT

Prof. Robert Mokaya

Pro-Vice-Chancellor for Global Engagement

University of Nottingham

Raul Zepeda Gil

President of the MexSocUK

Jorge Llamas

Chair of the XVIII Symposium of Mexican Studies and Students in the UK

13:30 Room 1 **Panel Discussion: "Bilateral Academic Collaboration MX-UK"**

Rodrigo Meléndrez

Head of Cooperation & Education Affairs

Embassy of Mexico to the United Kingdom

Arturo Mendoza

Head of Newton Fund, Mexico

Prof. Ana Elena González Treviño

Director Centre for Mexican Studies, UNAM-UK

King's College London

Omar Sainz

President of Red Global MX-UK

Emma Palfreyman

International Relations Officer to the Americas

University of Nottingham

Dr. Jesús Baca Plasencia

Atracción de Talento Académico

Tecnológico de Monterrey

Moderator:

Raúl Zepeda Gil

President of MexSocUK

14:30 Room 2 **"The role of Vaccines in the history of humanity"**

Prof. Alejandro Madrigal

MD, PhD, FRCP, FRCPath, DSc, HonDSci, FMedSci, D.h.c.

University College London

Moderator:

Paulyna Magana

PhD student, Pharmacy

University of Nottingham

All times are London time BST (British Summer Time), which is GMT+1.

The organisers reserve the right to alter timings if necessary.



THURSDAY 1 JULY

15:10 Room 1	Panel Discussion: "Energy Transition" Dr. Jon McKechnie Assistant Professor, Faculty of Engineering University of Nottingham Juan Manuel Avila CEO & Co-Founder of Top Energy Mexico Guillermo Zuñiga International Energy Transition Consultant at Earthjustice	15:10 Room 2	"Design, Innovation and Competitiveness" Dr. Julio Fries Peña Director Premio Nacional de Diseño: Diseña Mexico UNAM
	Moderator: Jorge Llamas PhD student, Sustainable Energy Technology University of Nottingham	15:40 Room 2	"Understanding Science Diplomacy in the Global South: an opportunity for the Mexican diaspora" Mtro. Parsifal Islas Morales Secretario Ejecutivo Cátedra de Diplomacia y Patrimonio de la Ciencia de la Ciudad de México

16:10	Oral Presentations	ENGINEERING Room A	CHEMISTRY Room B	ARTS & HERITAGE Room C	POLICY Room D
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17:40	BREAK
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17:45 Room 1	Panel Discussion: "Water Diplomacy" Dr. Blanca Jimenez UNAM	Prof. Rachel Gomes Professor of Water & Resource Processing Faculty of Engineering University of Nottingham	Moderator: Dr. Andrea Garduño Jimenez Wastewater Treatment and Reuse University of Nottingham
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18:45 Room 1	Panel Discussion: "Manufacturing Engineering" Omar Lopez-Botello CEO and Co-Founder of AMMA3D and Researcher at Tec de Monterrey Expert in Additive Manufacturing Laura Ruiz Cantu Transitional Assistant Professor, Faculty of Engineering, University of Nottingham Dalia Carolina Ramos Building and test Alpine F1 Team Javier Dominguez-Caballero Advanced Manufacturing Research Centre Technical Lead of the University of Sheffield	18:45 Room 2	"Challenges for changing the representation of Indigenous Peoples in Mexican Cinema" and short film: "Time and the Seashell" Dr. Itandehui Jansen Lecturer Film & TV Edinburgh College of Art, The University of Edinburgh
	Moderator: Cristina Ferro-Barbosa PhD Manufacturing Engineering, University of Nottingham		



ORAL PRESENTATIONS

THURSDAY 1 JULY

Room A ENGINEERING	Room B CHEMISTRY	Room C ART & HERITAGE	Room D POLICY
<p><i>Moderator:</i> Dr. Fernando Pérez-Cota RAEng Research Fellow University of Nottingham</p>	<p><i>Moderator:</i> Dr. Andrea Garduño Jimenez Wastewater Treatment and Reuse University of Nottingham</p>	<p><i>Moderator:</i> Jose Gustavo Berumen Salazar PhD in Digital Economy University of Nottingham</p>	<p><i>Moderator:</i> Dr. Carlos Osorio Sandoval Mechanical, Aerospace and Civil Engineering University of Manchester</p>
<p>16:10 Electrical impedance methods plan root phenotyping Diego Corona López The University of Manchester</p>	<p>Release of Fragmented Fibre Pollution from Common Textile Materials and Structures during Laundry Alma Victoria Palacios Marín University of Nottingham</p>	<p>The synergy of the actors with symbolic power to define the culinary heritage policy of Mexico. Brisol Garcia Garcia Universidad Intercultural del Estado de Puebla</p>	<p>Understanding multiple outcomes for the design of healthcare systems: a participatory approach Irma Cecilia Landa-Avila Loughborough University</p>
<p>16:25 Biomimetic materials for hydrogen production Samantha L Peralta Arriaga University of Sheffield</p>	<p>Plants on the Pill: We are what we eat, but do we know what we are eating? Andrea Lorena Garduño Jimenez University of Nottingham</p>	<p>Colonial and decolonial imaginaries to consider in the shape of cultural communitarian development initiatives. The case for batalla de Tlatoanis, promoting Nahuatl through content creation, didactical design and hip-hop music production. Aristeo Pantoja Diaz UNAM</p>	<p>Influence of health experts in the process of two obesity prevention policies: results of a first round of interviews Anette Bonifant Cisneros University of York</p>
<p>16:40 Porous and dense magnetic microspheres developed via a flame-spheroidisation method Jesus Molinar Diaz University of Nottingham</p>	<p>Microwave-assisted polymer synthesis for applications in the high performance coatings sector Jessica Vidales Herrera University of Nottingham</p>	<p>'Arte: arma de construcción masiva' by cerrucha. the consolidation of a new artistic speech Natalia Stengel Peña Kings College London</p>	<p>Creating Social Impact Synergy Through the Implementation of Trans-institutional Strategies in the Oaxacan Mixtec, Mexico. Illana Herrera Arellano Universidad Tecnologica de la Mixteca</p>
<p>16:55 Coherence scanning interferometry for additive manufacturing Carlos Alberto Gomez Moreno University of Nottingham</p>	<p>Wastewater Treatment Plants as a Source of Microplastic Guadalupe V. Landeros Gonzalez University of Nottingham</p>	<p>Redefining our Life-at-Home Using Human Centred Design Carla Resendiz Villasenor Teesside University</p>	<p>The Legislative Functions of the Executive: a Breach in the Principle of Separation of Powers? Sonia Anaid Cruz Davila King's College London</p>
<p>17:10 Designing, Modelling and Biofabrication of Scaffolds for Osteochondral Defect Repair Cristina Ferro-Barbosa University of Nottingham</p>		<p>Consumption and social use practices of Hallyu through Adriana Robledo Sánchez Universidad Autónoma de Querétaro, México. UAQ</p>	<p>Total Factor Productivity (TFP) in the Mexican Manufacturing (1993-2018): trend, determinants and spatial distribution. Emmanuel Ramirez Guerra Durham University</p>
<p>17:25 Statistical Predictive Modeling of the Morphology of Inkjet-printed Dielectric Tracks Juan Francisco Reyes Luna University of Nottingham</p>			



PROGRAMME FRIDAY 2 JULY

09:00 Room 1	"Proyecto Mezquite: empowering communities and addressing global challenges"	Room 2	"A digitization journey in the railway sector"
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Dr Zinnia Gonzalez-Carranza
School of Biosciences
University of Nottingham

Victoria Navarro Franco
Co-Founder & CTO
OmniSavy UG

09:40 Oral Presentations

CLIMATE ENGINEERING
& COMPUTER SCIENCE
Room A

ENGINEERING
& PHYSICS
Room B

POLITICS
Room C

HISTORY
Room D

11:00 BREAK

11:10 Room 1	"Green Energy from wastewater "
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Room 2

"Two Hundred Years of Synergy: El periquillo sarniento and the Invention of the Mexican Individual"

Dr. Sharon Velasquez Orta
School of Engineering
Newcastle University

Dr. Adam Sharman
School of Cultures, Languages and Area Studies
University of Nottingham

11:50 Room 1	"The new profile of the young researchers and their role in the post-pandemic era"
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Dr. David Oliva Uribe
General Secretary of the European Association of Power Electronics
Principal External Advisor of CONACYT
Co-founder of the EU Mex-Connect Consulting Company

12:30 Oral Presentations

LIFE SCIENCES
Room A

BUILDING ENVIRONMENT
ENGINEERING
Room B

REGULATION &
JUSTICE
Room C

BUSINESS &
ECONOMICS
Room D

13:45 Carlos Fuentes Award

Room 1 A recognition to the most outstanding Mexican student/researcher of the year in the United Kingdom

Moderator:

Raul Zepeda Gil
President of the MexSocUK

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14:15 **Career Opportunities**

Room 2

Dr. Ricardo Guerra Sánchez

Director General CATEC

14:35 **Dr. Jesús Baca**

Atracción de Talento Académico
Tecnológico de Monterrey

14:55 **Poster Session**

Room P

15:30 **Panel Discussion:**

"Vaccines and Therapy: the Gateway to ending the SARS-COV2 Pandemic"

Room 1

Panel Discussion:

"Paths for career development in Business, Finance, and Technology"

Victor Sánchez

Director Red OTT

Gabriel Anguiano

Chairman of the Mexican Chamber of Commerce in Great Britain

Liliana Reyes

Executive Director AMEXCAP

Dr. Teresa Cutino-Moguel

DipLSHTM, MSc, PhD, FRCPath

Virology Clinical Lead

Barts Health

Carlos Sanders, MD.

PhD student, Pharmacy

University of Nottingham

Dr. Alejandro Sanchez-Flores

Head of Core Facility

Unidad de Secuenciación Masiva y Bioinformática

UNAM

Moderator:

Paulyna Magana

PhD student, Pharmacy

University of Nottingham

Moderator:

Rodrigo Meléndrez

Head of Cooperation & Education Affairs

Embassy of Mexico to the United Kingdom

16:10

Room 1

Panel Discussion:

"Digital culture and Big data in Mexico"

"Profesionals in Mexico; new trends for

professional work after COVID."

Room 2

Dr. Ernesto Schwartz

University of Exeter

Dr. Lidia García González

Universidad de Guanajuato

Prof. Beatriz Bustos

Departamento de Estudios Socio-Urbanos

Universidad de Guadalajara

Moderator:

Gisela Reyes-Cruz

PhD Computer Science

University of Nottingham

16:50

Room 1

Closure and Invitation to 2022

Jorge Llamas

Chair of the XVIII Symposium of Mexican Studies and Students in the UK

PhD student, Sustainable Energy Technology

University of Nottingham



ORAL PRESENTATIONS

FRIDAY 2 JULY

	Room A CLIMATE ENGINEERING & COMPUTER SCIENCE	Room B ENGINEERING & PHYSICS	Room C POLITICS	Room D HISTORY
	Moderator: Mariana Gaytan Camarillo PhD in Environmental Psychology University of Nottingham	Moderator: Jesús Molinar Díaz PhD in Materials Engineering and Materials Design University of Nottingham	Moderator: Cristina Ferro-Barbosa PhD Manufacturing Engineering, University of Nottingham	Moderator: Jessica Vidales Herrera PhD in Chemical Engineering University of Nottingham
09:40	Twitter and actions to combat climate change during the COVID-19 pandemic. Mariana Gaytan Camarillo University of Nottingham	Echo mapping of Supermassive Black Holes Juan V. Hernández Santisteban University of St. Andrews	Corruption risks in public procurement contracts: what happens once a contract is awarded? Irasema Guzmán Orozco University of Sussex	Wisdom, language and worldview in Aztec philosophy Osiris Sinuhé González Romero Leiden University
09:55	Petrography of the Permian Yellow Sands of County Durham: Impact of the Zechstein transgression and implications for reservoir quality Joel Lozano-Perez University of Durham	Are we able to see the very first stars ever formed in the Universe? Teresita Suarez Noguez University of Edinburgh	Do electoral cycles boost corruption? An overview of corruption risks in public procurement procedures at a municipal level in Mexico during electoral and non-electoral years. Álvaro Quintero Casillas University of Sussex	Is the virtual development of spiritual intelligence possible? Aimeé Granados Pavón Universidad de Querétaro
10:10	Cooking as a Network of Interconnected Elements: Exploring Design Opportunities for Fast-Moving Consumer Goods Gustavo Berumen University of Nottingham	OPTICAM: A Triple-Camera Optical System Designed to Explore the Fastest Timescales in Astronomy Juan V. Hernández Santisteban University of St. Andrews	Universal Basic Income in Mexico: Political obstacles for its implementation Kevin Zapata Celestino University of Edinburgh	Climatic change in the central Mayab (Laguna Esmeralda) recorded away from major human impact Haydar Martinez-Dyrzo University of Nottingham
10:25	The variable renewable energy sources potential in Mexico: A temporally evaluated and geospatially constrained technoeconomical assessment Edgar Ubaldo Pena Sanchez Julich Research Institute - Institute of Energy and Climate Research	High-throughput phenotyping of carbon assimilation: Scaling traits from leaves to canopies in wheat Carlos A. Robles Zazueta University of Nottingham	The relation between Central Bank and financialisation in Mexico. A comparative perspective towards the political economy of financialisation in emerging markets. Jorge Andrés Quintero Sanchez University of Warwick	"Elizabeth Ward and the Mexican Landscape in 1826". Cony Marquez University of Arizona
10:40	Towards Technology design that supports the competencies of people with visual impairments Gisela Reyes Cruz University of Nottingham	Investigation of active thermal control system for small satellites Dafne Gaviria Arcila The University of Nottingham	"Why Climate Change is a Gender and LGBTQ+ Issue?" Room C Jessica Muñoz University of Birmingham Antonio Romero Rubio London School of Economics	Moderator: Fernando Champion Mexican Embassy
10:55	Multiview Transformers for Object Detection Brian Kostadinov Isaac Medina University of Durham			



ORAL PRESENTATIONS

FRIDAY 2 JULY

	Room A LIFE SCIENCES	Room B BUILDING ENVIRONMENT ENGINEERING	Room C REGULATION & JUSTICE	Room D BUSSINESS & ECONOMICS
Moderator:	Paulyna Magana PhD in Pharmacy University of Nottingham	Moderator: Jesús Molinar Díaz PhD in Materials Engineering and Materials Design University of Nottingham	Moderator: Dr. Armando Mendez Villalon Research Fellow, Bioengineering University of Nottingham	Moderator: Fatima Lopez Castellanos PhD in Business and Management University of Nottingham
12:30	In vitro modelling of neuroblastoma using human pluripotent stem cells. Ingrid M. Saldana-Guerrero University of Sheffield	Social value meets digital construction Jose Salazar-Vela University of Loughborough	Community value added (CAV) a strategy to encourage sustainable rural livelihoods (MVS) Martín Reyes García Karen Durán Mendoza Universidad Tecnologica de la Mixteca	Effects of oil-price modelling approach on the economics of instruments to procure financial security for decommissioning Arturo Regalado University of Aberdeen
12:45	Understanding the role of JAZMONATE ZIM DOMAIN proteins in plant stress-response and development. Eva Karina Díaz-Sánchez Royal Holloway University of London	Thermal comfort optimization in post-disaster social housig in the Yucatan Peninsula Yarely Aguilar Perez University of Nottingham	The barriers on-in operation based regulation and evaluation system in Mexico's social housing typology. (Analysis of eco-technologies) Yaressi Alejandra Treviño Garza University College London	Institutional change in producer economies and the global energy transition: the emergence of a strategic challenge for Mexico's National Oil Company Rafael Alejandro Vaquera Salazar University of Warwick
13:00	SMGBS as novel in vitro anti-infective agents for acanthamoeba spp. Infections Alemao Carpinteyro Sanchez University of Strathclyde	BIM-Based construction safety risk knowledge base for prevention through design Carlos Osorio Thomas Ashton Institute University of Manchester	Humour peacebuilding: the use of humour as an (1) Informative mobilizer, (2) Healing aid and (3) Process tool in contemporary Mexico Fernando Castro Escobar Lancaster University	Labour conditions amongst cultural producers of Mexico City: job insecurity and uncertainty Alejandra Jaramillo-Vázquez Universidad Autónoma Metropolitana
13:15	Tuberculosis and "The Masque of the Red Death" Lorena Carmona Hernández UNAM ENP8	Air in filtration modeling based on low-pressure airtightness measurements Alan Vega Pasos University of Nottingham	Justice by own hand from legal point of view Trujillo Juanita Quetzalli UNAM, ENP 8	Community Added Value (CAV) as a strategy to implement a new business model that allows Local Economic Development (LED) Karen Durán Mendoza Universidad Tecnologica de la Mixteca
13:30	The use of acids or bases for applications of dissolution and disintegration of human tissues Mayra Stefanía Gómez González UNAM ENP8	A Tale of Two Schools: Handling Separate Lives as a Mature Research Student Mario Alberto Moreno Rocha University of St. Andrews	The Remakings of Feminicide Data Saide Mobayed University of Cambridge	



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FRIDAY 2 JULY

POSTER SESSION

14:55

Room P

- 1.- "Hydrogen - Energy system integration through artificial intelligence"**
Eduardo E. Gonzalez Osuna
Durham University
- 2.- "Review on mechanical design parameters for self-starting vertical axis wind turbines"**
Francisco E. Aguerrebere Gonzalez
Durham University
- 3.- "A novel in vitro system for modelling the development of human tissues using human pluripotent stem cells"**
Alejandro Hidalgo Aguilar
Durham University
- 4.- "Scaling relationship and computational catalysts design for HDO processes"**
Fabian Morteo Flores
Cardiff University
- 5.- "Bioengineering a novel UV-induced skin model to mimic the effect of environmental stressor on skin health"**
Paola de los Santos Gomez
Durham University
- 6.- "Blind bolted connections using the extended hollo-bolt: A Review"**
Manuela Cabrera
University of Nottingham
- 7.- "First precipitation palaeoclimatic record based on δ₁₈O for the Late Holocene in Maya Highlands"**
Haydar Martinez-Dyrzo
University of Nottingham
- 8.- "Targeting DNA replication enzyme in microbial pathogens"**
Arturo Landeros de la Isla
University of Sheffield
- 9.- "Selection and mechanism reaction of transition metals on the Hydrodeoxygenation (HDO process): A DFT study"**
Fabian Morteo Flores
Cardiff University
- 10.- "Optical fibre sensors for novel medical devices"**
Dr. Francisco U. Hernández Ledezma
University of Nottingham
- 11.- "Understanding the role of drug transporters in the disposition of inhaled drugs in the lung"**
Paulyna Magana
University of Nottingham



Committees

MXSymposium21 would not have been possible without the commitment of these committees and their members.

Jorge A. Llamas Orozco (Chair)
PhD in Sustainable Energy Technology
Faculty of Engineering
University of Nottingham

Dr. Andrea Garduño Jiménez
Food Water Waste Research Group
Faculty of Engineering
University of Nottingham

Paulyna Magaña
PhD in Pharmacy
School of Pharmacy
University of Nottingham

Mariana Gaytan Camarillo
PhD in Environmental Psychology
School of Psychology
University of Nottingham

Cristina Ferro-Barbosa
PhD Manufacturing Engineering
Faculty of Engineering
University of Nottingham

Gisela Reyes-Cruz
PhD in Computer Science
School of Computer Science
University of Nottingham

Dr. Alan Vega Pasos
Faculty of Engineering
University of Nottingham

Dr. Carlos A. Osorio Sandoval
The Thomas Ashton Institute
University of Manchester

Dr. Francisco U. Hernández Ledezma
Optics & Photonics Engineer
Faculty of Engineering Associate
The University of Nottingham

Jesús Molinar Díaz
PhD in Materials Engineering and Materials Design
Faculty of Engineering
University of Nottingham

Carlos A. Gómez Moreno
PhD in Manufacturing Engineering
Faculty of Engineering,
University of Nottingham

Jose G. Berumen Salazar
PhD in Digital Economy
School of Computer Science
University of Nottingham

Jessica A. Vidales Herrera
PhD in Chemical Engineering
Faculty of Engineering
University of Nottingham

Yarely G. Aguilar Pérez
PhD in Sustainable Energy Technology
Faculty of Engineering
University of Nottingham

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Eduardo Estala Rojas (Principal Advisor)
Chief Executive Officer
Mexican Cultural Centre (MCC), UK

Dr. Lidia Ángeles García González (Advisor)
CONACyT Postdoctoral Researcher
Universidad de Guanajuato, México

Christian Chávez López (Designer)
Lecturer, PhD student
Posgrado en Artes y Diseño, UNAM, México

Dr. Michael James Basford (Academic Proofreader)
Faculty of Engineering
University of Nottingham





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symposium.mxuk.2020@gmail.com

