

18TH WORLD LAKE CONFERENCE
YURIRIA LAKE
GUANAJUATO · MEXICO · NOVEMBER 9TH - 11TH · 2021

GOVERNANCE, RESILIENCE
SUSTAINABILITY OF LAKES
FOR A BETTER SOCIETY

www.worldlakeconference.ugto.mx



UNIVERSIDAD DE
GUANAJUATO



CONAGUA
COMISIÓN NACIONAL DEL AGUA



SUSTAINABLE
DEVELOPMENT
GOALS

We support the Sustainable Development Goals



Final Announcement Table of Contents

About the World Lake Conference.....	5
Outline of 18 th World Lake Conference.....	5
About University of Guanajuato	6
Conference Schedule	7
Opening Ceremony	8
Plenary Keynote Addresses.....	8
“Sustainable Management, Conservation, and Innovation in Water Management in Mexico”	8
Dr. Humberto Marengo Mogollón, Deputy Technical Director of the Mexican National Water Commission.....	8
“Plenary Keynote Address”	9
Professor Tatsuki Toda, Dean of the Faculty of Science and Engineering, Soka University. Project Leader of Science and Technology Research Partnership for Sustainable Development (SATREPS by JST-JICA).....	9
“Governance, Financing and Knowledge Management of Transboundary Lakes and Beyond, United Nations Economic Commission for Europe (UNECE)”	9
Sonja Koeppel, United Nations Economic Commission for Europe (UNECE); Christian Severin, International Waters Focal Area, Global Environment Facility (GEF); Mish Hamid, IW: LEARN, Global Environment Facility (GEF).....	9
Thematic Keynote Presentations	10
“ILBM platform process for successfully overcoming governance challenges and sustainable management of Chilika Lake & its Basin - a case study from India”	10
Dr. Ajit Kumar Pattnaik, Vice President Wetlands International South Asia.	10
“Collaborative Efforts and Complementary Approaches for Ensuring the Future of our Lakes and Wetlands as Settings for Human Wellbeing and Health”	11
Dr. Colin Maxwell Finlayson, Institute for Land, Water and Society, Charles Sturt University, Australia.	11
“Use of the Integrated Lake Basin Platform (ILBM) in the Americas: development, current status and perspectives”	11
Mtro. Alejandro Juárez Aguilar, General Director, Institute Corazón de la Tierra, Mexico.	11
“Looking in the mirror ... How societies value their lakes”	12
Professor Pieter Van der Zaag, IHE Delft Institute for Water Education and at Delft University of Technology, The Netherlands.	12
“Lake food webs and C metabolism across gradients of catchment alkalinity and climate” ...	12
Dr. Tiina Nõges, Chair, Hydrobiology and Fishery, Institute of Agricultural and Environmental Science, Estonian University of Life Sciences, Estonia.	12



“Studies, Research and Management of West African Lakes, and Updates on wwf9”	13
Professor Salif Diop, Senior Officer at the United Nations, in UNEP’s Division of Early Warning and Assessment (DEWA) University Cheikh Anta, Senegal.....	13
“Earth Project in Lake Tana, Ethiopia”	13
Dr. Shinjiro Sato; Soka University Japan.....	13
“The Governance and Protection of Lake Erhai”	14
Zhengyu Hu, Deputy Director, Institute of Hydrobiology, Chinese Academy of Science.	14
Technical Sessions	14
Program.....	15
Information for Presenters.....	22
Information for Attendees	23
Special Sessions	23
Citizen Participation in Lake Basin Management, coordinated by Shiga Prefecture	23
UNEP-ILEC Special Session on Mainstreaming Lakes and Wetlands in the Global Water Agenda and SDGs	24
Water Solutionaries Create Waves from Great Lakes to Great Lakes	24
Panel: Governance in Latin American Lakes (spanish language)	24
Current Status, Suggested Management Interventions and Long-term Collaboration Needs on the African Great Lakes.....	25
Lake Briefs for Obtaining Information and Data for Integrated Management of Lakes and Reservoirs and Their Ecosystem Services in Latin America.	25
Integrated Lake Basin Management Workshop.....	26
Contribution from Younger Generations	26
Ibaraki Kasumigaura Prize Awardees	27
Cultural Events	27
Closing Ceremony.....	28
The Guanajuato Declaration	28
WLC 19 Venue Announcement and Presentation	28
Conference Summary.....	29
Tutorial for the use of the UG Events Platform.....	29
Access to the UG Events platform.....	29
Access the Event.....	31
Participate in forums.....	32
Answer the event evaluation	33



Conference Committee 34
 1. Scientific Committee 34
Contact Information 35



About the World Lake Conference

The World Lake Conference (WLC) began with the Shiga Conference on Conservation and Management of World Lake Environment in 1984, known as LECS'84, which was held at Lake Biwa, Japan with the objective of contributing and promoting scientific studies on the management of lakes around the world.

The Conference has since become recognized worldwide as a platform for participants from diverse areas to exchange views and experiences on the assessment and management of lakes, their resources, and their basins for sustainable use.

Past conferences have been held in the United States, Hungary, China, Italy, Argentina, Denmark, Kenya, India, Indonesia, and Japan on a biannual basis.

Outline of 18th World Lake Conference

Theme **Governance Resilience and Sustainability of Lakes for a Better Society.**

Thematic areas

Lake Ecosystem Values, Uses and their Sustainability:

- Resource values of lake, shoreline and basin ecosystems
- Regulating functions, properties, resilience and sustainability
- Anthropological, socio-cultural and historical values and assets
- Geophysical, chemical and bio-ecological features

Problems and Issues of Concern:

- In-lake problems
- Nearshore/lakeshore problems
- Problems arising from lake basin activities
- Global-scale challenges

Management Approaches and Frameworks:

- Governance
- Social ambit
- Environment and health
- Science and technology
- Economic ambit

Conference dates November 9, 10 and 11, 2021

Venue <https://eventos.ugto.mx>

Language English / Spanish

Host Organizations University of Guanajuato



	International Lake Environment Committee (ILEC)
Contributors	Guanajuato State Government National Water Commission, Mexico (CONAGUA)
Supported by	Guanajuato Municipal Potable Water and Sewer System Mexican Hydraulics Association Mexican Network of Basins Institute Corazón de la Tierra

This edition of the Conference, entitled “Governance, Resilience and Sustainability of Lakes for a Better Society”, hosted by the University of Guanajuato, Mexico, will be held in a virtual format. It is the first time in 23 years that the World Lake Conference will be convened in Latin America. This Conference aims to contribute the Sustainable Development Goals through knowledge generation, information exchange, management experiences and best practices directed to the comprehensive management of lakes and their basins for sustainable use.

The 18th World Lake Conference represents an international forum for lake experts from countries around the world, authorities in charge of their administration, users, technologists, scientists, professionals, students, and civil society members interested in spreading, learning, and implementing pertinent actions enhancing the management of lakes.

About University of Guanajuato

The University of Guanajuato is a comprehensive, multi-campus university with almost 300 years of history. It ranked 4th among public (state) universities in Mexico, and 2nd best for international outlook, according to the Times Higher Education World University Ranking in 2019. UG is a major research institution with 106 graduate and 98 undergraduate programs in Arts, Health Sciences, Economics and Administration Sciences, Natural and Exact Sciences, Social Sciences and Humanities, Life Sciences, and Engineering. UG has a total population of 28,047 students in 4 Campuses across Guanajuato State, organized into 13 Divisions and 52 departments. The UG High School System has 15,214 students in 11 venues in the state of Guanajuato.

UG has over 330 laboratories and 642 researchers certified by the National System of Researchers of the Mexican Council of Science and Technology (CONACyT). Research is developed by research groups in an ideal environment for knowledge production, management, and the transfer of technology. UG also organizes every year its Summer Research Program, recognized internationally for its quality, offered to undergraduate and graduate students.

In terms of international collaboration, UG has 317 international agreements with 197 international partners in 33 countries. It offers double degree programs at both undergraduate and graduate levels.



Conference Schedule

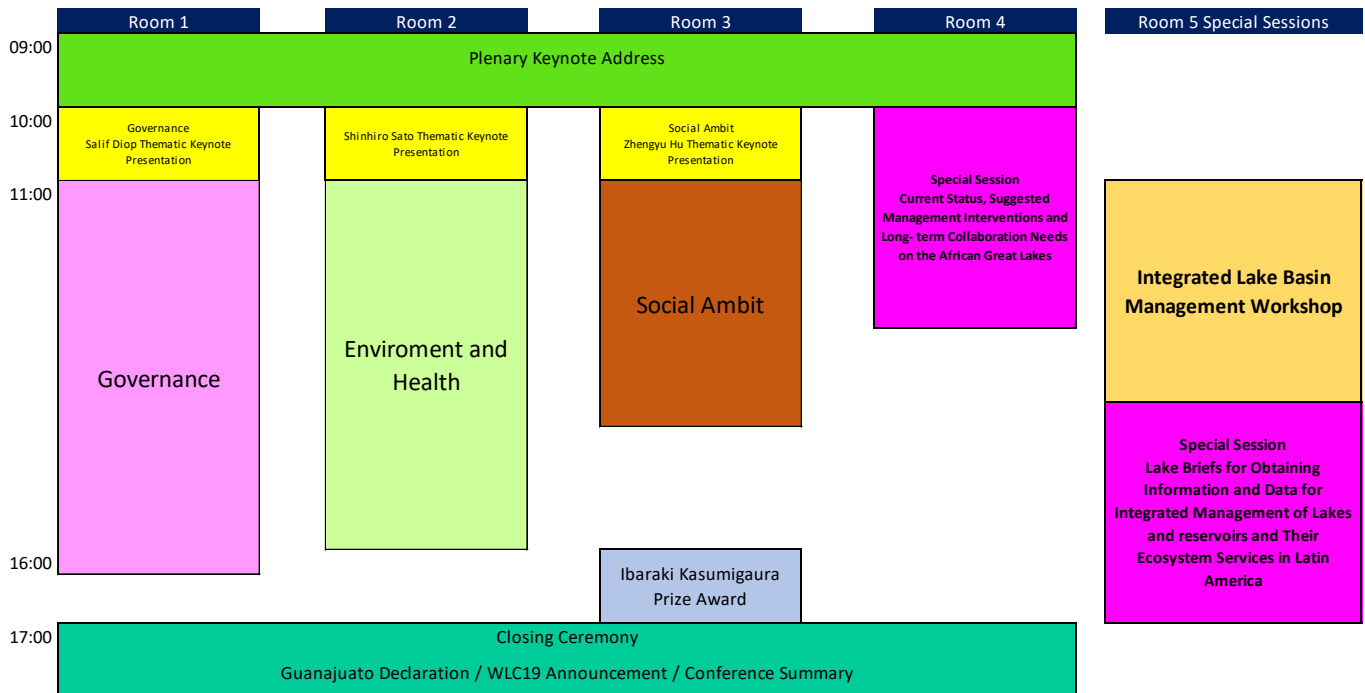
Day 1 Tuesday November 9th

	Room 1	Room 2	Room 3	Room 4	Room 5 Special Sessions
09:00	Opening Ceremony				
10:00	Sustainable Management, Conservation and Innovation in Water Management in Mexico, Plenary Keynote Address by Dr. Humberto Juan Francisco Marengo Mogollón Deputy Technical Director Mexican National Water Commission				
11:00	The Practice of Managing of Water Resources Ajit Kumar Pattnaik Thematic Keynote Presentation	Environment and Health Colin Maxwell, Finlayson Thematic Keynote Presentation	Spanish Technical Session Alejandro Juárez Thematic Keynote Presentation	Economics Pieter van der Zaag Thematic Keynote Presentation	Integrated Lake Basin Management Workshop: General Introduction
12:00	The Practice of Managing of Water Resources	Environment and Health	Spanish Technical Session	Economics	
16:00					Special Session Citizen Participation in Lake Basin Management, coordinated by Shiga Prefecture
18:00	University of Guanajuato Symphonic Orchestra Performance				

Day 2 Wednesday November 10th

	Room 1	Room 2	Room 3	Room 4	Room 5 Special Sessions
09:00	Plenary Keynote Address by Tatsuki Toda Soka University				
10:00	The Practice of Managing of Water Resources	Environment and Health	Spanish Technical Session	Science and Technology Tiina Nöges Thematic Keynote Presentation	Integrated Lake Basin Management Workshop
11:00				Science and Technology	
14:00	Special Session Panel: Governance in Latin American Lakes (spanish language)				Special Session Water Solutionaries Create Waves from Great Lakes to Great Lakes
16:00					UNEP-ILEC Special Session on Mainstreaming Lakes and Wetlands in the Global Water Agenda and SDGs
18:00	University of Guanajuato Folkloric Ballet Performance				

Day 3 Thursday November 11th



Opening Ceremony

The Opening Ceremony will take place on the first day of the Conference, Tuesday November 9th, 2021, is scheduled at 9:00 am (GMT-6). It will be enhanced by the participations of the Governor of Shiga Prefecture, Japan, Mr. Taizo Mikazuki; the Rector General of the University of Guanajuato, Dr. Luis Felipe Guerrero Agripino; the President of the International Lake Environment Committee Foundation (ILEC), Dr. Kazuhiko Takemoto and representatives from the Mexican National Water Commission and the Government of the State of Guanajuato.

Plenary Keynote Addresses

“Sustainable Management, Conservation, and Innovation in Water Management in Mexico”

Dr. Humberto Marengo Mogollón, Deputy Technical Director of the Mexican National Water Commission.

November 9th, 10:00 hrs (GMT-6).



Dr. Marengo has a bachelor degree, Master in Sciences and Doctorate in Civil Engineering, from the Faculty of Engineering of the National Autonomous University of Mexico, where he has been a professor since 1985.

He has worked for the Mexican Federal Electricity Commission, particularly in dam and hydroelectric plant projects, and as Mexican Commissioner of the International Boundary and Water Commission between Mexico and the United States, among other responsibilities.

“Plenary Keynote Address”

Professor Tatsuki Toda, Dean of the Faculty of Science and Engineering, Soka University. Project Leader of Science and Technology Research Partnership for Sustainable Development (SATREPS by JST-JICA).

November 10th, at 9:00 hrs (GMT-6).

Dr. Toda received a doctoral degree from the University of Tokyo (Japan). As a Professor at Soka University, he is attached to the Department of Science and Engineering for Sustainable Innovation, Faculty of Science and Engineering. His main research activities are environmental dynamic analysis, environmental impact assessment, environmental policy, environmental technology, environmental material, resource maintenance studies, earth resources system engineering, form/structure, living organisms, diversity/classification, and general fishery studies.

Dr. Toda has an extensive academic output, including five books in joint works, 194 published papers, 3966 citations, 221 conference presentations and talks and 27 honor awards for his conference activities. He has been awarded a grant from the Japan Society for the Promotion of Science, in the project “Creating marine forests that can withstand herbivory,” July 2017 - March 2020. Dr. Toda is one of the principal investigators of the Japan Science Technology Agency Project for Continuous Operation System for Microalgae Production Optimized for Sustainable Tropical Aquaculture (COSMOS): Preserving Malaysia's ecosystem through microalgae “aquatic jewels,” 2015 – 2022. Dr. Toda was Director of the Center for Cooperative Research and Development of Environmental Technology and currently serves as Dean of the School of Engineering, Faculty of Science and Engineering, Soka University, Japan.

“Governance, Financing and Knowledge Management of Transboundary Lakes and Beyond, United Nations Economic Commission for Europe (UNECE)”

**Sonja Koeppel, United Nations Economic Commission for Europe (UNECE);
Christian Severin, International Waters Focal Area, Global Environment Facility (GEF);
Mish Hamid, IW: LEARN, Global Environment Facility (GEF)**



Thematic Keynote Presentations

Some members from the ILEC Scientific Committee (SciCom) will make presentations on topics in their areas of expertise. The SciCom membership comprises a small number of internationally renowned scientists and experts in the field of lake and reservoir management and conservation.

“ILBM platform process for successfully overcoming governance challenges and sustainable management of Chilika Lake & its Basin - a case study from India”

Dr. Ajit Kumar Pattnaik, Vice President Wetlands International South Asia.

Tuesday November 9th, 11:00 hrs. (GMT-6), room “The Practice of Managing of Water Resources”.

This session will be presented by Dr. Ajit Kumar Pattnaik, Vice President, Wetlands International South Asia; Member of the State Pollution Control Board, Odisha; Senior Scientific Consultant, National Center for Sustainable Management; Ministry of Forest & Environment, Government of India Strategic Advisory Committee; Ministry of Water Resources, Government of India; Short Term Consultant, The World Bank.

Session description:

Governance is a steering function and is generally defined as the institutions that are responsible and accountable, structures and processes that determine who makes decisions, how and for whom decisions are made, whether how and what actions are taken by whom and to what effect. So, what makes the governance of Lakes special? Firstly, Lakes encapsulate a range of ecosystems providing myriads of ecosystem services that are incredibly significant for human well-being, the livelihood of a host of dependent communities, and, most importantly, climate change adaptation and mitigation. Good governance, based on fairness, transparency, and empowerment of all stakeholders, is essential for sustainable management and wise use of the lake & its basin. Many lakes globally are either degraded or lost due to unsustainable use and poor governance.

The Integrated Lake Basin Management (ILBM) Platform developed by International Lake Environment Committee Foundation (ILEC) provides an excellent framework for sustainable management of Lakes and their Basins. ILBM is an approach for achieving sustainable management of lakes and wetlands through the gradual, continuous and holistic improvement of basin governance, including sustained efforts for the integration of six pillars, i.e. institutional responsibilities, policy directions, stakeholder participation, scientific and traditional knowledge, technological possibilities, and funding prospects and constraints. The adequacies and inadequacies of lake basin management for individual lake basins can be determined by reviewing and assessing the existing management activities and practices. Based on the comprehensive surveys of the state of the world's lakes conducted over the past decades, relevant review questions have been categorized into six thematic domains, including; Institutions to manage a lake and its basin for the



benefit of all lake basin resource users; Policies to govern people's use of lake resources, and its impacts on lakes; Participation- Involvement of stakeholders to facilitate lake basin management; Technological possibilities and limitations that often dictate long-term decisions; Knowledge of both traditional and modern scientific origin as the basis for informed decisions; Sustainable finances to support the implementation of all of the above-noted activities. ILBM platform is now being adopted across the globe for sustainable management of the lake and their basins and gaining popularity day by day.

ILBM Platform process was adopted successfully for restoration and management of Chilika lake, a Ramsar site of India. The case study demonstrates how six governance pillars of the ILBM platform are being used aptly to restore a highly degraded lake and bring it back to near pristine condition.

“Collaborative Efforts and Complementary Approaches for Ensuring the Future of our Lakes and Wetlands as Settings for Human Wellbeing and Health”

Dr. Colin Maxwell Finlayson, Institute for Land, Water and Society, Charles Sturt University, Australia.

Tuesday November 9th, 11:00 hrs. (GMT-6), room: Environment and Health.

Session description:

This talk encourages the development and use of alternative and complementary approaches for lakes and wetland conservation and sustainable use to accompany the efforts that have been in place for the last half century since the Ramsar Convention on Wetlands was agreed. These include collaborative initiatives for raising the profile of the impacts of climate change on aquatic ecosystems, responding to the world scientists second warning to humanity, proposing a declaration towards the rights of wetlands and lakes, supporting integrated “lake” basin management, and addressing regime changes and novel ecosystems, and listing wetlands and lakes of distinction. These approaches have been supported by initiatives undertaken through the global Society of Wetland Scientists in collaboration with other organizations.

“Use of the Integrated Lake Basin Platform (ILBM) in the Americas: development, current status and perspectives”

Mtro. Alejandro Juárez Aguilar, General Director, Institute Corazón de la Tierra, Mexico.

Tuesday November 9th, 11:00 hrs. (GMT-6), room: Spanish Session.

Session description:

An overview of the application of the ILBM platform in the American Continent, analyzing the lake cases and countries where it has been used, the effects it has had on policies, grass root processes, research promotion and governance structures. In the final part, a series of comments will ponder the applicability and potential usefulness of this adaptable and strategic instrument, to improve basin management in the Americas.

“Looking in the mirror ... How societies value their lakes”

Professor Pieter Van der Zaag, IHE Delft Institute for Water Education and at Delft University of Technology, The Netherlands.

Tuesday November 9th, 11:00 hrs (GMT-6), room: Economics

Session Description:

The presentation focuses on the intricate relationships societies develop with lakes, including the problems and challenges that emerge. Societies learn to value lakes not in a smooth way. Feedbacks are critical in this learning process. Societies that completely disregard lakes may face surprises. It typically takes quite some time for a society to transform into a new mode that is compatible with the needs of lakes. This symbiotic mode may encompass economic but also cultural and other dimensions. Valuing lakes may therefore not be fully captured by economic approaches. Some iconic examples of how societies have dealt with lakes will illustrate the argument.

“Lake food webs and C metabolism across gradients of catchment alkalinity and climate”

Dr. Tiina Nõges, Chair, Hydrobiology and Fishery, Institute of Agricultural and Environmental Science, Estonian University of Life Sciences, Estonia.

Wednesday November 10th, 10:00 hrs (GMT-6), room: Science and Technology.

Session description:

Humans are now plumbers of the world’s hydrologic cycle through irrigation, dam construction, inter-basin transfer, wetland drainage, groundwater extraction, and myriad other activities. The science that explores the consequences of this plumbing for aquatic carbon cycling is now emerging. We have yet to understand, how massive manipulation of surface and ground waters is impacting carbon cycling in inland waters at the global scale. This requires an integrated, whole network perspective.

Recognition of the significance of inland waters to the global carbon cycle has led scientists to redouble their efforts to understand how much carbon is being transported, transformed, or stored by inland waters.

These efforts have boosted the global-scale importance of limnology for generating the knowledge needed to sustain the ecosystem goods and services provided by freshwater ecosystems in a rapidly changing world.

Questions of “how much?”—need to be complemented with the questions “how?”.

“Studies, Research and Management of West African Lakes, and Updates on wwf9”

Professor Salif Diop, Senior Officer at the United Nations, in UNEP’s Division of Early Warning and Assessment (DEWA) University Cheikh Anta, Senegal.

November 11th, 10:00 hrs (GMT-6), room: Governance.

Session description:

Discussions on lake systems, IWRM, ILBM, IILBM and wetland ecosystems all consider the multiple crises observed in the West Africa sub-region during past decades, including:

- Climate change, extreme events and disaster reduction (floods & droughts);
- Population growth;
- City expansions and unsustainable provision of drinking water and sanitation infrastructures;
- Ecosystem degradation and low population incomes, and
- Pollution, degradation of ecosystem services, etc.

These evolving conditions require research & scientific interventions, and consideration of societal realities and activities, to develop effective sustainable management options and solutions.

Objectives of these studies should be development of knowledge and initiation of research actions focused on preserving and developing integrated management of lake basins and other aquatic ecosystems.

Specific objectives:

- Describe situations, characteristics and dynamics of West African lake systems;
- Conduct analysis of water resources management policies, and compliance with laws and regulations;
- Develop areas of cooperation to adopt a common approach to relevant research regarding lake and wetland ecosystems and their watersheds.

“Earth Project in Lake Tana, Ethiopia”

Dr. Shinjiro Sato; Soka University Japan.

November 11th, 10:00 hrs (GMT-6), room: Environment and Health.

Since the year 2017, Soka University is making efforts to promote the international joint research project “PLANE3T” with three Ethiopian universities; As a result of this initiative, the Japan Science and Technology Agency (JST) and the Japan International Cooperation Agency (JICA) selected the research development "Eco-engineering for Agricultural Revitalization Towards Improvement of Human Nutrition (EARTH): Water Hyacinth to Energy and Agricultural Crops” as one of the Science and Technology Research Partnership for Sustainable Development (SATREPS) research projects. Lake Tana, the largest lake in Ethiopia, sources the Nile river and is originally known as a scenic place with rich natural environment. Water hyacinth, an aquatic plant, covers the surface of the lake making it impossible for boats to travel, causing environmental and economic problems. The project aims are to restore a healthy lake ecosystem, the research and development of methods for harvesting water hyacinth, as well as the effective utilization of such harvested biomass. The obtained biomass will be converted into the nutritious superfood "Spirulina", fertilizers, and soil conditioners destined to the production of local agricultural products which can improve the nutrition of the children of Ethiopia, where "hidden hunger" is pervasive.

“The Governance and Protection of Lake Erhai”

Zhengyu Hu, Deputy Director, Institute of Hydrobiology, Chinese Academy of Science.

November 11th, 10:00 hrs. (GMT-6) Room: Social Ambit

Session description:

- a. An overview of Lake Erhai
- b. Changes of Governance Stages
- c. Measures and Achievements
Future Challenges

Technical Sessions

In this 18 WLC there will be 128 technical presentations, during the 3 days, in which researchers, government officers, civil associations, NGOs, academicians, etc., will present and discuss their works and their results within 20 min specific topical sessions, including Question & Answer period. These sessions will be moderated by renowned research professors from the University of Guanajuato, Mexico.

Program

November 9th		
The Practice of Managing of Water Resources		
12:00	Alejandro Juárez Aguilar	Ficha Informativa ILBM del Lago Chapala, México
12:20	Ana Paula Montenegro Generino	Validators applicable to qualitative water and sediment monitoring
12:40	Ana Paula Montenegro Generino	Qualifiers applicable to qualitative water and sediment monitoring
13:00	Juan Grima Olmedo	Talayuelas lagoon. An example of hidden Groundwater-Surface water interaction
13:20	Sophanna Ly	Delineation of water level regime for major vegetation types in a large tropical floodplain of Tonle Sap Lake, Cambodia
13:40	Sharon van Tuylen	Lago de Amatitlán, Guatemala Experiencias de gestión y lecciones aprendidas
14:00	Melanie Kolb	Inserción institucional del monitoreo participativo del agua y la biodiversidad acuática en CONAGUA para mejorar la gestión del agua y los ecosistemas acuáticos en México
14:20	Melanie Kolb	Propuesta de un marco de indicadores sobre servicios ecosistémicos hidrológicos para la conservación y monitoreo de ecosistemas costeros
14:40	Cenk Gurevin	Investigation of Nutrient Release from Pore Water of Küçükçekmece Lagoon (Istanbul) Sediment
15:00	Christopher H. D. Magadza	The role and the Politics of the Lake Chivero wetlands.
15:20	Marcela Ormachea	El Sitio web del 'Observatorio permanente del Lago Titicaca'(OLT) https://olt.geovisitorumsa.com
15:40	Zati Sharip	Infusing ILBM into IWRM towards water sector transformation – a case of Malaysia

November 9th		
Environment and Health		
12:00	Dilip Keshav Kakvipure	DIVERSITY AND MOLECULAR PHYLOGENY OF FRESHWATER SPONGES FROM THANE REGION OF NORTHERN MAHARASHTRA, INDIA.
12:20	Fatima Natuel	Microplastic Characterization and Concentration in Surface Waters of Lakes Sampaloc and Yambo in San Pablo City, Laguna, Philippines
12:40	Mary Grace Maribao	CITIZEN SCIENCE ON WATER QUALITY MONITORING IN LAGUNA DE BAY: TOWARDS A SUSTAINABLE TRANSFORMATIVE STRATEGIC PLAN IN ENVIRONMENTAL MONITORING
13:00	Royette Posadas	Effects of the Water Physico-Chemical Conditions to the Water Mercury Levels of Palawan Quick Silver Mines, Inc. Pit Lake and

		Tagbuross River in Sta. Lourdes, Puerto Princesa City During the Dry Season Using Multivariate Analysis
13:20	John Claude Renan Salluta	Taxonomic and functional feeding diversity of macroinvertebrates in streams draining to Lake Sebu (Mindanao Island), the Philippines
13:40	Pradipta Ranjan Muduli	Impact of extreme events on the hydrological characteristics of Chilika Lake, east coast of India
14:00	Li Yang	Physico-chemical assessment of water quality and selected heavy metals of an ex-mining lake in Kg. Gajah, Perak, Malaysia
14:20	Nadezda Apostolova	Lake Presa (North Macedonia) and its vicinity studied by remote sensing methodology: a clue for its dramatic drop in water level
14:40	Arturo Chacon Torres	A PROPOSAL FOR LAKE PATZCUARO RESTORATION, MEXICO
15:00	Mohd Fadhil Kasim	RESEARCH AND DEVELOPMENT OF INTEGRATED LAKE BASIN MANAGEMENT PLAN (ILBMP) FOR TIMAH TASOH RESERVOIR AND MELATI LAKE, PERLIS
15:20	Junichi Tanoue	Joint Presentation by the State of Michigan, U.S.A., and Shiga Prefecture, Japan: The Impacts of Climate Change on Lakes and the significance of promoting the value of freshwater lakes
15:40	Mayela Zavala	CARACTERIZACIÓN DE PELLETS PROVENIENTES DE RESIDUOS LIGNOCELULÓSICOS PARA SU USO EN EL TRATAMIENTO DE AGUAS CONTAMINADAS CON ARSÉNICO Y MERCURIO

November 9th		
Spanish Language Sessions		
12:00	Maribel Flores Díaz / Pablo Osiel Arenas González	Área de influencia por la contaminación en el río Santiago y lago de Chapala
12:20	Luis Angel Morález Pérez	FICHA INFORMATIVA DEL LAGO DE CHALCO - TLÁHUAC, MÉXICO.
12:40	Ángel Flores Ponce	EVALUACIÓN DEL CAMBIO CLIMÁTICO EN EL BOSQUE LA PRIMAVERA, PERIODO HISTÓRICO Y FUTURO
13:00	Jesús Alberto Espinosa Arias	Laguna de Zapotlán, México: Diagnóstico de Sustentabilidad y Gobernanza
13:20	Ramiro Luján Godínez	FACTORES DE DETERIORO, SITUACIÓN ACTUAL Y ACCIONES PARA EL RESCATE DE LA LAGUNA DE CAJITILÁN, EN JALISCO, MÉXICO
13:40	Dulce María Arzola Torres	Tratamiento de aguas residuales del sector automotriz con la aplicación del proceso Fenton
14:00	Cinthya Soledad Manjarrez Rangel	RECONSTRUCCIÓN DE LOS CAMBIOS AMBIENTALES DE LA LAGUNA DE YURIRIA MEDIANTE INDICADORES PALEOLIMNOLÓGICOS

14:20	María Álvarez Jiménez	Enfoque estratégico y formación de la Red Latinoamericana y del Caribe para el Manejo y Gestión de Cuencas
14:40	Alfonso Banderas	En busca del manejo sustentable del embalse de Valle de Bravoilidad
15:00	Claudia Ximena Roblero Escobar	PLATAFORMA SIG PARA EL INDICE DE VULNERABILIDAD A LAS INUNDACIONES EN LA CIUDAD DE MORELIA, MICHOACAN.
15:20	Rafael Trueba	"Deterioro ecológico del Lago de Cuitzeo, Michoacán, México: impactos socioeconómicos".
15:40	Rafael Trueba	"El Lago de Cuitzeo, Michoacán, México: acciones de restauración y disposición a contribuir".

November 9th		
Economics Ambit		
12:00	Ivana Yuniarti	Ecosystem services trade-offs in complex lake ecosystems of the tropics impacts of tilapia cage culture in Lake Maninjau, Indonesia
12:20	Sooriyakumar KRISHNAPILLAI	Villager's Willingness to Pay for Sustainable Ecosystem Management of Lagoon: A locality study in Thondamanaru Lagoon in Sri Lanka
12:40	Zati Sharip	Economic valuation of ecosystem services of three reservoirs and their importance for lake governance in Malaysia

November 10th		
The Practice of Managing of Water Resources		
10:00	Oswaldo Corona Soria	La práctica de la gestión de los recursos hídricos en la cuenca del Lago de Zirahuén
10:20	Arturo Chacón Torres	LAGO DE CUITZEO
10:40	Romina Diaz Gomez	Mapeo de la gobernanza para el manejo integral del Embalse Escaba, Tucumán, Norte de Argentina
11:00	Nancy Nayeli Domínguez Alfaro	Lago de Xochimilco, la importancia de su preservación: retos y oportunidades.
11:20	Sandra Poikane	Global survey on Lake Restoration: First results
11:40	Afroz Ahmd/Shah	Basin and lake formation during the tectonic convergence in NW Himalaya
12:00	Adelina Santos-Borja	Downscaling of ILBM to the Sub-basin level: a Test of Effectiveness
12:20	Takashi FUJIO	Impact of Climate Change in Lakes - Water body, Ecosystem -
12:40	Keiko / Wada	New viewpoints beyond for managing nonpoint source pollution
13:00	Arturo Chacón Torres	LAGO DE PÁTZCUARO

13:20	Julia Pérez Sillero	Lake Brief: Lake Fúquene
13:40	Osvaldo Corona Soria	La práctica de la gestión de los recursos hídricos en la cuenca del Lago de Pátzcuaro

November 10th		
Environment and Health		
10:00	Debasish MAHAPATRO	Impact of a tropical Cyclone "Tit li and Fani" on Spatial Distribution of Marine Community of Chilika lake
10:20	Takayuki Mochizuki	Conservation and Restoration of Lake Biwa, and the Mother Lake Goals (the Lake Biwa version of SDGs)
10:40	Uk Sovannara	Variability of planktonic chlorophyll and phycocyanin in a complex hydroecological system of Tonle Sap Lake, Cambodia
11:00	Shang Shen	Metagenomic analysis reveals the interaction between cyanobacteria and their phages in a freshwater lake
11:20	Alyssa Plata	Water Quality Assessment of Laguna de Bay Through Geostatistical Analysis of Physicochemical Parameters
11:40	Molika/Lim	Enhancing Natural Organic Matter Removal by Simultaneous Injection of Powder Activated Carbon and Coagulant in Conventional Water Treatment
12:00	ZANDRA T. SALUT	Status of Biodiversity and Hydrological Studies in Candaba, Pampanga
12:20	Aman Ghutke	Prospects of World Lake Vision on Nathsagar Reservoir of Jayakwadi Dam, Aurangabad (MS), India.
12:40	Luz Adriana Vizcaíno Rodríguez.	Desarrollo de un bioindicador a partir de Scenedesmus acuminatus.
13:00	Javier Alberto Maldonado Alfaro	Estimación de concentraciones de clorofila-a del fitoplancton del Lago Menor del Titicaca, poco profundo, de gran altitud tropical, con técnicas de teledetección utilizando el satélite Sentinel 2 y validación con mediciones in situ.
13:20	Charleen Nicole C. Gonzales	Landmark-Based Geometric Analysis In Describing The Body Shape Variation In Three Female Population Of Sardinella tawilis (Clupeiforms: Clupeidae: Clupeinae) from Taal Lake, Philippines

Novemebr 10th		
Spanish Language Sessions		
10:00	Arturo Chacón Torres	LAGUNA DE MEDIA LUNA
10:20	Ana Paula Osorio Betanzos	El agua residual en México: Estado actual y Oportunidades

10:40	Rodolfo Jofre Meléndez	ESCENARIOS FUTUROS DE CAMBIO CLIMÁTICO Y EROSIÓN EN LA PRESA ESPERANZA, GUANAJUATO, MÉXICO UTILIZANDO EL MODELO CE-QUAL-W2
11:00	Axel Julissa Baez Lara	Calidad de agua en el lago “Laguna de Yuriria” periodo 2018-2020
11:20	Juan Felipe Rodríguez Ruiz	Arsenic and hydrated silica removal from underground water by electrocoagulation coupled to a flocculator-settler in continuous mode
11:40	Montserrat Vidal Álvarez	CARACTERIZACIÓN Y ANÁLISIS DE LA CALIDAD DEL AGUA DE LA LAGUNA OLMECA EN VERACRUZ, MÉXICO.
12:00	Pablo Andrés Pineda Capacho	Importancia de la interacción de los cuerpos de agua y las aguas subterráneas ante los potenciales efectos del cambio climático
12:20	Mauricio Vargas	El patrimonio biocultural de los recursos pesqueros de Ihuatzio, Michoacán biocultural
12:40	Enrique Mora Heredia	Riqueza y diversidad del fitoplancton tropical: el caso de Los Tuxtlas, Veracruz.
13:00	Fatima Rodriguez	Control integral del lirio acuático 2020

Novemebr 10th		
Science and Technology		
11:00	Gilberto Carreño Aguilera	Sulphate ions removal in water through the electrocoagulation process and characterization of flocs
11:20	Marycarmen Verduzco	FIRST APPROACH TO WATER QUALITY ASSESSMENT OF LAKE ATOTONILCO, MEXICO
11:40	Rajashree Naik	Assessment of India’s largest inland saline lake during the time frame of phase one COVID-19 pandemic using GEE platform
12:00	Tri Soeprobowati	INFERRING WATER QUALITY OF LAKE BALEKAMBANG, DIENG CENTRAL JAVA BASED ON THE DIATOM INDEX
12:20	YOSHIAKI KOHNO,	Approaches to enhance biodiversity in a eutrophic inner bay of Lake Biwa
12:40	Pranshu Bhatia	Understanding the structural and chemical composition of lignin-rich steam-exploded Ludwigia grandiflora during semi continuous anaerobic digestion
13:00	Anas Hijazi	Effect of sedimentation time on methane generation rate of compressed water hyacinth juice
13:20	Stella Chan	Comparing of effect of various conductive materials and substrates on enhancement of methane production
13:40	Kento Nishi	Evaluation of microalgae-nitrifying bacteria immobilized in light shielding hydrogel consortia under strong light irradiation
14:00	Elsa Janet Corona Rivera	Remoción de Cromo hexavalente de un lixiviado industrial con el empleo de un compuesto de biocarbono impregnado con maghemita

14:20	Mauro Vilar	The bright side of a weed: Daphnia as a biosensor on the assessment of cyanotoxins (saxitoxins) phytoremediation by the invasive water hyacinth (<i>Pontederia crassipes</i>)
14:40	Masaaki Fujiwara	Semicontinuous anaerobic digestion of excessive growing aquatic weeds harvested from Lake Biwa for energy and nutrient recovery
15:00	Demetrio Meza	ANÁLISIS CUANTITATIVO DEL DRENAJE Y LAS CARACTERÍSTICAS MORFOMÉTRICAS DE LA CUENCA DE LA LAGUNA DE ATOTONILCO, JALISCO
15:20	Jonathan Valentin-Reyes	Arsenic and hydrated silica remotion from drinking water by electrocoagulation using iron as sacrificial electrodes
15:40	Hailemariam Zewudu	Anaerobic digestion of water hyacinth juice in upflow bubble column bioreactor for production of biogas and nutrient recovery.

November 11th		
Governance		
11:00	Naoko Hirayama	Role Sharing among Stakeholders in Collaboration Activities for Lake Basin Conservation
11:20	Naoko Hirayama	Sewerage financial system for Lake Biwa environmental conservation
11:40	Inge Retnowati	GOVERNANCE CHALLENGES AND GOVERNMENT'S POLICY AND ACTION ON SUSTAINABLE LAKE MANAGEMENT
12:00	Mr. Jackson Akama Raini	Use of Research Findings in Promoting Lake Basin Management: A case of Lake Nakuru, Kenya
12:20	Betty Betharia Sonata Naibaho	The Lake Toba Degradation in Indonesia: How Water Grabbing Aggravates The Pressures on a Common-pool Resource
12:40	Supriyanto	SUSTAINABLE WATER RESOURCE IN LAKE RAWA PENING INDONESIA
13:00	Sara Venturi	Trasimeno lake responses to climate change and governance policies: present and future scenarios
13:20	Xavier Lazzaro	El 'Observatorio permanente del Lago Titicaca' (OLT), Bolivia
13:40	Arturo Gándara-Mendoza	Redes: sinergia por la sustentabilidad. Configuración y características de la red pro-sustentabilidad ambiental de la Cuenca del Lago de Pátzcuaro (CLP)
14:00	Lauren Touchant	Governing the Great Lakes and the St. Lawrence River: the rise of municipal governance.
14:20	Alejandro Juárez Aguilar	Elaboración de Fichas Informativas ILBM de América Latina
14:40	Eduardo Ríos Patrón	Colaboración en RED para la gobernanza en cuencas lacustres, el caso de la Red Mexicana de Cuencas
15:00	Zeeda Fatimah Mohamad	Towards an integrated "Heartware – Hardware – Software" Approach to Lake Management: Insights Water Warriors Living Lab, Universiti Malaya, Malaysia

15:20	SERGIO A. SILVA M.	Revisiting the Lake Basin “Heartware” Concept
15:40	Audy Joinaldy	Leadership for Economic Growth and Sustainable Lake Management

November 11th		
Environment and Health		
11:00	Nickel Jean S. Lagare	Rediscovery and conservation status of Philippine endemic freshwater crabs, <i>Mainitia mainitensis</i> Balss, 1937 and <i>Amarinus wolterecki</i> Balss, 1934 from Lake Mainit, Mindanao Island, Philippines
11:20	Fidel García-Granados	Fomento al establecimiento de biodigestores a base lirio acuático en la Laguna de Yuriria
11:40	Juan Miguel Reyes-Cisneros	Batimetría y estimación de sedimentos en la Laguna de Yuriria
12:00	Jeph Roxy M. Macaraig	Waterborne Parasites as Sentinels of Fecal Pollution in the Seven Maar Lakes of San Pablo, Laguna, Philippines: Implications to Public and Ecosystem Health
12:20	Mylene Cayetano	Population-based health risk assessment of potentially toxic elements (PTEs) in commodity fishes from Laguna de Bay, Philippines
12:40	Arturo Chacón Torres	LAGO DE ZIRAHUÉN
13:00	0	Evaluation of the design of an artificial wetland to rehabilitate the Tzoncoyotl river through environmental, social, and economic indicators in Teteles de Ávila Castillo, Puebla.
13:20	William Gustavo Lanza	Microalgas del fitoplancton y perifiton como bioindicadores de la eutrofización en el Lago Menor del Titicaca, con perspectiva al WFD EU (European Water Framework Directive)
13:40	Charina Gracia B. Banaay	Assessment of the Biomechanical Filtration Ability of Asiatic Clams (<i>Corbicula fluminea</i>) from the South Bay of Laguna Lake, Philippines
14:00	Yang Gao	The aggregation behavior of commercial graphene oxide in natural surface water: Aggregation mechanism and microbial diversity.
14:20	Kathleen Joyce	Effect of Water Quality on the Volume of Freshwater Fish Production in Laguna
14:40	Jacobo Santander Monsalvo	Resultados preliminares de la ficha informativa del Lago de Catemaco.
15:00	Simeon	Reconstruction of past metal pollution and sources from the sediments of Bukit Merah Reservoir (BMR), Perak, Malaysia.
15:20	Jun Xu	Synergistic effects of warming and eutrophication alert predator-prey interactions along the benthic–pelagic interface
15:40	Toshiaki Mizuno	Improved the sediment environment in the lake basin by conservation of the understory of the forest

November 11th		
Social Ambit		
11:00	Toshiyuki ISHIKAWA	Learning about the lake environment in compulsory education in Japan and efforts in the teacher training program at the Faculty of Education, Shiga University
11:20	Claudia González Gómez	Programa Bosques Agua Gente Para Chapala
11:40	Katia Beatriz Villafán Vidales	Hacia la Soberanía alimentaria en regiones lacustres en Michoacán: análisis desde los actores
12:00	Yaaye Arellanes	Retos de la pesca en lagos de Michoacán
12:20	Taishi YAZAWA	Investigation of University Students' Values over Environment through Mutual Educational Workshops toward Integrated Watershed Management
12:40	Mansee BHARGAVA	Social Dilemmas in Public Participation in Urban Lake Management: A case of Thaltej Lakes in Ahmedabad, India
13:00	Mansee BHARGAVA	Why Resource Governance Fail? Examples from Urban Lakes in India
13:20	Gautamee BAVISKAR	Governing Principles of Inter-District Transboundary Lake Basin Management of Upper Godavari, Maharashtra, India
13:40	Haruka Tsujino	Collaborative removal of an invasive alien aquatic weed by volunteering university students in collaboration with multiple stakeholder groups around Lake Biwa, Japan
14:00	Hector Arciniega Ruiz	Diagnóstico de Percepción Ambiental del Lago Chapala y su Cuenca.

Information for Presenters

Technical Sessions will run as follows: 20 minutes

1. Session chair will introduce the session and authors before the video is played
2. The technical staff will playback each video presentation (15 min)
3. Q&A after each presentation (5 min)

Access to the zoom sessions will be through the platform <https://eventos.ugto.mx> .

All participants should be muted and with their camera off.

The session chair will lead questions from the audience in the Q&A box if the presenter is online. Otherwise, the attendees can upload their questions at the chat platform section, at the end of the journey.

Once the last question has been answered and/or the session is running out of time. The session chair will thank the authors and participants for joining.

At the end of the technical session, the session chair will conduct closing remarks.

Notes:

- If you cannot share your camera, consider adding a profile picture to your Zoom account.
- The Session Chair and Presenting Author should join using the link is provided to you. Only one author per paper/presentation can answer questions.
- For those who wish to present their work live, the conference staff will email instructions related.

Information for Attendees

The registration for attendees still open until November 7th, 2021 (15:00 GMT-6). There is not registration fee. The registration platform will be sending you a confirmation e-mail.

No longer than November 8th (15:00 hours GMT-6); you will receive the credentials to access the platform: <https://eventos.ugto.mx>

Please consider that each Technical Sessions will be host 300 attendees, “*first come – first served*”.

For attendee registration, please visit our website:

<http://www.worldlakeconference.ugto.mx>

or the following link:

REGISTRATION

Special Sessions

Citizen Participation in Lake Basin Management, coordinated by Shiga Prefecture

Tuesday November 9th 16:00 hrs (GMT-6)

A case of Lake Biwa, Shiga Prefecture, Japan, will be held as a Special Session, showcasing the citizen – government collaboration in lake basin management. It will consist of several segments. They include introduction to a brief history of participatory lake basin management, to a new designated as MLGs, or Mother Lake Goals being a citizen driven pursuit toward meeting the Lake Biwa SDG goals, to environmental education at the grade school level, to voluntary action initiatives at the university level, as well as to some typical non-governmental programs and projects.



UNEP-ILEC Special Session on Mainstreaming Lakes and Wetlands in the Global Water Agenda and SDGs

Wednesday November 10th 16:00 hrs (GMT-6)

This Special Session will highlight UNEP and ILEC programs and activities regarding the state of the world's lakes and wetlands, and the management challenges to their sustainable use, as well as highlighting their essential roles in achieving the SDGs. It also highlights the urgent need to recognize them as a significant missing link in the Global Water Agenda. The Session will introduce a brochure and a revised version of the "Call to Action Statement" on this topic. Other Session components include a global overview of the state of the world's wetlands, and global eutrophication trends and health impacts. Relevant perspectives on mainstreaming lakes needs will be provided by Latin American, Asia and African representatives, and highlights from a range of clips from government and international organizations participating in a previous global webinar on this topic will be presented.

In addition to messages previously received from WHO, FAO and other UN/UN-related international agencies such as the World Bank, Global Environment Facility (GEF) and various international scientific organizations and NGOs, including the International Society of Limnology (SIL) and Global Nature Fund (GNF), will also provide their perspectives and support for this initiative. The Session will be closed by recognizing the importance of continued efforts to realize productive deliberations at forthcoming global meetings, including the 5th United Nations Assembly (UNEAS) planned for February 2022 and the 9th World Water Forum planned for March 2022.

Water Solutionaries Create Waves from Great Lakes to Great Lakes

Wednesday November 10th 14:00 hrs (GMT-6)

This special session will highlight the role of hope and action in international youth collaboration on water and climate issues. Teenagers from Water Solutionaries (WS) will show and discuss *Where Hope Lives*, a 10-minute new film by Ben Keller about their peer-to-peer experiences working on water and climate change issues on Lake Victoria (East Africa) and Lake Michigan (US), from the African Great Lakes to the North American Great Lakes. The film highlights how youth from Uganda and the United States collaborate to stay hopeful while working on issues related to climate change including flooding, drought, and pollution. In this session, the teens, filmmaker and adult guides will talk about Water Solutionaries, show the film, and hold a discussion panel about lessons the group is learning and what it takes for youth to remain inspired to take action to solve critical water issues. This session will emphasize the intersection between climate and water issues, and how adults can support teens working across these sectors.

Panel: Governance in Latin American Lakes (spanish language)

Wednesday November 10th 14:00 hrs (GMT-6)

To reflect on lake basin management in Latin America, through a panel of experts from different countries, analyzing challenges and progress in the process of strengthening ILBM (Integrated Lake



Basin Management) governance, in particular the aspects of participation and information, responsible institutions, financial instruments, and alliance building.

Current Status, Suggested Management Interventions and Long-term Collaboration Needs on the African Great Lakes.

Thursday November 11th 10:00 hrs (GMT-6)

Collaboration on the African Great Lakes to Strengthen Science and Create Solutions.

In this Special Session, the African Center for Aquatic Research and Education (ACARE) will present an overview of their vision and long-term strategies for strengthening science, research and education on the Great Lakes of Africa: Albert & Edward, Kivu, Malawi/Niassa/Nyasa Basin, Tanganyika, Victoria and Turkana. In line with the WLC Conference theme, session presentations and talks will be made through i) lake specific-advisory groups and ii) the African Women in Science program. The session will focus on outcomes of the recent scientific inquiry conducted on assessing the current status of each of the African Great Lakes, suggested management interventions, lessons learnt and present opportunities for global freshwater collaboration for improved health of these lakes. Integrated in these presentations will be matters of gender balance and critical roles played by women on the African Great Lakes towards their sustainable management and use. The special session will conclude with interactive discussions by attendees on how to better collaborate with and learn from other global lake entities focused on science, research and building bridges to policy and positive change for lake ecosystems and their surrounding communities.

Lake Briefs for Obtaining Information and Data for Integrated Management of Lakes and Reservoirs and Their Ecosystem Services in Latin America.

Thursday November 11th 14:00 hrs (GMT-6)

Consistent with the conference theme, the proposed session focuses on the Integrated Lake Basin Management (ILBM) platform developed by the International Lake Environment Committee (ILEC) for assessing and managing lakes and other bodies of standing water for sustainable use of their life-supporting ecosystem services. ILBM focuses on achieving sustainable management of natural and manmade lakes through gradual, continuous, and holistic improvement of lake governance, including sustained efforts for integration of institutional responsibilities, policy directions, stakeholder participation, scientific and traditional knowledge, technological responsibilities, and funding prospects and constraints. Achieving this goal requires accurate knowledge and information regarding a lake, its basin, and its resources, including the status of its governance structure and associated management activities. ILEC previously developed guidelines for obtaining this information in the form of so-called Lake Briefs. The Lake Briefs are structured to obtain not only the essential scientific/technical information, but also the scope of lake resource uses, the impediments to these uses, and the structural and non-structural responses for addressing them, including the range of socioeconomic, political, and cultural realities to be addressed to achieve their integrated management over the long term.

Integrated Lake Basin Management Workshop

November 9th, 10th, 11th 11:00 hrs (GMT-6)

The workshop program will be designed to fulfill three general objectives, during 3-hours sessions each day of the Conference.

- a) Introduction to and review of the ILBM concept, representative application cases and their typologies, and key challenges faced and emerging prospects for overcoming them.
- b) Review of the state of program development at the local, national, regional, and international levels, the state of cross-fertilization of the lessons learned and experience gained from the past and ongoing efforts, and the state of international collaboration for further program development.
- c) Development of an international network of ILBM research, human-resource development, and information resource generation and use, particularly for facilitating the local, national, regional and international governmental and non-governmental efforts.

Day 1

- Introduction to the Session
- An overview of the lake basin management national programs
- 2 case presentations, Lakes in the Pokhara Valley, Nepal and Lake Nakuru, Kenya
- Interactive discussion

Day 2

- Review of Day1
- An overview of the Latin American lake basin management status and prospect
- 3 case presentations, Lake Chapala, Lake Atitlan and Lake Titicaca
- Interactive discussion

Day 3

- Review of Day1 and Day2
- An overview of the lake-river-coastal basin management issues and challenges
- Case presentation on the Lerma-Chapala-Santiago Basin
- The emerging issues in lake-river-coastal basin management, i.e., disaster prevention, climate change, etc.
- Interactive discussion

Contribution from Younger Generations

The purpose of these sessions is to foster the new generations in relevant issues of water care, but above all to create awareness of the importance of this concern. In this regard some activities have been carried out in parallel to the 18th World Lake Conference, involving children and youths.

Drops of Hope

Within the framework of the 18th edition of the World Lake Conference (WLC18), the University of Guanajuato, carried out the project "Drops of Hope" in collaboration with the educational area of 7

Highschool Session

A satellite session on the exchange between Shiga and Guanajuato-Chapala high school students on the conservation of water bodies and their future in our environments will be held in the weekend prior to the Conference.

A summary of this satellite session and its output will be shared in the main Conference.

Where hope lives

This is an international collaboration from *Water Solutionaries*, an organization from youth around the world who face current challenges linked to: the pandemic, climate crisis, water inequity, and environmental, racial and social injustice, which all have water-related elements.

This contribution about Lake Victoria, Uganda; Lake Michigan, United States; Jexa Northern California, River Nile, contents their concerns about the state and future of fresh water. There are their actions and their desires to create and to be the change.

Ibaraki Kasumigaura Prize Awardees

The 11th Ibaraki Kasumigaura Prize, supported by the Ibaraki Prefectural Government, Japan, award two distinguished researchers: Jackson Akama Raini, (Kenya), for their work titled: "Integrated Lake Basin Management as an approach for improved Governance of Rising Water Levels in Lake Nakuru, Kenya"; and Pradipta Ranjan Muduli (Kenia, for their work "Impact of Extreme Events on the Transformation of Hydrological Characteristics of Asia's Largest Brackish Water System, Chilika Lake.

The award ceremony will be held on November 11th at 16:00 hrs (GMT-6).

Each recipient of the prize will receive a certificate of commendation and a monetary prize of JPY250,000, in addition to the opportunity to make a presentation to an international audience at WLC18 on their submitted paper.

The presentation of Jackson Akama Raini is scheduled on November 11th at 12:00 hrs (GMT-6), in room "Governance".

The presentation of Pradipta Ranjan Muduli is scheduled on November 9th at 13h40 (GMT-6), in room "Environment and Health".

Cultural Events

The 18 World Lake Conference Organizing Committee has contemplated two cultural events for this program, to the delight of the public.

The University of Guanajuato Symphony Orchestra (OSUG) presentation.

Born in 1952, the OSUG is one of the most prestigious orchestral ensembles in the country, with a solid international projection. In the last five years (2015 to 2020) it has offered around 210 concerts for more than 119,000 people. In 2017, on its 65 years of foundation, it toured Spain, France and Italy, where 54 concerts were offered, addressing approximately 7,000 people. In addition to its artistic presentations, it undertakes training activities, such as pre-concert talks; open rehearsals and score reading tables with music students; composition and arrangement competitions made by students and teachers to be performed in special concerts and didactic concerts.

For this Conference, the OSUG will perform a special program, available from November 9th 18:00 hrs (GMT-6), on the event's platform.

Folkloric Ballet of the University of Guanajuato (BAFUG)

Iconic group of Mexican folkloric dance, accredited since 2011 by the International Council of Organizations of Folklore Festivals and Traditional Arts. Since 1997, with the founding of the Children's Ballet, the dance activity has a comprehensive training approach. In the period 2015-2020 it has had international presence, such as in Peru (2016), and as a guest of Mc Allen University, Texas (2017). It highlights its successful presentation at the Palace of Fine Arts in 2017 with the program "Guanajuato, land and tradition"; and in 2016, 2017 and 2018 it was nominated for better presentation at the National Auditorium within the category Traditional Dance.

For this Conference, the BAFUG will perform a special program, available from November 10th 18:00 hrs (GMT-6), on the event's platform.

Closing Ceremony

The closing ceremony will be held on November 11th at 17:00 hrs (GMT-6), on the events platform.

The Guanajuato Declaration

The 18 World Lake Conference Organizing Committee is invited all stakeholders to make contributions to construct the Guanajuato Declaration, at the end of the Conference.

These contributions, in free format, can be upload in the specific section created for this purpose in the platform.

The Declaration Committee of Selection, will organized and discussed all the contributions and the Chair of International Lake Environment Committee (ILEC) Scientific Committee, Dr. Walter Rast will make the announcement of the Guanajuato declaration at the closing ceremony, on November 11th at 17:00 hrs.

WLC 19 Venue Announcement and Presentation

A formal invitation from the WLC 19 Venue will be displayed on the closing ceremony, to participate in 2023.

Conference Summary

The remarks of the Conference will be conducted by Dr. Sergio Antonio Silva Muñoz, UG - Provost for Academic Affairs at the University of Guanajuato and Chairperson of the Scientific Advisory Board Committee.

Tutorial for the use of the UG Events Platform

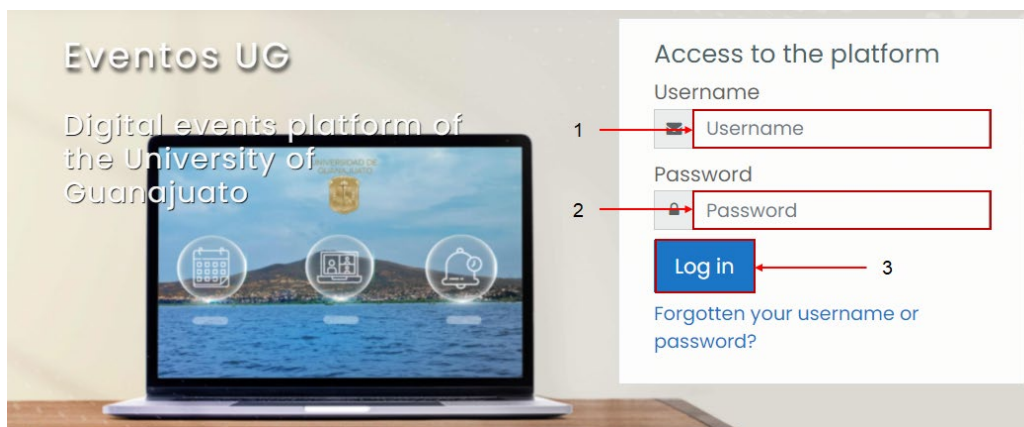
Access to the UG Events platform

To log in to the digital platform, you will need to go to the web address <https://eventos.ugto.mx>. It is important that you have your login credentials before going to the platform, otherwise you will not be able to access your course or learning activity.

Then, perform the following steps to access the platform:

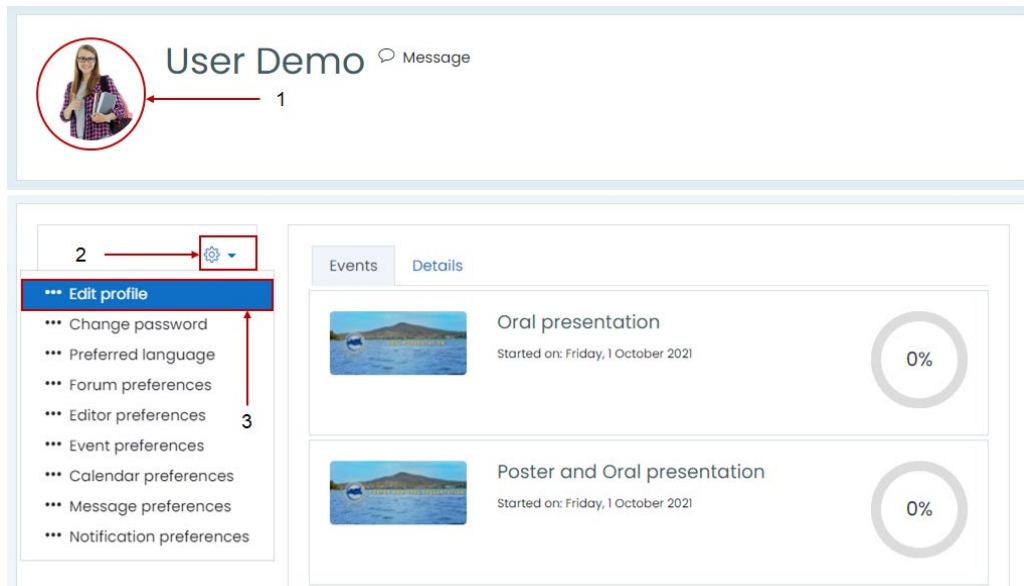
In your web browser, enter the following address: <https://eventos.ugto.mx>. On the platform's home page do the following:

1. In the **Username** field, enter your username.
2. In the **Password** field, enter the user's password.
3. Finally, click on the **Log in** button.



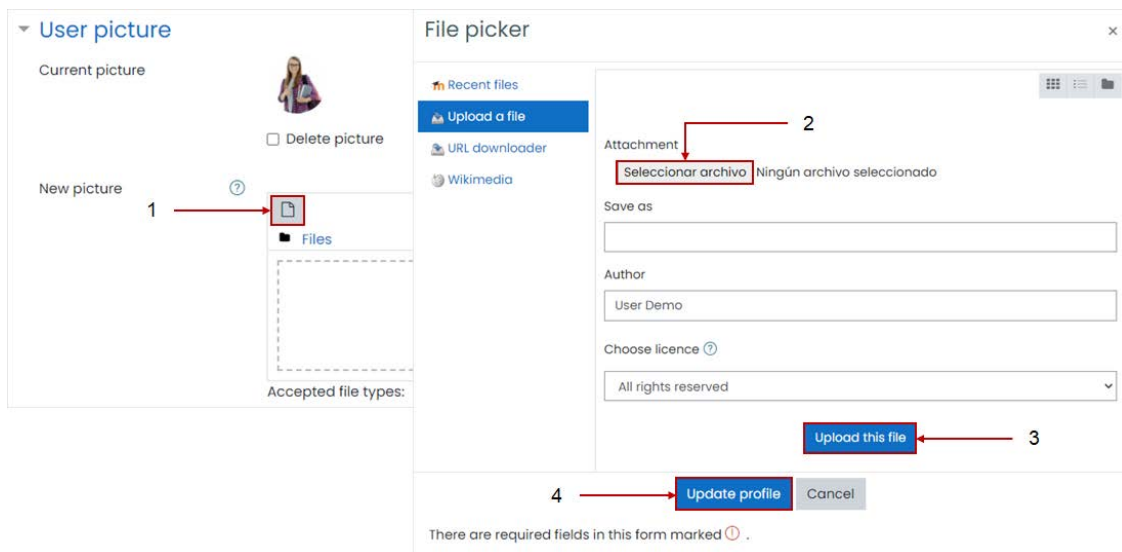
After logging in to the platform, verify your user profile information by performing the following steps:

1. Click on your **User profile** image.
2. The user profile window will open where you will click on the **Actions Menu** button, a menu will open where you will click on the **Edit profile** option.

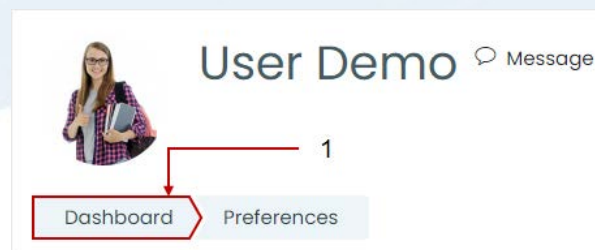


In the user profile, go to the **User picture** section and do the following:

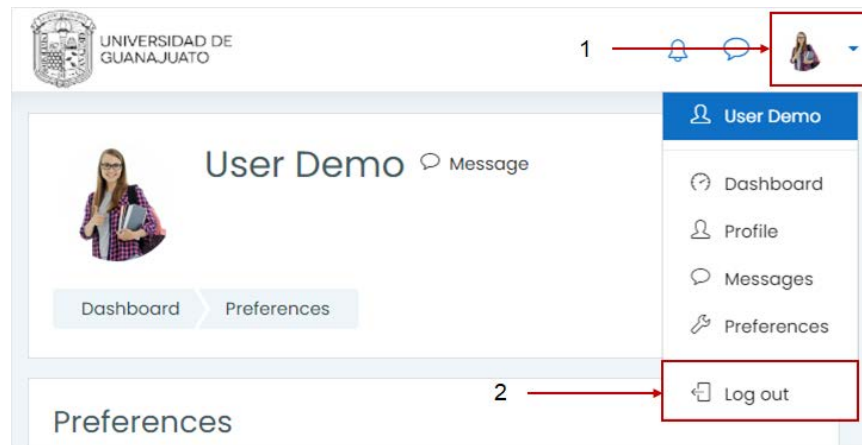
1. Click on the **Add** button.
2. The **File picker** window will open where in the **Upload a file** menu you will click on the **Select file** button.
3. Locate on your computer the image that you will use in your user profile.
4. Once the new profile image is selected, click the **Upload this file** button.
5. Finally, click the **Update profiles** button.



After customizing your user profile, click the **Dashboard** button to return to the home page.



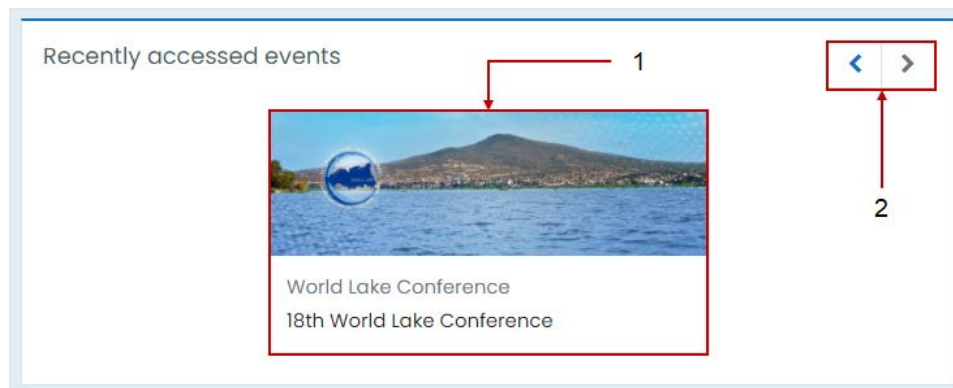
To log out, go to the **User** menu and click on it, a menu will appear where you will click on the **Log out** option.



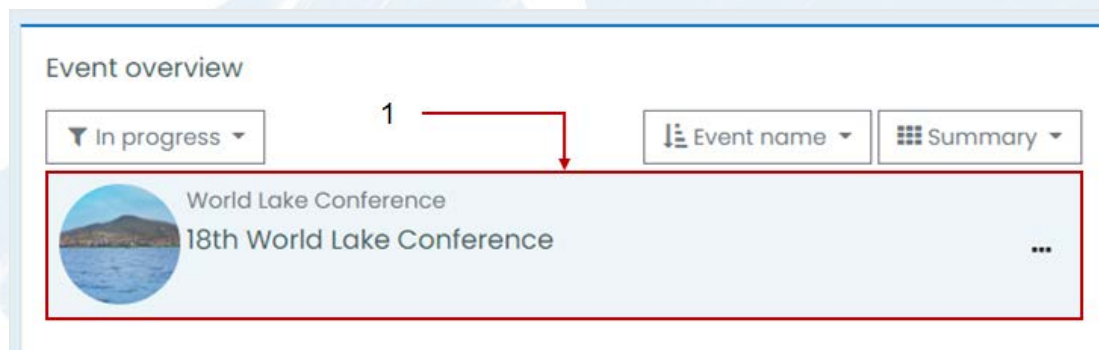
Access the Event

To access an event, you can do it in two ways:

1. In the **Recently accessed event** section, where you will find all the events available on the platform, click on the event you wish to access. To change the event, click on the scrolling buttons.



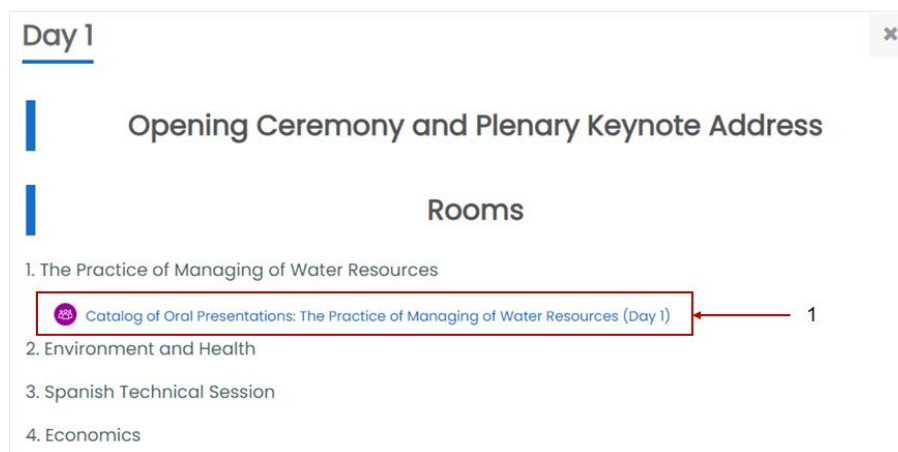
2. In the **Event overview** section, where all the events available on the platform will be listed, click on the event you wish to enter.



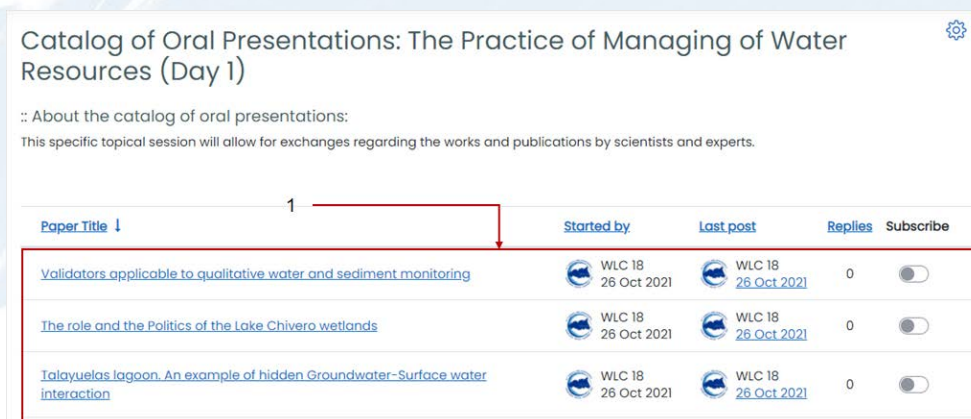


Participate in forums

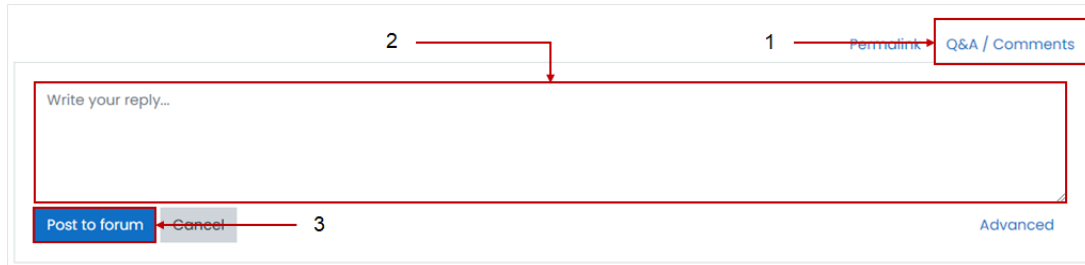
1. Enter the module that you will have enabled per week, within the module click on the **Catalog of Oral Presentations** forum.



2. In the Oral Presentations Catalog, click on the forum that most interests you.

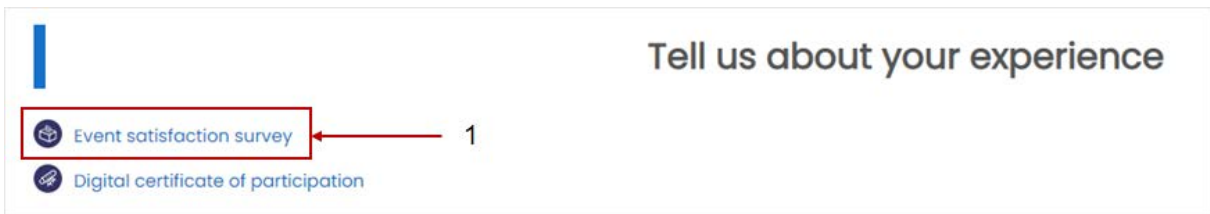


3. Within the forum, do the following:
 - a. Read and view the contents and then click on the **Q&A / Comments** button.
 - b. A comment box will be displayed where you will enter your participation.
 - c. Finally, publish your participation in the forum by clicking on the **Post to forum** button.



Answer the event evaluation

1. Go to the General Information module, go to the **Tell us about your experience** section and click on the **Event satisfaction survey**.



2. In the **Event satisfaction survey**, click on the button **Answer the questions**.



3. Answer the questions and then click on the button **Submit your answers**.

Conference Committee

The 18th World Lake Conference Program Committee is comprised of the University of Guanajuato and the International Lake Environment Committee (ILEC) Scientific Committee members and the Local Organizing Committee members, as follows:

1. Scientific Committee

This Committee consists of two main boards as follows:

A. University of Guanajuato, Mexico, Scientific Advisory Board

Chair Person:

Sergio Antonio Silva Muñoz

Members:

Gilberto Carreño Aguilera

Pabel Antonio Cervantes Avilés

German Cuevas Rodríguez

Arodi Bernal Martínez

José Antonio Arciniega Nevárez

José de Jesús Mora Rodríguez

Luz Adriana Arias Hernández

Josefina Ortiz Medel

José Luis Nava Montes de Oca

Xitlali Virginia Delgado Galván

Locksley Fabian Castañeda Ulloa

B. ILEC Scientific Committee

Chair Person:

Walter Rast (Chair; USA)

Members:

Alejandro Juarez Aguilar (Mexico)

Sandra Azevedo (Brazil)

Salif Diop (Senegal)

Colin Maxwell Finlayson (Australia)

Zhengyu Hu (China)

Tiina Nõges (Estonia)

Daniel Olago (Kenya)

Ajit Kumar Pattnaik (India)

Adelina Santos-Borja (Philippines)

Yoshihisa Shimizu (Japan)

Masatsugu Takamatsu (Japan)
Pieter van der Zaag (The Netherlands)

2. Local Organizing Committee

Elías Rigoberto Ledesma Orozco
Verónica Carmona Hernández
Marco Roberto Delgado Cortés
Daniela Pereda Valdez
Erick Manuel Sánchez Robles
Karla Marcela Rivera Nieto
Carmen Aragón Jauregui
José Francisco Márquez González
Virginie Sophie Pautrat
Aideé Carmina Flores Tello
Betzabee Romero Moya
Ivón Ledesma Páramo

Contact Information

The 18th World Lake Conference Organizing Committee, University of Guanajuato can be reached as follows:

Lascuráin de Retana #5 Colonia Centro C.P. 36000

Guanajuato, México

Tel: +52-47373-20006 Ext. 2757

E.mail: support.wlc@ugto.mx

www.worldlakeconference.ugto.mx