



GLORIA I. LÓPEZ C. Ph.D.
Aspirante Convocatoria Pública SGC
2022

Convocatoria: Director Técnico de Geoamenazas
 Institución: Servicio Geológico Colombiano
 Dirigido a: **Convocatoria Pública SGC**
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 Fecha: 18 Abril 2022

INSCRIPCIÓN Y DOCUMENTOS RELACIONADOS
(DESCRIPCIÓN DE LA DOCUMENTACIÓN ANEXADA)

Tipo de Documento	Características de Documento	Consecutivo Secciones	No. Páginas
Relación de Documentos	Este documento	PDF1-1	2
Curriculum Vitae	Documento 1: completo, en inglés	PDF1-2	43
Cédula de Ciudadanía	Documento 2: ambas caras	PDF1-3	2
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Otras Tarjetas:			
Licencia de Supervisor de Instalaciones Radiactivas (Gobierno Español)	Documento 4: ambas caras	PDF1-5	1
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Títulos Obtenidos	Documento 4:		
	Pregrado (Colombia): Geología		1
	Maestría (Canadá): Geología	PDF2-1	1
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	Diplomado (México): Desastres y Cambio Climático		1
Actas de Grado: Las Universidades Canadienses no proporcionan este documento. La prueba del grado es el propio Diploma, el certificado de la defensa de la tesis de PhD, y las anotaciones de que el estudiante se puede graduar en las calificaciones.	Documento 5:		
	Pregrado: No. 0333 (ver anotación en relación de calificaciones). Copia no proporcionada		
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	Además, ver anotación en relación de calificaciones.		
	Diplomado: Ver Diploma.		
Acreditación Formación Académica y Conocimientos Básicos o Esenciales puntos 1-8 y 16: Historia Académica de cada programa, lista de Materias y Calificaciones	Documento 6:		
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Acreditación Conocimientos Básicos o Esenciales puntos 9-13 y 16: Experiencia en investigación y todo lo que esto implica; Publicaciones científicas en revistas indexadas	Documento 10: Primeras páginas de artículos científicos en revistas Q1, Q2, Q3	PDF3-1	28
Acreditación Conocimientos Básicos o Esenciales puntos 9-13 y 16: Experiencia en Investigación y todo lo que esto implica; Publicaciones de libros, capítulos de libros, aportes a Enciclopedias, etc.	Documento 11: Primeras páginas de algunas de estas publicaciones	PDF3-2	24
Acreditación Conocimientos Básicos o Esenciales puntos 14-16: Experiencia en Investigación y todo lo que esto implica; Proyectos de investigación ideados, en ejecución o ejecutados	Documento 12: Ver listado en Hoja de Vida	Ver PDF1	Ver PDF1
No. Total de Páginas PDF3			52
Certificaciones Experiencia Laboral: Experiencia Posdoctoral (4 años)	Documento 13: Posdoc 1 (Israel): CSMS, U Haifa + Servicio Geológico Posdoc 2 (Israel): RIMS, U Haifa	PDF4-1 Ver PDF4-3	2
Certificaciones Experiencia Laboral: Experiencia laboral contractual (>15 años) en 4 países (Colombia, Canadá, Holanda, España)	Documento 14: Ver listado de cargos profesionales en Hoja de Vida Copias de los certificados laborales en idiomas originales	PDF4-2	16
Experiencia laboral voluntaria (<i>ad honorem</i>) y Científico Visitante (>10 años)	Documento 15: Ver listado en Hoja de Vida Copias de certificados de Científico Visitante	Ver PDF1 Ver PDF4-2 y 3	Ver PDF1 Ver PDF4-2 y 3
Acreditación Experiencia Laboral y Conocimientos Básicos o Esenciales: Docente en 4 países (Colombia, Canadá, Israel, España) a nivel de pregrado y posgrado, y diversos idiomas (>15 años)	Documento 16: Ver listado de cursos en Hoja de Vida Ver Certificados Experiencia Laboral Ejemplo de las evaluaciones de algunos cursos dictados a nivel de posgrado (Israel) y pregrado (Canadá): <i>es importante anotar que estas evaluaciones solo se dan en el idioma oficial de la institución en la que se efectuó el curso o en Inglés y no se pueden pedir reproducir en otros idiomas.</i>	Ver PDF1 Ver PDF4-2 PDF4-3	70
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Documento Escrito: Propuesta de Visión para la Dirección de Geoamenazas	Documento 16: Escrito original inédito	PDF5-1	4
No. Total de Páginas PDF5			4

GLORIA I. LÓPEZ *Ph.D.*

Curriculum Vitae

Current affiliations

- *Affiliated Scientist – Research Fellow* Leon Recanati Institute for Maritime Studies, University of Haifa, Israel
- *President* Colombian Geological Society

Author IDs: Scopus: 15623346700 Orcid: 0000-0002-7884-6204 //scholar.google.com/citations?user=yOW_JboAAAAJ
Redalyc: 5892 Publons: 1237475 Mendeley: gloria-lpez12

Full Name: Gloria Inés López Cadavid **Date of Birth:** 30 December 1970 **Citizenships:** Colombian & Canadian
Languages: Spanish (Mother tongue) English & French (Written + Verbal: Fluent / C2) Portuguese (Written + Verbal: Advanced / C1)
Italian (Verbal: Intermediate / B1) Hebrew (Verbal: Elementary / A1)

C.V. Index:

Research Areas - Interests / Education / Education: Other Titles / Fellowships, Sponsorships, Honours & Awards / Professional Positions / Research & Projects: Experience, Collaborators, Grants / Scientific Publications / Educational Publications / Publication of Photographs / Consulting & Technical Reports / Fieldwork / Conference Teaching Courses / University Teaching Experience / Student Mentorship, Supervision & Laboratory Training / Invited Lectures, Colloquium, Seminars, Meetings & Talks / Participation & Presentations in Scientific Conferences, Seminars, Congresses & Workshops / Volunteer Service (Community & Professional Outreach) / Degree Homologations / Certifications & Licenses / Professional Affiliations & Memberships / Professional Development & Training / Professional & Additional Technical Skills - Major Analytical Instruments & Field Techniques / Qualities

RESEARCH AREAS - INTERESTS

- Quaternary geochronology, luminescence dating (OSL), luminescence signal as sedimentological proxy
- Coastal geology, coastal processes & evolution, shoreline behaviour & morphodynamics, littoral sediment transport
- Tsunami research, palaeo- & modern tsunami deposits, neotectonics, palaeoseismology
- Hazards, Coastal hazards, marine extreme events, sea-level change, disaster risk reduction & management
- Quaternary geology, geomorphology, landscape evolution, stone-lines, weathering processes, geo-indicators
- Geoarchaeology
- Sedimentology, mineralogy, petrophysics, multi-proxy analyses
- Laboratory & field methods

EDUCATION

Ph.D. GEOLOGY, McMaster University, Hamilton, ON, Canada 2002-2007

Specialty: Geochronology (luminescence dating), sedimentology, stratigraphy, coastal geology, Quaternary geology, shoreline behaviour, coastal processes.

Dissertation: *The Late Quaternary Evolution of the Apalachicola Barrier Island Complex, North-East Gulf of Mexico, as determined from Optical Dating*. Published Ph.D. dissertation, McMaster University, Hamilton, Canada, 264 pp (single-spaced & double-sided). **September 2007**.

<http://digitalcommons.mcmaster.ca/dissertations/AAINR36037/>

Available as PDF document at: <http://dx.doi.org/10.13140/RG.2.1.1989.2567>

Supervisor: Dr. W. Jack Rink.

Merit: Full Scholarship (McMaster University Graduate Studies Scholarship)

M.Sc. GEOLOGY, University of Victoria, Victoria, BC, Canada 1998-2002

Specialty: Palaeoseismology, neotectonics, Quaternary geology, tsunami deposits, sedimentology, limnology, geophysics, stratigraphy, geochronology.

Thesis: *Palaeoseismic Investigations on the Central West Coast of Vancouver Island, British Columbia, Canada: Pre-Historic Tsunami Deposits in Coastal Lacustrine Environments*. Unpublished M.Sc. thesis, University of Victoria, Victoria, Canada, 284 pp + CD-ROM (double-spaced & single-sided). **April 2002.**

Supervisors: Dr. Peter T. Bobrowsky and Dr. Eileen Van der Flier-Keller; Co-Mentors: Dr. John J. Clague & Dr. Ian Hutchinson.

Merit: Full Scholarship (University of Victoria Graduate Student Annual Grant from 1998 to 2002)

B.Sc. HONOURS GEOLOGY, EAFIT University, Medellín, Antioquia, Colombia 1988-1993

Specialty: Coastal & Quaternary geology, sedimentology, stratigraphy, geomorphology, cartography.

Honours Thesis: *Geomorphology and Sedimentology of the El Choncho Island, San Juan River Delta, Pacific Coast of Colombia*. Unpublished Honours Thesis, Universidad EAFIT, Medellín, Colombia, 330 pp + appendices (double-spaced & single-sided). **December 1993.**

Supervisor: Dr. Iván D. Correa.

Merit: Best undergraduate thesis (*Cum Laude*).

EDUCATION: OTHER TITLES

DIPLOMA: *Natural Hazards and Climate Change: with focus on public policy (2nd Edition)* 2015
Distance Course, 20 Jul – 30 Nov. Intensity: 4 months. Instituto de Investigaciones Dr. José María Luis Mora / CONACYT, Ciudad de México, Mexico. Diploma No. SE/055/2015.

SPECIALISATION: Marine Geology: *Morphology and Sedimentology of Coastal and Oceanic Bottoms* 1996
Federal University of Rio Grande do Sul – Concepción University. International Graduate Course valued as 2 full Ph.D. credits. Intensity: 2 months. Concepción, Chile.

FELLOWSHIPS, SPONSORSHIPS, HONOURS & AWARDS

2014 Durham University Fellowship Development Fund (U.K.)
2013 McMaster University Alumni Association "ARCH" Award to recent outstanding Alumni (Canada)
2010-2012 First Azrieli Foundation International Post-Doctoral Fellowship (Canada – Israel)
2007, 2009 Visiting Fellowship (Governmental) – NSERC (Canada)
2005 Walter Gibbins Memorial Travel Bursary (Canada)
2005 Graduate Students Association, McMaster University Travel Grant (Canada)
2002-2006 McMaster University Graduate Studies Scholarship (Canada)
1998-2002 University of Victoria Graduate Student Annual Grant (Canada)
1999-2001 University of Victoria Graduate Teaching Assistant Fellowship (Canada)
1998-1999 USGS-NEHRP Research Assistant Fellowship (USA) *by grant to P.T. Bobrowsky*
1997 COLCIENCIAS National Excellence Research Group Award (Colombia)
1995 EAFIT University Annual Research Award (Colombia)
1993 Professional Geologist. Professional Geologists Council of Colombia.
1993 Distinction for Honours Thesis, EAFIT University (Colombia)

PROFESSIONAL POSITIONS

- Affiliated Scientist / Honorary Research Fellow** 2017-present
Hatter Laboratory for Coastal and Harbour Archaeology, Leon Recanati Institute for Maritime Studies
University of Haifa, **Israel**
Coastal Geology, Sedimentology and Geochronology expert in geological and geoarchaeological projects involving the Bay of Haifa, Zevulum Plain, Tel Akko, Atlit.
Collaborators: Dr. Michal Artzy, Dr. Dov Zviely
- Research Scientist; Head** 2015-2020
Luminescence Dating Laboratory, Centro Nacional de Investigación sobre la Evolución Humana -CENIEH-, Burgos,
Spain
Head Scientist; Senior Analyst; Senior Commercial Service provider; in charge of training students & technicians; field collection, laboratory preparation & processing of samples (commercial & research/academic) for luminescence dating & analysis of results.
- Laboratory Manager, Senior Analyst** 2013-2014
The Netherlands Centre for Luminescence Dating, Wageningen University, **The Netherlands**
Managing & operating the Luminescence Laboratory; in charge of training students & technicians; field collection, laboratory preparation & processing of samples (commercial & research/academic) for luminescence dating & analysis of results.
Laboratory Director: Dr. Jakob Wallinga.
- Post-Doctoral Fellow** 2013-2014
Leon Recanati Institute for Maritime Studies, University of Haifa, **Israel**
Coastal Geology and Geochronology expert in geological and geoarchaeological projects involving the Bay of Haifa, Zevulum Plain and Tel Akko.
Research Supervisor: Dr. Michal Artzy.
- Visiting Scientist / Scholar** 2011-2012
Geological Survey of Israel, Luminescence Dating Laboratory, Jerusalem, **Israel**
Geochronologist (Collaborator & Lab. Director: Dr. Naomi Porat)
- International Post-Doctoral Fellow (Geology & Geoarchaeology)** 2010-2012
Azrieli Foundation, Jerusalem & Haifa, **Israel**
Development of a new sedimentological proxy to characterize coastal and shallow marine sands from extreme events such as tsunami and episodic severe storminess within the Geoarchaeological and natural marine contexts. Development of a sediment transport / provenance proxy to understand coastal and littoral sand movements. Both proxies are based on the luminescence signal of quartz (optically & thermally). Optical Dating of submerged sediments in the Geoarchaeological context.
Geological Survey of Israel Visiting Scholar (Luminescence Dating Laboratory), Research Supervisor: Dr. Naomi Porat.
Sponsor Institution: University of Haifa (Leon H. Charney School of Marine Sciences), Collaborator & Sponsor: Dr. Beverly N. Goodman.
- Research Associate; Senior Analyst; Laboratory Manager & Technician** 2009-2010
AGE Laboratory, School of Geography & Earth Sciences, McMaster University, Hamilton, ON, **Canada**
Laboratory leader, managing & operating the Optical Luminescence laboratory; in charge of training students & technicians; field collection, laboratory preparation & processing of samples (commercial & research/academic) for luminescence dating & analysis of results.
Laboratory Director: Dr. W. Jack Rink.

- Graduate Program Administrative Assistant & Undergraduate Teaching Technician** 2009-2010
School of Geography & Earth Sciences, McMaster University, Hamilton, ON, **Canada**
Laboratory/Field Courses Technician/Manager.
- Consultant – Research / Field Geologist and Laboratory Researcher** 2008
Baird & Associates Coastal Engineers Consulting, Oakville, ON, **Canada**
- Field Geologist & Geochronologist, Translator & Interpreter** 2006-2008
Université de Montréal, Canada: Dating archaeological sites in the Province of Alentejo, **Portugal**
- Research Assistant; Senior Analyst; Laboratory Manager & Technician** 2005-2008
AGE Laboratory, School of Geography & Earth Sciences, McMaster University, Hamilton, ON, **Canada**
Laboratory leader, managing & operating the Optical Luminescence laboratory; in charge of training students & technicians; field collection, laboratory preparation & processing of samples (commercial & research/academic) for luminescence dating & analysis of results.
Laboratory Director: Dr. W. Jack Rink.
- Scientific Consultant & Director of Construction Luminescence (Sample Preparation) Laboratory** 2005-2007
EAFIT University, Medellín, **Colombia**
Responsible for implementing & building the 1st laboratory in Colombia fit to prepare & process samples collected for Optical Dating purposes. Scientist in charge of the first operation of the laboratory & oversight of preparation methodologies & procedures applied in Optical Dating.
- Field Geologist** 2001
Natural Resources Canada – Pacific Geosciences Center, Sidney, BC, **Canada**
High Precision GPS, Geophysics and Geothermal Flow Project, Yukon Territories
- Field Geologist and Geochemistry Laboratory Technician** 2000
British Columbia Geological Survey, Victoria, BC, **Canada**
Geochemical Exploration in Central and Northern British Columbia
- Associate Researcher** 1995-1998
Marine Sciences, Dept. of Geology, EAFIT University, Medellín, **Colombia**
Co-author of 4 proposals for both environmental and coastal studies nationally and internationally founded for the Geology Department. Co-investigator in two multidisciplinary and inter-institutional projects (Geological and Biological Indicators of the San Juan River Delta, Pacific Coast of Colombia, Phases I and II).
- Research Fellow** 1993
Dept. of Geology, EAFIT University, Medellín, **Colombia**
Investigations in Advanced Geomorphology and Environmental Geology.
- Intern Geologist** 1992
CORPAMAG (Regional Corporation of the Province of Magdalena), Santa Marta, Mag., **Colombia**
Integrated management of resources and water basins of the Sierra Nevada.

VISITING SCIENTIST

- Environmental Physics Laboratories** May-June 2019
Scottish Universities Environmental Research Centre (SUERC) & University of Glasgow, Scotland

Calibration, verification & construction of portable gamma spectrometers.

Collaborator: Dr. David Sanderson

The Sedimentology & Portable Luminescence Reader Lab

August-October 2018

Recanati Institute for Maritime Studies, RIMS, University of Haifa (Haifa, Israel)

Tel Akko sediment cores sedimentology, stratigraphy & lab work.

Luminescence Signal of various sediment samples from various archaeological & geological sites in Israel.

First comparative measurements of luminescence signal from 2 Portable Luminescence Readers (CENIEH & U Haifa).

Collaborators: Dr. Michal Artzy, Dr. Naomi Porat, Dr. Joel Roskin

The Basin Analysis and Petrophysics Laboratory (PetroLab)

August-October 2018

Department of Marine Geosciences, Charney School of Marine Sciences, University of Haifa (Haifa, Israel)

Luminescence Signal & OSL Dating of shallow-water sediment cores from the Mediterranean Sea & Indian Ocean; Petrophysical measurements of sedimentary cores obtained in Tel Akko.

Collaborators: Dr. Nicolas D. Waldmann, Dr. Or. Bialik

Department of Geosciences & Environment

February 2017

Universidad Nacional de Colombia (Medellín, Colombia)

Luminescence Signal of shallow-water sediment cores from Cayo Serrana, Colombian Caribbean.

Collaborator: Dr. Gladys Bernal

Salvage Archaeological Excavations Shoket Junction (Northern Negev Desert)

July-August 2016

Israel Antiquities Authority (Jerusalem, Israel)

Luminescence signal analysis & dating of a buried Chalcolithic archaeological site.

Collaborators: Dr. Joel Roskin, Dr. Ron Bee'ri

Luminescence Dating Laboratory

August 2016

Geological Survey of Israel (Jerusalem, Israel)

Luminescence signal analysis of agricultural terraces around Jerusalem.

Collaborator: Dr. Naomi Porat

The Basin Analysis and Petrophysics Laboratory (PetroLab)

July-August 2016

Department of Marine Geosciences, Charney School of Marine Sciences, University of Haifa (Haifa, Israel)

Luminescence Signal & OSL Dating of shallow-water sediment cores from the Mediterranean Sea & Indian Ocean; Petrophysical measurements of sedimentary cores obtained in Tel Akko.

Collaborators: Dr. Nicolas D. Waldmann, Dr. Or. Bialik

Environmental Physics Laboratories

March 2016

Scottish Universities Environmental Research Centre (SUERC) & University of Glasgow, Scotland

Portable OSL Reader: acquisition, development, training, and personalised course.

Collaborators: Dr. David Sanderson, Dr. Tim Kinnaird

Salvage Archaeological Excavations Tel Nahariya

October 2015

Israel Antiquities Authority (Jerusalem, Israel)

Geoarchaeology & Geochronology of the Tel Nahariya site.

Collaborator: Dr. Ron Bee'ri

The Basin Analysis and Petrophysics Laboratory (PetroLab)

July-September 2014

Department of Marine Geosciences, Charney School of Marine Sciences, University of Haifa (Haifa, Israel)

Luminescence Signal & OSL Dating of shallow-water sediment cores from the Indian Ocean; Petrophysical measurements of sedimentary cores obtained in Tel Akko.

Collaborators: Dr. Nicolas D. Waldmann

Hatter Laboratory for Coastal and Harbour Archaeology

July-September 2014

Leon Recanati Institute for Maritime Studies, University of Haifa (Haifa, Israel)

Geoarchaeology & Palaeoenvironmental reconstruction of the landscape around Tel Akko.

Collaborator: Prof. Michal Artzy

RESEARCH & PROJECTS

Colombia: 2019-2022

Rio Cauca terraces & Palaeoseismological evidence in Central Antioquia:

- Characterization of various fluvial terraces using PPSL measurements and OSL dating to constrain different fluvial, alluvial and colluvial processes.
- Geochronological reconstruction of palaeoseismic events in key sites around Central Antioquia.
- Collaborative investigations part of a Ph.D. Research Project at EAFIT University with Dr. María I. Marín.

Peru: 2018-2020

Ostra Complex Archaeological Site:

- Characterization of stone piles using PPSL measurements and OSL dating found across the Ostra Site Complex, a pre-Columbian strategic warfare site.

Ecuador: 2017-present

Pacific Coast:

- Identification, characterization, OSL dating and differentiation (by means of luminescence signals) of tsunami and storm deposits in low-lying coastal backwash areas and marshlands (including inhabited areas).

Portugal: 2017-2020

Algarve Coast:

- Identification, characterization, OSL dating and differentiation using luminescence signals between tsunami and storm deposits in low-lying coastal areas (backwash, strandplain, back dunes, marshlands intertidal zone), by means of trenches, pits, and sediment cores.

Gibraltar: 2016-2020

Gorham's Cave:

- Geochronological reconstruction of various archaeologically rich units of Neanderthal attribution by means of luminescence dating (OSL) and luminescence profiling.

Caleta Rampant Dunes:

- Geochronological reconstruction of several aeolian units by means of luminescence dating (OSL).

Spain: 2015-2020

CENIEH Environmental Physics Experiments:

- Creation of an in-house produced, low radiation, "calibration quartz" for OSL readers and ESR spectrometers.
- Determining the sensitivity of far-transported quartz: tackling the quality of quartz grains from several beaches and coastal dunes from around the World.
- Quality control & sensitivity control of quartz grains from several geological origins.

- Loess sediment as a control sample for dosimetry purposes (Gamma & Beta spectrometry).
- Pink granite & concrete block fabrication as verification & control box for Gamma & Beta spectrometry.
- Coupling Portable OSL Reader measurements with various petrophysical measurements attached to a Multi-Sensor Core Logger (MSCL) in different sediment types and sediment cores from various environmental settings.
- Adapting the Multi-Sensor Core Logger (MSCL) Natural Gamma sensor as a portable Gamma Spectrometer to obtain in-situ dosimetry along sediment cores of different diameters.

Cueva de Guantes (Province of Palencia):

- Geochronological reconstruction of Palaeolithic units in an ancient bear hibernation cave by means of luminescence dating (OSL).

Cova Gran de Santa Lliana (Province of Catalunya):

- Geochronological reconstruction of Palaeolithic units in a Pre-Pyrenean semi-vault Neanderthal & Homo sapiens shelter by means of luminescence dating (OSL).

Bolomor Cave (Province of Valencia):

- Geochronological reconstruction of Mousterian-rich (paleoanthropological) units by means of luminescence dating (OSL).
- Understanding vertical stratigraphic continuity by means of luminescence profiling.
- Detailed study of intra-stratigraphic lateral variations across specific archaeologically rich sedimentological units.

Galería Cave, Atapuerca Complex (Province of Burgos):

- Detailed study of intra-stratigraphic lateral variations across archaeologically rich sedimentological units by means of OSL, dosimetry, luminescence profiling, sedimentology, geochemistry, mineralogy, and magnetic properties.
- Geochronological reconstruction of Acheulean-rich (paleoanthropological) units by means of luminescence dating (OSL).

Pinilla del Valle (Province of Madrid):

- Geochronological reconstruction of Acheulean-rich (paleoanthropological) units in 4 different infilled caves and shelter areas by means of luminescence dating (OSL).

Puerto Colombino de Palos (region of Huelva, Province of Andalucía):

- Geochronological, palaeoenvironmental and geoarchaeological reconstruction of the marsh areas housing the old XVIII c. port where Christopher Columbus prepared and built the caravels for his first trip to the Americas.

Israel:

2013-present

Negev Desert & Mediterranean Coastal Dunes:

- Understanding the history of aeolian deposition and stratigraphic evolution of selected sedimentary sequences by means of sedimentology, geochemistry, and luminescence profiling, in order to determine temporal variations in key aeolian palaeo-environments.

Tel Nahariya:

- Geochronological and palaeoenvironmental understanding and reconstruction of the initiation and evolution of the construction phases of the coastal archaeological site of Tel Nahariya.

Tel Akko:

- Palaeoenvironmental reconstruction of the coastline around Tel Akko to determine the location of ancient harbours, the evolution of the habitation patterns on the Tel and the coastal evolution around Akko. Collaboration with leading archaeologist Prof. Michal Artzy (RIMS University of Haifa). Laboratory measurements and analyses in collaboration with Dr. Nicolas D. Waldmann (PetroLab, Department of Marine Geosciences, University of Haifa).

Haifa Bay:

- Identification and dating of beachrock units recovered from long underwater sedimentary rock cores throughout Haifa Bay. Investigation of subsidence rates and tectonic activity since the Pleistocene (MIS 5-

7). Collaboration with Drs. Dov Zviely, Udi Galili and Amos Salamon (RIMS University of Haifa, Israel Antiquities Authority, Geological Survey of Israel).

Kenya: 2012-present

Gede:

- Geochronological, palaeoenvironmental and ge archaeological reconstruction of the history of the coastal archaeological site of Gede and understanding of the sudden demise of its Swahili kingdom.

Malindi coastline (Indian Ocean)

- Identification, characterization and dating of the underwater (shallow shelf) sedimentary deposits formed by the 2004 and 2006 Indian Ocean tsunamis. Littoral and beach sand identification and characterization.

Japan: *Province of Sendai* 2011-present

- Identification and characterization of the sand deposit generated by the 2011 Tohoku Tsunami (March 11th2011) by means of Optical and Thermal Luminescence to investigate their potential as sedimentological proxies.

Greece: Crete - *Palaikastro* 2011-2015

- Identification, characterization, and differentiation of underwater tsunami deposits on the Eastern shelf of Crete, near the archaeological site of Palaikastro, to look for similar evidence to the Santorini event found offshore Caesarea Maritima (Israel).
- Optical Dating of the Santorini Minoan event identified in terrestrial tsunami deposits atop Palaikastro's archaeological site.

Israel: 2010-present

Michmoret - Haifa Littoral zone (2012-present):

- Investigations of seasonal movement of sediments alongshore and around underwater anthropogenic structures (3 to 30m depths). Collaborations with Dr. Dov Zviely and Rami Tsadok.

Israeli Mediterranean Shallow Continental Shelf (2012-present):

- Investigations of the potential of luminescence to be used as a proxy for determination of sediment source and transport in underwater environments (10 to 100m depths).
- Co-Investigator in inter-institutional geological project Israel Mediterranean Grid (IMG 2011) lead by Prof. Barak Herut (Director General, Israel Oceanographic & Limnological Research IOLR) and Dr. Ahuva Almogi-Labin (GSI).

Caesarea Maritima (2010-2012):

- Identification, characterization and differentiation of severe storm events and tsunami deposits in Eastern Mediterranean upper shelf underwater environments by means of Luminescence analyses and sedimentological proxies. Optical Dating of potential tsunami-laid sands preserved off the coast of Israel and submerged archaeological sites: Caesarea Maritima. Principal Investigator. Geological Survey of Israel (GSI) & University of Haifa (Leon H. Charney School of Marine Sciences). Luminescence Supervisor: Dr. Naomi Porat (GSI); U. Haifa collaborator: Beverly N. Goodman.

Mexico & Chile: Pacific Coast 2010-2012

- Luminescence-dating newly discovered potential tsunami deposits along the Pacific Coast of Mexico and Chile (following the Chile Tsunami of February 27th2010). Collaborator of project with the Centro de Investigaciones de Geología Ambiental CIGA, Universidad Nacional Autónoma de México UNAM: Dr. Maria Teresa Ramírez-Herrera (PI).

Chile: Valdivia 2008

- Sedimentology & Palaeoenvironmental Reconstruction of estuaries and rivers.
<http://www.baird.com/what-we-do/project/estuarine-wetland-assessment>

- U.S.A. – Florida: 2007-2010
- Continuing coastal evolution and Optical Dating research on Indian Pass Peninsula and St. George Island, Apalachicola Barrier Island Complex, Florida Panhandle, U.S.A.P.I., continuation of Ph.D. research at the Independent level.
- Portugal: Alentejo 2006-2008
- Optical Dating of Palaeolithic archaeological sites in over-worked peneplains of the Alentejo Province, Portugal: searching for evidence of Neanderthal sites and ancient patterns of land-use in the Iberian Peninsula. Collaborative research with the Université de Montréal, Canada: Dr. Ariane Burke.
- Colombia: Antioquia 2006-2008
- Optical dating of stone-lines in two altiplanos on the Central Cordillera of Colombia: Principal Investigator (Research Scientist for EAFIT University) – Geochronologist. (Project funded by the Bank of the Republic of Colombia). Collaborative project with the COLCIENCIAS-founded EAFIT University project (see below).
- Colombia: Antioquia 2005-2008
- Chronology and correlation of morphologies and surficial formations: Evolution of two altiplanos on the Central Cordillera, Colombia: Collaborator in Geochronology (Optical Stimulated Luminescence) and Sedimentology / Geomorphology. Multi-institutional international collaborative project. Project funded by COLCIENCIAS and based at EAFIT University.
- Israel: Caesarea Maritima 2005
- First dated underwater sediments from a submerged archaeological site and underwater tsunami deposit by means of Optical Stimulated Luminescence (OSL), Caesarea Maritima, Israel. Co-investigator: Geochronologist. McMaster University, Hamilton, ON, Canada.
- U.S.A.: Florida 2002-2007
- Evolution and chronologies of coastal systems: understanding coastal forming processes, sediments, sediment transport and dating of events in various barriers and islands. Geoarchaeology of selected archaeological coastal midden sites. St. Joseph Peninsula, Cape San Blas, St. Vincent Island, Little St. George Island and surrounding mainland, Northeast Gulf of Mexico, Florida, USA. Principal Investigator. Ph.D. related research and also Independent Research.
<http://www.stjosephbaypreserves.org/PreserveResearch.htm>
- Canada: Pacific West Coast 1998-2002
- Tsunami research on the central west coast of Vancouver Island, BC, Canada: implications of palaeotsunami impacts, recurrence intervals, sedimentology, and models. Principal Investigator. M.Sc. related research.
- Colombia: Pacific Coast 1991-1998
- Study of the Sedimentology, Geomorphology and General Hydrodynamics of the San Juan River Delta. First compilation of the general aspects regarding the history of the evolution and formation of the Delta, including topographic surveying and coastal change histories.

COLLABORATORS (Past & Present)

North America: U Maine (Sandweiss); U Wisconsin Eau Claire (Jol); USGS, USA (Atwater, Mahan, Morton); Smithsonian Institution (Stanley); University of Texas – Pan-American (González); U Southern Mississippi, USA (Otvos); U South Florida, USA (White); Florida State Parks, USA; St. Joseph Buffer Preserve Florida, USA; SFU, Canada (Clague, Hutchinson, Reimer); Geological Survey of Canada (Bobrowsky); McMaster U, Canada (Boyce, Eyles, Reinhardt, Rink, Risk, Schwarcz); U Montréal, Canada (Burke); Adventure Science Ltd., Canada (Donato).

Central & South America: INOCAR, Ecuador (Arreaga, Rentería); U Técnica de Manabí (UTM), Ecuador (Chunga, Mendez); Escuela Superior Politécnica del Litoral (ESPOL), Ecuador (Martillo); U regional Amazónica (IKIAM), Ecuador (Guzmán, Campos); U Nacional de Colombia, Bogotá Campus (Gómez, Prieto); U Caldas, Colombia (Pardo); GMAS, Colombia (Jaramillo); U EAFIT, Colombia (Hermelin†, Toro, Sierra, Correa, Restrepo, Martínez†, Marín, Paniagua, Beltrán); U Los Andes, Colombia (Montes); Corporación Geológica ARES, Colombia (Bayona); U Chile (Cristino); CIGA – UNAM, Mexico (Ramírez-Herrera); Servicio Geológico Colombiano (Calvache, Arcila, Dionicio, Peña, Olaya); Dirección General Marítima Colombia DIMAR – CIOH Pacífico (Sánchez).

Europe: U Lisboa (Costa, Andrade); U Vigo (García-Gil, Rey); U Lleida (Posch, Rodríguez, Balasch); U Burgos (Iriarte, Navazo), U País Vasco (Aramburu, Tarriño); U A Coruña (Sanjurjo); U Huelva (Rodríguez Vidal); U Málaga (Álvarez, Suárez); CENIEH (Bermúdez de Castro, Moreno, Benito-Calvo, del Val, Parés, Duval); Gibraltar Museum (Finlayson); Durham U, UK (Garrett, Gröcke, Greenwell); U Glasgow, Scotland (Bishop, Sanderson); Wageningen U, The Netherlands (Wallinga, Reimann, Versendal); Utrecht U, The Netherlands (Trabucho); Deltares, The Netherlands (Hijma); Aarhus U & DTU-RISØ, Denmark (Sohbati, Ankjaergaard, Buylaert, Jain); U Algarve (Costas); University of the Peloponnese, Greece (Xanthopoulou); British School at Athens, Greece (MacGillivray).

Asia & Middle East: Geological Survey of Israel (Porat, Almogi-Labin); Israel Oceanographic & Limnological Research Institute (Herut); Israel Antiquities Authority (Be’eri); U Haifa, Israel (Roskin, Goodman, Waldmann, Sivan, Shtober, Klein, Zviely, Artzy); Tel Aviv U (Ben Yosef, Finkel, Barkai, Gopher); Middle East Technical University, Turkey (Tzcan); Physical Research Laboratory, India (Singhvi); Tohoku U, Japan (Sugawara).

Australia & South Pacific: U New South Wales, Australia (Goff, Chagué); U Auckland, New Zealand (Cronin).

GRANTED & FINANCED PROJECTS - GRANTS

2021	Colombian Commission for the Oceans – CCO – & the Colombian National Navy, organizers of the 3rd Pacific Scientific Expedition 2021-II – Bahía Málaga (Colombia). P.I. “Evidencia de Paleo-Tsunamis y subsidencia co-sísmica en el Pacífico colombiano: estudio preliminar en Bahía Málaga”.	
	In-kind funding (oceanographic cruise + room & board + equipment + initial analyses) US\$ 25.000	
2018	INCYT & USPE (Ecuador). Co-PI “Palaeoseismicity and paleotsunamis in Santa Elena Bay, Ecuador”.	
	Funding for 1 yr.	US\$ 5.000
2018	Colombian Commission for the Oceans – CCO – & the Colombian National Navy, organizers of the 1st Pacific Scientific Expedition – Cabo Manglares (Colombia). P.I. “Palaeo-tsunamis and sea level changes in Cabo Manglares: preliminary study in the Pacific Coast of Colombia”	
	In-kind funding (oceanographic cruise + room & board + equipment + initial analyses) US\$ 50.000	
2017	Bi-national Science Foundation – BSF (Israel-U.S.A.). Co-Investigator (& author of proposal). “A Palaeo-Hydrological approach to Understanding the Complex Coastal Evolution of an Ancient Maritime Trade City: The Tel Akko Multi-Disciplinary Case Study, Israel”. App. No. 2016080.	
	Funding for 3 yrs.	EU€ 115.500
2017	PADI Foundation (International). P.I. “The invisible signal of coastal deposits: re-identifying potential extreme hazards”	US\$ 7.500
2016	MINECO-FEDER H2020 (Spain) Call for Acquisition of Scientific Equipment.	
	P.I. “Luminescence”	EU€ 375.106
2016	CENIEH (Spain) start-up grant.	EU€ 3.000
2013-2015	Israel Antiquities Authority & Geological Survey of Israel. Co-P.I. Identification and dating of beachrock units recovered from long underwater sedimentary rock cores throughout Haifa Bay: investigations of subsidence rates and tectonic activity since the Pleistocene (MIS 5-7).	
	In-kind funding US\$ 10.000	
2012	PADI Foundation (International). P.I. “Tsunamis of the World: signal or no signal?”.	US\$ 6.000
2012-2014	Azrieli Foundation (Canada-Israel). Co-P.I. Identification of seasonal movement of sediments alongshore and around underwater anthropogenic structures (3-30 m depths).	US\$ 2.000
2012-2014	Azrieli Foundation (Canada-Israel). P.I. “Characterization of seasonal sediment transport trends, erosion and accretion patterns around Caesarea Maritima, Israel: Offshore & underwater and onshore along the coast”.	US\$ 10.000

- 2011-2013 Geological Survey of Israel and the Israel Oceanographic and Limnological Research Institute. P.I. Identification of the TL signal of the bottom surface sediments of the Mediterranean Continental Shelf to characterize sediment transport trends along the Israeli coastline (1-100 m depths). Details of the in-kind funding for the project: vessel and sampling equipment (grab sampler, multi-corer, box-corer), archiving facilities, Luminescence Dating Laboratory equipment and chemicals.
All in-kind funding (approx. US\$ 150.000)
- 2011 Tohoku University (Japan). P.I. Identification and characterization of the sand deposit generated by the 2011 Tohoku-oki Tsunami (11 March 2011) by means of Optical and Thermal Luminescence analyses to investigate the potential of luminescence signal as sedimentological proxy.
In-kind funding US\$ 3,000
- 2011 University of Haifa (Israel). P.I. Optical dating of the Santorini Minoan event identified in terrestrial tsunami deposits atop Palaikastro's archaeological site, Crete, Greece. **In-kind funding US\$ 1.000**
- 2010-2012 Azrieli Foundation (Canada-Israel) & Geological Survey of Israel. P.I. Identification, characterization and differentiation between severe storm events and tsunami deposits in the Eastern Mediterranean upper shelf underwater environments by means of Luminescence analyses and sedimentological proxies.
Optical dating of potential tsunami-laid sands preserved off the coast of Israel and submerged archaeological sites: Caesarea Maritima. **US\$ 5.000**
- 2010 UNAM (Mexico). P.I. Optical dating of newly discovered potential tsunami deposits along the Pacific Coast of Mexico: First-ever determination of a nocturnal tsunami deposit by means of luminescence.
In-kind funding US\$ 2.000
- 2006-2008 Foundation for the Promotion of Research and Technology from the "Banco de la República" (Colombia). P.I. "Optical Dating of some Surficial Formations from the Altiplanos of San Nicolás and Llano de Ovejas, Antioquia, Colombia". **US\$ 15.000**
- 2004-2007 COLCIENCIAS (Colombian Institute for the Development of Science and Technology "Francisco José de Caldas"). Collaborator: Optical Dating Module, "Chronology and Correlation of Morphologies and Surficial Formations between two Altiplanos on the Central Cordillera, Colombia". **US\$ 87.500**
- 2002-2007 T.H. Stone Memorial St. Joseph Peninsula State Park, Florida Department of Environmental Protection (Port St. Joe, FL, USA). P.I. "The Late Quaternary Evolution of the Apalachicola Barrier Island Complex, North-East Gulf of Mexico, as determined from Optical Dating" (Ph.D. Research). Details of the in-kind funding for each yearly fieldwork season (1 to 2 months long): off-road 4x4 and ATV vehicles, boat, facilities, mechanical / pneumatic tools, and gasoline.
All in-kind funding (approx. US\$ 10.000/yr.)
- 2002-2007 Apalachicola National Estuarine Research Reserve, Florida Department of Environmental Protection (Apalachicola, FL, USA). P.I. "The Late Quaternary Evolution of the Apalachicola Barrier Island Complex, North-East Gulf of Mexico, as determined from Optical Dating" (Ph.D. Research). Details of the in-kind funding for each yearly fieldwork season (1 to 2 months long): lodging, facilities, mechanical / pneumatic tools, off-road ATV vehicles, boat, and gasoline.
All in-kind funding (approx. US\$ 10.000/yr.)
- 2002-2007 St. Vincent National Wildlife Refuge Island, U.S. Fish & Wildlife Service (Apalachicola, FL, USA). P.I. "The Late Quaternary Evolution of the Apalachicola Barrier Island Complex, North-East Gulf of Mexico, as determined from Optical Dating" (Ph.D. Research). Details of the in-kind funding for each yearly fieldwork season (1 to 2 months long): lodging, facilities, mechanical / pneumatic tools, ferry, off-road ATV vehicles, and gasoline.
All in-kind funding (approx. US\$ 5.000/yr.)
- 1999-2002 Pacific Geoscience Centre, Natural Resources Canada (Sydney, BC, Canada). Usage of laboratory and storage facilities, specialised laboratory, and field equipment and all what it concerns (reagents, reactants, standards, etc.) to pursue a complete and detailed analysis of sediment samples related to M.Sc. thesis "Palaeoseismic Investigations on the Central West Coast of Vancouver Island, British Columbia, Canada: Pre-Historic Tsunami Deposits in Coastal Lacustrine Environments".
All in-kind funding (approx. US\$ 50.000/yr.)

GRANTS UNDER REVIEW

- 2022 Ministry of Science (Colombia). Leading Scientist & idea/autor of proposal “Riesgo Por Tsunami Frente Al Cambio Climático En La Costa Pacífica Colombiana: Aporte Al Conocimiento Y Formulación De Una Estrategia Para Su Apropiación Social”. Registry No. 91213 (24.04.2022). Multi-disciplinary & multi-institutional Project with 4 major allies: Colombian Geological Society (SCG), National University of Colombia (UN Bogotá), Geological Survey of Colombia (SGC), Colombian National Unit for Disaster Risk Management (UNGRD). *Submitted, under review*. Funding for 2 yrs. **EU€2.700.000**

SCIENTIFIC PUBLICATIONS

Students are underlined (contribution related to undergraduate, M.Sc. or Ph.D. research, Post-Doctoral or side research)

Articles Accepted & Published in Scholarly Journals

28. Benito-Calvo, A., Moreno, D., Fujioka, T., **López, G.I.**, Martín-González, F., Martínez-Fernández, A., Hernando, I., Karampaglidis, T., Bermúdez de Castro, J.M., Gutiérrez, F., **2022**. Towards the steady state? A long-term river incision deceleration pattern during Pleistocene entrenchment (Upper Ebro River, Northern Spain). *Global & Planetary Change* available online 06 April 2022, 103813. DOI: 10.1016/j.gloplacha.2022.103813.
27. Giaime, M., Artzy, M., Jol, H.M., Salmon, Y., **López, G.I.**, Abu Hamid, A, **2022**. Refining Late-Holocene environmental changes of the Akko coastal plain and its impacts on the settlement and anchorage patterns of Tel Akko (Israel). *Marine Geology* 447, 106778. DOI: 10.1016/j.margeo.2022.106778
26. Giaime, M., Jol, H.M., Salmon, Y., **López, G.I.**, Abu Hamid, A., Bergevin, L., Bauman, P., McClymont, A., Sailer-Haugland, E., Artzy, M., **2021**. Using a multi-proxy approach to locate the elusive Phoenician/Persian anchorage of Tel Akko (Israel). *Quaternary International* 602, 66-81. DOI: 10.1016/j.quaint.2021.06.008.
25. Moreno, D., Gutiérrez, F., del Val, M., Carbonell, D., Jiménez, F., Alonso, M.J., Martínez-Pillado, V., Guzmán, O., Martínez, D., **López, G.I.**, **2021**. A multi-method dating approach to reassess the geochronology of faulted Quaternary deposits in the central sector of the Iberian Chain (NE Spain). *Quaternary Geochronology* 65, 101185. DOI: 10.1016/j.quageo.2021.101185.
24. Parés, J.M., Campaña, I., Duval, M., Sier, M.J., Ortega, A.I., **López, G.I.**, Rosell, J. **2020**. Comparing depositional modes of cave sediments using magnetic anisotropy. *Journal of Archaeological Science* 123, 105241. DOI: 10.1016/j.jas.2020.105241.
23. Gutiérrez, F., Moreno, D., **López, G.I.**, Jiménez, F., del Val, M., Alonso, M.J., Martínez-Pillado, V., Guzmán, O., Martínez, D., Carbonell, D., **2020**. Revisiting the slip rate of Quaternary faults in the Iberian Chain, NE Spain. Geomorphic and seismic-hazard implications. *Geomorphology* 363, 107-233. DOI:10.1016/j.geomorph.2020.107233.
22. Santamaría, M., Navazo, M., Benito-Calvo, A., Alonso, R., **López, G.I.**, & Carbonell, E., **2020**. Atapuerca Neanderthal landscape at Fuente Mudarra site in Burgos, Spain, during Marine Isotope Stages 5–3. *Quaternary Research*, 1-22. DOI:10.1017/qua.2020.65.
21. Zea, S., Bernal, G., **López, G.I.**, Weber, M., García-Urueña, R.P., **2019**. Arrecifes de arenisca en el Golfo de Salamanca, plataforma continental del Caribe Colombiano – Sandstone reefs in the Gulf of Salamanca, continental shelf of the Colombian Caribbean. *Bulletin of Marine & Coastal Research INVEMAR* 48, 153-158. DOI: 10.25268/bimc.invemar.2019.48.1.762 (in Spanish)
20. González-Regalado, M.L., Gómez, P., Ruiz, F., Cáceres, L.M., Clemente, M.J., Rodríguez-Vidal, J., Toscano, A., Monge, G., Abad, M., Izquierdo, T., Monge Soares, A.M., Campos, J.M., Bermejo, J., Martínez-Aguirre, A., **López, G.I.**, **2019**. Holocene palaeoenvironmental evolution of Saltés Island (Tinto and Odiel estuary, SW Spain) during the Roman period (1st century BC – 5th century AD). *Journal of Iberian Geology* 45, 129-145. DOI:10.1007/s41513-018-0089-8.
19. **López, G.I.**, Goodman-Tchernov, B.N., Porat, N., **2018**. OSL Over-Dispersion: a pilot study for the characterisation of extreme events in the shallow marine realm. *Sedimentary Geology* 378, 35-51. DOI: 10.1016/j.sedgeo.2018.09.002 (*Special Issue Sedimentary Evidence of Geohazards: Challenges and Advances*).

18. Cáceres, L.M., Gómez, P., González-Regalado, M.L., Clemente, M.J., Rodríguez-Vidal, J., Toscano, A., Monge-Gómez, G., Abad, M., Izquierdo, T., Monge, A.M., Ruiz, F., Campos, J.M., Bermejo, J., Martínez-Aguirre, A., **López, G.I., 2018.** Modelling the mid-late Holocene evolution of Huelva Estuary and its human colonization, South-Western Spain. *Marine Geology* 406, 12-26. DOI: 10.1016/j.margeo.2018.08.008
17. Porat, N., **López, G.I.**, Lensky, N., Elinson, R., Avni, Y., Elgart-Sharon, Y., Faershtein, G., Gadot, Y., **2018.** Using portable OSL to obtain a time scale for soil accumulation and erosion in archaeological terraces, the Judean Mountains, Israel. *Quaternary Geochronology* 49, 65-70. DOI: 10.1016/j.quageo.2018.04.001
16. Giaime, M., Morhange, C., Marriner, N., Artzy, M., **López, G.I., 2018.** Geoarchaeological investigations at Akko, Israel: New Insights into landscape changes and related anchorage locations since the Bronze Age. *Geoarchaeology*, 1-20. DOI: 10.1002/gea.21683
15. Velasco, E.R., López, G.I., **2016.** Marco Conceptual para Investigaciones Tsunamigénicas: Caso Litoral Pacífico Colombiano. *Boletín de Geología* 38, 79-106.
14. Rodrigues, K., Rink, W.J., Collins, M.B., Williams, T.J., Keen-Zebert, A., **López, G.I., 2016.** OSL ages of the Clovis, Late Paleoindian and Archaic Components at Area 15 of the Gault Site, Central Texas, U.S.A. *Journal of Archaeological Science: Reports* 7, 94-103. DOI: 10.1016/j.jasrep.2016.03.014
13. Rink, W.J., **López, G.I., 2015.** Corrigendum to "OSL-based Lateral Progradation and Aeolian Sediment Accumulation Rates for the Apalachicola Barrier Island Complex, North Gulf of Mexico, Florida, USA" [*Geomorphology*, 123 (2010): 330-342]. *Geomorphology* 24, 41.
12. **López, G.I.**, Thompson, J.W. **2012.** OSL and sediment accumulation rate models: understanding the history of sediment deposition. *Quaternary Geochronology* 10, 175-179. DOI: 10.1016/j.quageo.2012.02.026
11. Burdette, K.E., Rink, W.J., **López, G.I.**, Mallinson, D.J., Parham, P.R. **2012.** Geological Investigations and Optical Dating of Quaternary Siliciclastic Sediments near Apalachicola, Northwest Florida, U.S.A. *Sedimentology* 59, 1836-1849. DOI: 10.1111/j.1365-3091.2012.01328.x
10. Ramírez-Herrera, M.T., Lagos, M., Hutchinson, I., Kostoglodov, V., Machain, M.L., Caballero, M., Gogichaisvili, A., Aguilar, B., Chague-Goff, C., Goff, J., Ruiz-Fernández, A.-C., Ortiz, M., Nava, H., Bautista, F., **López, G.I.**, Quintana, P. **2012.** Extreme wave deposits on the Pacific coast of Mexico: tsunamis or storms? A multi-proxy approach. *Geomorphology* 139-140, 360-371. DOI: 10.1016/j.geomorph.2011.11.002
9. **López, G.I., 2011.** Evidence for Mid to Late Holocene Palaeotsunami Deposits, Kakawis Lake, Vancouver Island, British Columbia, Canada. *Natural Hazards*, 60, 43-68 (**Invited contribution** to Special Publication "Tsunami Risk and Impacts on Coastlines"). DOI: 10.1007/s11069-011-9952-z
8. Rink, W.J., **López, G.I., 2010.** OSL-based Lateral Progradation and Aeolian Sediment Accumulation Rates for the Apalachicola Barrier Island Complex, North Gulf of Mexico, Florida, USA. *Geomorphology* 123, 330-342. DOI:10.1016/j.geomorph.2010.08.001
7. Reinhardt, E.G., Nairn, R., **López, G.I., 2010.** Recovery estimates for the Río Cruces after the May 1960 Chilean earthquake. *Marine Geology* 269, 18-33. DOI:10.1016/j.margeo.2009.12.003
6. **López, G.I.**, Rink, W.J., **2008.** New Quartz-OSL ages for Beach Ridges on the St. Vincent Island Holocene Strandplain, Florida, U.S.A. *Journal of Coastal Research* 24, 49-62. DOI:10.2112/05-0473.1
5. García, C., Hermelin, M., **López, G.I.**, Sierra, G.M., Toro, G.E., Rink, W.J., **2007.** Datación por fotoluminiscencia de la stone line y otras formaciones superficiales del Llano de Ovejas, Cordillera Central, Antioquia. *Boletín de Geología* 29, 131-141. (Colombian Journal; in Spanish).
4. **López, G.I.**, Rink, W.J., **2007.** Characteristics of the burial environment related to Quartz SAR-OSL dating at St. Vincent Island, NW Florida, U.S.A. *Quaternary Geochronology* 2, 65-70. DOI: 10.1016/j.quageo.2006.05.035
3. Thompson, J.W., Rink, W.J., **López, G.I., 2007.** Optically Stimulated Luminescence age of the Old Cedar Midden, St. Joseph Peninsula State Park, Florida. *Quaternary Geochronology* 2, 350-355. DOI: 10.1016/j.quageo.2006.05.005
2. Reinhardt, E.G., Goodman, B.N., Boyce, J.I., **López, G.I.**, van Hengstum, P., Rink, W.J., **2006.** The Tsunami of December 13, 115 A.D. and the destruction of Herod the Great's Harbor at Caesarea Maritima, Israel. *Geology* 34, 1061-1064. DOI: 10.1130/G22780A.1
1. Morton, R.A., González, J.L., **López, G.I.**, Correa, I.D., **2000.** Frequent Non-Storm Washover of Barrier Islands, Pacific Coast of Colombia. *Journal of Coastal Research* 16, 82-87.

Articles submitted to &/or under review in Scholarly Journals*GSA Bulletin – Special Issue “Reporting & Interpretation of Geochronologic Data”:*

Mahan, S., Rittenour, T., Nelson, M.S., Atae, N., Brown, N., DeWitt, R., Durcan, J., Evans, M., Feathers, J., Frouin, M., Heidari, M., Huot, S., Jain, M., Keen-Zebert, A., Li, B., **López, G.I.**, Neudorf, C., Porat, N., Rodrigues, K., Sakai, S., Sawakuchi, A., Spencer, J., Thomsen, K. Guide for interpreting and reporting luminescence dating results.

Quaternary Geochronology:

López, G.I. Heat and cold stresses on OSL samples: A word of caution regarding field and lab extreme conditions.
López, G.I., Bao, X., Ortega, A.I., Parés, J.M., E. Carbonell, and Bermúdez de Castro, J.M. Implications of Intrastratal Complexities on finite Luminescence Ages: the case of Galería, Sierra de Atapuerca, Spain.
 Moreno, D., **López, G.I.**, Carbonell, E., Bermúdez de Castro, J.M. First attempt of ESR dating of K-feldspars from Galería site (Atapuerca, Spain).

Tectonophysics:

Perea, H., Ortuño, M., Masana, E., Baguer, A., Hanson, K., Moreno, D., Guzmán, O., Jiménez, F., **López, G.I.** Constraining fault slip rate affecting alluvial fans in semi-arid weather: El Camp Fault (NE Iberian Peninsula).

Quaternary International:

López, G.I. Luminescence profiling as a geo-proxy: a helpful tool to further understand stratigraphical contexts in archaeological sites.

Open Quaternary – Special Issue IGCP 639 Oman & South Africa Meetings:

López, G.I. Signal or noise? Luminescence as a sediment’s textural maturity proxy

Quaternary Science Reviews:

López, G.I., Velasco, E.R. First Review Catalogue of Great Magnitude Earthquakes and Associated Tsunamis for the Pacific & Caribbean Coasts of Colombia.

López, G.I. Palaeotsunami Evidence in the Colombia-Ecuador Region: a review.

Marine Geology:

López, G.I., Olarte, P., Cantor, L., Bernal, G. Sedimentation, luminescence, and storminess in Cayo Serrana Seaflower Biosphere Reserve.

López, G.I., Bialik, O.M., Waldmann, N.D. Luminescence signal profiling: a new proxy for sedimentologically “invisible” marine Mass Transport Deposits (MTDs).

López, G.I., Tsadok, R., Goodman, B.N., Porat, N. Tracing nearshore sand movements before and after severe winter storms.

Special Book Edition - Festschrift: Prof. (Emeritus) M. Artzy, University of Haifa

López, G.I. The search for the ancient anchorages of Tel Akko, Israel. In: Gilboa, A. and Yassar-Landau, A. (Eds.) *Nomads of the Mediterranean: Trade and Contact in the Bronze and Iron Ages.*

Geology:

López, G.I., Ramírez-Herrera, M.T., Sugawara, D. Signal or No Signal? The power behind the optical luminescence of tsunami deposits.

Geomorphology:

López, G.I., Hermelin, M., García, C., Sierra, G.M., Toro, G.E., Rink, W.J. Evaluation of the Evolution of a High Elevation Plateau in the Northern Central Cordillera of the Andes, Colombia, South America: First Optical Ages and Preliminary Results (**invited contribution**; submitted; peer-reviewed; **accepted for publication**).

Geoarchaeology:

López, G.I., Rink, W.J., White, N.M. Optical Dating of an Ancient Coastal Occupation Site and Underlying Land on the Northwest Gulf Coast of Florida, near Apalachicola, U.S.A.

Radiation Measurements:

López, G.I., Thompson, J.W. Radiation dose rate models for sediment accumulation.

Open Files, Book Chapters; Books & Encyclopaedias; Edited Volumes

10. **UNESCO, 2021.** UNESCO-IOC Report on the ICG/PTWS Scientific meeting of experts to understand tsunami sources, hazards, risk and uncertainties associated with the Colombia-Ecuador Subduction Zone (Guayaquil, 27-29 January 2020).
http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewEventRecord&eventID=2548
9. Artzy, M., Jol, H.M., Giaime, M., Salmon, Y., Abu Hamid, A., **López, G.I.**, Morhange, C., Kaniewski, D., Bauman, P., Killebrew, A.E., **2021.** The effects of coastline and river changes on anchorages, harbours and habitation patterns: the case of Akko. In: Demesticha, S. and Blue, L. (Eds) Under the Mediterranean I: Studies in Maritime Archaeology, Honor Frost Foundation, Sidestone Press Academics, Leiden, pp. 267-278.
8. **López, G.I., 2016.** *Grain Size Analysis*. In: Goldberg, P. and Gilbert, A. (Eds.) Encyclopaedia of Geoarchaeology. Series Title: Encyclopaedia of Earth Science Series, Springer, The Netherlands, pp. 341-348.
7. **López, G.I., 2015.** *Tsunamigenic Sediments*. In: Rink, W.J. and Thompson, J.W. (Eds.) Encyclopaedia of Scientific Dating Methods. Series Title: Encyclopaedia of Earth Science Series, Springer, The Netherlands, pp. 827-832 (DOI: 10.1007/978-94-007-6304-3_199).
6. **López, G.I., 2015.** *Walther's Law of Facies*. In: Rink, W.J. and Thompson, J.W. (Eds.) Encyclopaedia of Scientific Dating Methods. Series Title: Encyclopaedia of Earth Science Series, Springer, The Netherlands, pp. 957-958 (DOI: 10.1007/978-94-007-6304-3_30).
5. **López, G.I.** (Editor), **2012.** *Tsunami – Analysis of a Hazard: from geological interpretation to human impact*. Open Access InTech, Rijeka (ISBN: 979-953-307-835-8) (DOI: 10.5772/2614).
4. Morton, R.A., González, J.L., Correa, I.D., Salazar, O., Tabares, N., **López, G.I., 2002.** *Causes and Events of Atipic Washover Effects on the Pacific Coast of Colombia: the events of May and August 1997 on the El Choncho Island, San Juan River*. In: Correa, I.D. and Restrepo, J.D. (Eds), Geology and Oceanography of the San Juan River Delta, Pacific Coast of Colombia. Fondo Editorial Universidad EAFIT, EAFIT University – COLCIENCIAS, Medellín, Ant., Colombia, pp. 133-150 (ISBN 958-9041-93-0; in Spanish).
3. Vernet, G., Gayet, J., **López, G.I.**, Aristizábal, O.C., **1995.** *San Juan River Delta: Comparison with other Colombian Deltas – Importance of its study*. In: Cantera J.R. and Restrepo J.D. (Eds.), Bays of Málaga and Buenaventura – San Juan River Delta, Vol. II COLCIENCIAS-EAFIT-UNIVALLE. Valle University, Santiago de Cali, Valle, Colombia, p. 318-344 (in Spanish).
2. **López, G.I.**, Salazar, O., Tabares, N., Correa, I.D., **1995b.** *Geomorphology of El Choncho Beach, San Juan River Delta, Pacific Coast of Colombia*. In: Restrepo J.D. and Cantera J.R. (Eds.), San Juan River Delta – Bays of Málaga & Buenaventura, Vol. I COLCIENCIAS-EAFIT-UNIVALLE. EAFIT University, Medellín, Ant., Colombia, p. 89-101 (in Spanish).
1. **López, G.I.**, Salazar, O., Tabares, N., Correa, I.D., **1995a.** *Sedimentology of El Choncho Beach, San Juan River Delta, Pacific Coast of Colombia*. In: Restrepo J.D. and Cantera J.R. (Eds.), San Juan River Delta – Bays of Málaga & Buenaventura, Vol. I COLCIENCIAS-EAFIT-UNIVALLE. EAFIT University, Medellín, Ant., Colombia, p. 102-113 (in Spanish).

Articles in preparation, submitted to &/or under review in Scholarly Books & Encyclopaedias

Encyclopaedia of Geoarchaeology – edited by Goldberg, P. and Gilbert, A.

López, G.I., 2024. *Grain Size Analysis*.

Key Concepts in Geomorphology (online supplements for textbook):

López, G.I. Vignette – *Low elevation lakes: wonderful tsunami debris traps – Kakawis Lake, Vancouver Island, West Coast of Canada*. In: Bierman & Montgomery (Eds.)

López, G.I. Vignette – *Key features in Coastal Geomorphology: beach ridges, barrier islands, spits, and tombolo's – examples from the Pacific Coast of Colombia and the Gulf Coast of U.S.A.* In: Bierman & Montgomery (Eds.)

López, G.I. Vignette – *Coastal change, Tsunamis, Storms & Geoarchaeology: destruction, exposure, and a glimpse into the past of an ancient great Roman coastal town and its harbour – Caesarea Maritima and the Harbour of Sebastos, Israel*. In: Bierman & Montgomery (Eds.)

Other Refereed Contributions (Published Abstracts; Conference/Workshop/Contributions; etc.)

6. Domínguez-Solera, S.D., Moreno, D., Pérez, C., **López, G.I.**, Muñoz, M. 2020. El Provencio (Cuenca, Spain): The research possibilities of a new complete stratigraphic and archaeological sequence from Lower to Middle Palaeolithic. Book of Abstracts, *XV Reunión Nacional del Cuaternario*, Bilbao, Spain, July 1-5.
5. Bergevin, L., Jol, H.M., Sailer-Haugland, E., Artzy, M., Salomon, Y., Giaime, M., **López, G.I.**, Abu Hamid, A. **2020**. Locating an ancient anchorage at Tel Akko (Israel) using subsurface imaging: 2019 results. *18th International Conference on Ground Penetrating Radar*, Golden CO, 14-19 June 2020. DOI: 10.1190/gpr2020-002.1.
4. **López, G.I.**, **2009**. Ph.D. Thesis Abstract – The Late Quaternary Evolution of the Apalachicola Barrier Island Complex, North-East Gulf of Mexico, as determined from Optical Dating. *Ancient TL*, 27(2): 51.
3. **López, G.I.**, Bobrowsky, P.T., **2001**. A 14,000-year-old-record from a coastal freshwater lake: Sedimentological evidence for tsunamigenic events on the west coast of Vancouver Island, British Columbia, Canada. The Twentieth International Tsunami Symposium, 2001. Seattle, OR, USA. IUGG Tsunami Commission - PMEL - NOAA - USGS, Proceedings *Edited by* R.L. Whitney, M. Dunlap, and K. Ventenbergs, pp. 491 – 500 (http://nthmp-history.pmel.noaa.gov/its2001/Separate_Papers/3-04_Lopez.pdf).
2. **López, G.I.**, Bobrowsky, P.T., **2000**. Lacustrine Evidence for Seismic Sea Waves on the West Coast of British Columbia, Canada. *The Coastal Society 17th Conference - Coasts at the Millennium, Proceedings*. The Coastal Society - USGS, Portland, OR, USA, July 9-12, pp. 380-387 <http://nsgl.gso.uri.edu/oresu/oresuc00002/pdffiles/papers/064.pdf>.
1. **López, G.I.**, **1995**. Development of a Methodology to Elaborate Plans for Municipal Environmental Development. In: Repetto F.L. (UNESCO Paris) & Karez C.S. (UNESCO Montevideo) (Eds.), *Geological Aspects for Environmental Protection*, Vol. II, UNESCO-UNICAMP-PNUMA. UNESCO ÓCYT Montevideo, Uruguay, pp. 41-45 (ISBN 92-9089-048-7; in Spanish).

EDUCATIONAL PUBLICATIONS

5. **López, G.I.**, Garzón, N., Botero, C.M. (eds), **2020**. *Uso de Mascarilla en la Playa. Guía Práctica 1 Nueva Normalidad, Serie ProPlayas COVID-19*. Red Proplayas, 26 pp.
4. **López, G.I.**, **2011**. *Tsunamis in Israel? A recap of recent underwater investigations along the Eastern Mediterranean coast off Caesarea Maritima*. A publication for the *Azrieli Foundation Fellows Program (invited contribution)*.
3. **López, G.I.**, **2010**. Summary of Ph.D. & post-Ph.D. Geological Research in the Apalachicola – port St. Joe Region (Gulf & Franklin Counties, Florida, U.S.A.). Publication for the *Friends of St. Joseph Bay Preserves*; part of the *Apalachicola National Estuarine Research Reserve (ANERR), Florida Department of Environmental Protection, NOAA*. <http://www.stjosephbaypreserves.org/PreserveResearch.htm> (Invited contribution).
2. **López, G.I.**, **2004**. “The evolution of coastal areas through geologic time”, “The coast & sea level changes”, “Tsunamis & coasts”. In *Agenda del Mar 2004: A Latin American ocean-related educational agenda* and

daily-planner targeted to the general public www.agendadelmar.com (**Invited contributions - 3 short papers**).

1. **López, G.I., 2004. Tsunamis and the Coastal Zone: A Geological Perspective.** *International Oceanographic Commission, IOCARIBE-UNESCO, Newsletter*, 4: 12-15
<http://ioc3.unesco.org/iocaribe/files/news4.pdf> (**Invited contribution**).

PUBLICATION OF PHOTOGRAPHS

1. **López, G.I., 2012.** Aqueduct Beach and the Roman Upper-Level Aqueduct (W side) of Caesarea Maritima, Israel: Newsletter Cover Photograph, *Just CERFing (The Coastal Education & Research Foundation Inc., CERF – Journal of Coastal Research, JCR)*, November issue. © **G.I.L. - 13 April 2012.**

CONSULTING & TECHNICAL REPORTS

- 2015-2020 Luminescence Dating Laboratory, CENIEH. Over 20+ field and 40+ final OSL laboratory reports on sampling and laboratory results of thousands of sedimentary and rock samples from multiple geological, archaeological, and paleoanthropological settings, related to service (commercial & research) contracts. Due to their sensitive matter, a detailed display of the titles of the projects, locations or sample characteristics cannot be disclaimed.
- 2013-2014 The Netherlands Centre for Luminescence Dating -NCL- (Wageningen University). Over 20 laboratory OSL reports on results obtained on multiple samples from multiple commercial service contracts sent to the NCL Laboratory. Due to their sensitive matter, a detailed display of the titles of the projects, locations or sample characteristics cannot be disclaimed, but they comprised an array of geological to archaeological projects in various environmental settings around the World.
- 2011 C-CAP 2011 Technical Underwater Excavation Report. Caesarea Coastal Archaeology Project (Summer 2011), Charney School of Marine Sciences, University of Haifa, Israel. Compilation of findings and preliminary results of the underwater excavations undertaken at 4 sites in the Intermediate Harbour of Sebastos, Caesarea Maritima, Israel. Excavation co-leaders: Beverly N. Goodman (U of Haifa), Hendrik Dey (CUNY), Koby Sharvit (Israel Antiquities Authority).
- 2010 AGE Laboratory (McMaster University). Optical Dating Results on 10 selected samples from the Gault archaeological site, Texas. *Client: Texas Archaeological Research Laboratory, The University of Texas at Austin, U.S.A.*
- 2009 AGE Laboratory (McMaster University). Optical Dating Results on 4 selected samples from Gasparões archaeological area, SRDS Project to Alentejo, Portugal. *Client: Dr. Ariane Burke, Département d'Antropologie, Université de Montréal, Montréal, Québec, Canada.*
- 2008 Sedimentology, Granulometry, Geophysical Properties, ^{137}Cs & ^{210}Pb Dating on multiple selected sediment core samples from Valdivia estuaries and rivers. *Client: Baird & Associates Coastal Engineers Consulting, Oakville, Ontario, Canada.*
- 2007 AGE Laboratory (McMaster University). Optical Dating Results on 10 selected samples from Bolivia and Argentina, South American Andes. *Client: Catherine Hickson (Project Leader): Multinational Andean Project: Geology in Support of Sustainable Development (MAP), Geological Survey of Canada, Vancouver, British Columbia, Canada.*

- 2007 AGE Laboratory (McMaster University). Optical Dating Results on 4 selected samples from Alberta, Canada. *Client: Dr. Ken Munyikwa, Earth Sciences Centre for Science, Athabasca University, Athabasca, Alberta, Canada.*
- 2007 AGE Laboratory (McMaster University). Optical Dating Results on 6 selected samples from Pine Island – Merritt Island Conservation Area, Florida, U.S.A. *Client: Brevard County Environmentally Endangered Lands Program, Florida, U.S.A.*
- 2006 Geological and geomorphological report on the Gasparões archaeological area, SRDS Project to Alentejo, Portugal. *Client: Dr. Ariane Burke, Département d'Antropologie, Université de Montréal, Montréal, Québec, Canada.*
- 2006 AGE Laboratory (McMaster University). Optical Dating Results on 4 selected samples from Mongolia - Siberia. *Client: Prof. Nat Rutter, University of Alberta, Alberta, Canada.*
- 2005 AGE Laboratory (McMaster University). Complete and detailed Manual for preparation of samples undergoing Optical Dating and Darkroom Laboratory Protocols.

FIELDWORK

Extensive knowledge and field experience in coastal and marginal systems; lacustrine and estuarine, arid, fluvial and peneplain environments; mountainous and tectonically active terrains.

Application of innumerable sampling and data-collection techniques, as well as on-site invention of other methodologies when/if needed.

- Portugal** 2017-2020
Collection of samples in unconsolidated coastal areas (backwash, strandplain, dunes, marshlands, intertidal zone) by various means (mm to cm-size diameter PVC tubes, box cores, and hand samples at high resolution (every 2 cm)) inside trenches and pits in tsunamigenic and storm-derived levels and units.
- Spain** 2015-2020
Collection of samples (PVC, blocks, hand samples, drilled samples, under tarp or not) in archaeologically and paleoanthropologically rich sites inside caves and karstic complexes, containing different stratigraphic sequences and diverse sediment types.
Collection of geological samples for multiple purposes including research, experiments, and commercial services.
- Gibraltar** 2015-2020
Collection of samples (PVC, blocks, hand samples, drilled samples, under tarp or not) in archaeologically rich sites inside caves and karstic complexes, containing different stratigraphical sequences and diverse sediment types.
- U.K.: Wales coastline (North Atlantic Ocean)** 2014
Reconnaissance of ancient submerged coastal woodlands features unearthed by recent severe winter storms (January-February 2014). Extensive exposure of peatlands within situ stumps and toppled tree trunks along the intertidal zone of various beaches. Reconnaissance of intertidal salt marshes in highly hydrodynamic estuarine environments.
- Kenya: Malindi coastline (Indian Ocean)** 2012-present
Offshore underwater coring (percussion) and underwater / coastal marginal sampling for both geoarchaeological and geological contexts mostly associated to 2004 and 2006 Indian Ocean tsunamis and their existing coastal evidence.
- Colombia** 2010-2012; 2019-2021

Analysis of the geomorphology and generation of catastrophic debris flows hypothetically produced by glacially derived melt-water events; recovery of horizontal sediment cores and rock surface sampling (rock cores) from mega-boulders, both for OSL-dating.

Geochronological and landscape evolution of the Cauca River basin by means of multi-proxy analyses of fluvial, colluvial and alluvial deposits. Analysis of palaeoseismic events in the Central Antioquia region.

Greece: Crete

2011

Offshore underwater coring (percussion) and sampling for both geoarchaeological and geological contexts; special sub-sampling for Optical Dating (high resolution within sediment cores). Special terrestrial sampling of tsunami deposits associated with archaeological site (Palaikastro) for Optical Dating.

Israel, Mediterranean & Red seas

2010-present

Collection of rock and sediment samples for the purposes of dating (OSL), luminescence profiling, sedimentology, mineralogy, petrophysics and geochemistry.

Terrestrial percussion and vibration coring (with and without liners) along coastal, desert, arid and deep valley (Sea of Galilee and Jordan Valley, below sea level) environments. Offshore underwater coring (push, percussion, pneumatic), grab-sampling and box-corer; underwater sampling of both archaeological and geological contexts; special underwater sampling for Optical Dating (in situ, grab- and box-corer sampling); underwater excavation of archaeological sites with or without caisson structure.

Chile, Valdivia

2008

Sediment coring (several different techniques) in estuaries and rivers.

USA, Florida (Central & Northern Peninsula)

2007

GPR surveying and sediment coring (for optical dating purposes) on palaeo-shorelines.

USA, Florida (Central & Northern Peninsula)

2006

Selection of sites for sediment coring and dating of palaeo-shorelines for future research.

Portugal, Alentejo

2006

Geomorphology and landscape evolution analysis; archaeological excavation & survey; recovery of horizontal sediment cores for OSL-dating within fan deposits; collection of box-sediment with personally invented apparatus in arid extremely compacted plough zone areas; logging trenches.

U.S.A., MA, Martha's Vineyard

2004-2007

Vertical sediment cores (dunes & marshes); grab samples on beach face; beach & barrier profiles.

Colombia, Western & Central Cordillera of the Andes (High-elevation Plateaus & Terraces)

2004-2007

Geomorphology and landscape evolution analyses; recovery of horizontal sediment cores for OSL-dating within alluvial deposits; logging trenches.

U.S.A., Northwest Florida, Apalachicola Barrier Island Complex & surrounding mainland

2002-2010

Sediment coring (terrestrial & underwater); collection of underwater littoral samples (skin diving) for grain size and luminescence studies; beach & barrier profiles; dune & beach trenches for stratigraphic analyses; GPR profiling; re-opening of archaeological trenches; collection of archaeological artefacts; high resolution GPS surveying; topographical surveying.

Canada, Yukon Territory

2001

High-precision GPS monitoring; collection of igneous & metamorphic rocks for geothermal flow analysis.

Canada, Central & Northern British Columbia

2000

Grab sampling for geochemical exploration; categorization of till deposits; terrain mapping.

Canada, B.C., West Coast of Vancouver Island 1998-2002

Sediment coring in freshwater lakes, bays, and marshes; marsh trenches for stratigraphic & palaeoseismic analyses.

Colombia, Antioquia, multiple urban & rural Municipalities 1995-1998

Natural hazards surveys, mapping & assessments; geomorphology; terrain mapping; topographic surveys.

Colombia, Pacific Coast, San Juan River Delta 1991-1998

Coastal geomorphology; longshore current analyses; sediment coring (terrestrial, intertidal & underwater) & estuarine underwater grab sampling; beach trenches for stratigraphic analyses; beach & barrier islands profiling; topographic surveys; quantification of species & flora sampling (mangroves); water sampling; current-meter set up & data collection; estuarine bathymetric profiling & morphological analyses; continuous littoral environment observations.

Colombia 1988-1993

Multiple field work trips (1 per academic course; min. 1 day, max. 1 month) to various geological provinces of the country. Collection of rock samples; geomorphologic analyses; mapping; topographic surveying; photography; opening of trenches for stratigraphic analyses; geophysical logging of oil & gas wells; collection of vertical sediment cores in various sedimentary environments; water collection for geochemical analyses; mining excavation; geotechnical surveys; bathymetric profiling; stratigraphy logging; sedimentology basin analyses; beach profiling; collection of underwater samples; quantification of species (flora & fauna) in a specific ecosystem; landscape evolution assessment; measurement of geological structures; analysis and measurement of tectonic movements; etc.

CONFERENCE TEACHING COURSES

Creation of short courses to be taught for a specific audience pre- &/or post-conference events.

XVIII Congreso Colombiano de Geología, virtual conference, Medellín, Colombia 17 August 2021

Online Course Title: "Geotsunamis: de la Identificación a la Geoamenaza".

Participants: **20**. Hours: **4**.

XVII Congreso Colombiano de Geología, Santa Marta, Colombia 13 August 2019

Course Title: "Paleosísmica de Zonas de Subducción con Potencial Tsunamigénico".

Participants: **25**. Hours: **8**.

UNIVERSITY TEACHING EXPERIENCE

TEACHING PORTFOLIO AVAILABLE UPON REQUEST

Spain

Lecturer

Invited Lecturer 2020

Adult Program, Open University Programme, University of Burgos, 30 March 2020 (online)

Geology, Engineering and Geological Hazards Course; Module Seismicity & Tsunamis: **100 students**

Lecturer 2018

Course opened to all (undergraduates, graduates, professionals, researchers)

Summer School Program, University of Burgos, Spain, 25-27 July 2018

"Introduction to Geochronology: Discovering the age of our past": **25 students**

Invited Lecturer 2016

Last updated: April 2022

M.Sc. Graduate Program, **University of Burgos**, Spain, 17 March 2016

Lecture on generalities of dating coastal environments: "**Optical Dating of Coastal Sediments: insights on the Apalachicola Barrier Island Complex (USA) - its Late Quaternary Evolution revisited**": **30 students**

Israel

Lecturer, Instructor

(Rating among top 2%)

Invited Lecturer

2012

Undergraduate Geoarchaeology Course

Department of Archaeology, **Tel Aviv University**, Israel, 30 October 2012

Lecture on generalities of personal research dealing with Sedimentological, Geochronological, Geoarchaeological and Coastal Processes along the Mediterranean coastline of Israel and Caesarea Maritima: "**The tale behind a grain of sand: sediment migration & erosion, ages & chronologies, tsunamis & storms, artifacts & geoarchaeology – The dynamic underwater environment off Caesarea Maritima, Israel**".

Invited Lecturer & field/lab Instructor

December 2011

Graduate Course *Marine Sedimentology of the Red Sea*

Israel's **Inter-University Institute for Marine Sciences** in Eilat (IUI), 21-30 December 2011

Joint Graduate intensive 10 day-long course lead by the IUI & the University of Haifa: **18 Ph.D. & M.Sc. Graduate Students** from 5 Israeli Universities.

Lectures: "**Grains of Sand: Visual Mineral Identification**"; "**Geochronology: Dating Methods for Marine Sediments**"; "**Coastal and Marine Sedimentology**"; "**Geochronology: OSL Dating of Sediments**".

Invited Lecturer

2011

Caesarea Coastal Archaeological Project (C-CAP)

Underwater archaeological & geoarchaeological excavation summer field school (24 July – 12 August) at Caesarea Maritima Israel. Collaborative Field School between **University of Haifa** (Israel), Israel Antiquities Authority (Israel), Hunter College (USA).

Lecture 27 July 2011: "**Optical Dating – A Basic Understanding of an Exceptional Dating Method**".

Invited Lecturer & field/lab Instructor

2011

Graduate Course *Marine Sedimentology of the Red Sea*

Israel's **Inter-University Institute for Marine Sciences** in Eilat (IUI), 4-14 January 2011

Joint Graduate intensive 10 day-long course lead by the IUI & the University of Haifa: **13 Ph.D. & M.Sc. Graduate Students** from 5 Israeli Universities.

Lectures: "**Grains of Sand: Visual Mineral Identification**"; "**Geochronology: Dating Methods for Marine Sediments**"; "**Geochronology: OSL Dating of Sediments**".

Canada

Lecturer, Sessional Faculty

(Rating among top 5%)

Laboratory Instructor, Teaching Assistant and Field Instructor & Assistant

Instructor/Sessional Faculty, EARTH SC-2MM3 Gemstones

Summer 2010

McMaster University, School of Geography & Earth Sciences: **80 students**

Instructor/Sessional Faculty, EARTH SC-2GG3 Natural Disasters

Spring 2010

McMaster University, School of Geography & Earth Sciences: **600 students**

Instructor/Sessional Faculty, EARTH SC-2MM3 Gemstones

Spring 2010

McMaster University, School of Geography & Earth Science: **300 students**

Senior Field Assistant, GEOG-3ME3 Environmental Field Camp (Dundas Valley, ON, Canada)

Summer 2009

McMaster University, School of Geography & Earth Sciences

Instructor/Sessional Faculty, EARTH SC 3AA3 Geosciences Explorers & Adventurers

Summer 2009

School of Geography & Earth Sciences, McMaster University: **50 students**

Instructor/Sessional Faculty, GEO-2GG3 Natural Disasters

Fall 2007

McMaster University, School of Geography & Earth Sciences: **600 students**

Instructor/Sessional Faculty , <i>GEO-3EO3 Sedimentary Environments</i>	Fall 2007
McMaster University, School of Geography & Earth Sciences: 25 students	
Field Co-Instructor , <i>GEO 4EO3 Coastal Environments (Martha's Vineyard, MA, U.S.A.)</i>	Fall 2007
McMaster University, School of Geography & Earth Sciences: 25 students	
Senior Field Assistant, <i>GEO-3FE3 Field Camp (White Fish Falls, ON, Canada)</i>	Summer 2007
McMaster University, School of Geography & Earth Sciences	
Senior Teaching Assistant, <i>GEO-2GG3 Natural Disasters</i>	Fall 2006
McMaster University, School of Geography & Earth Sciences.	
Instructor/Sessional Faculty , <i>GEO-3DD3 Geoarchaeology</i>	Spring 2006
McMaster University, School of Geography & Earth Sciences: 200 students	
Laboratory Instructor , <i>GEO-2KO3 Optical Crystallography</i>	Fall 2005
McMaster University, School of Geography & Earth Sciences: 45 students	
Senior Field Assistant, <i>GEO-3FE3 Field Camp (White Fish Falls, ON, Canada)</i>	Summer 2005
McMaster University, School of Geography & Earth Sciences	
Tutorial Instructor / Senior Teaching Assistant , <i>GEO-3DD3 Geoarchaeology</i>	Spring 2005
McMaster University, School of Geography & Earth Sciences: 200 students	
Senior Field Assistant, <i>GEO 4EO3 Coastal Environments (Martha's Vineyard, MA, U.S.A.)</i>	Fall 2004
McMaster University, School of Geography & Earth Sciences	
Senior Laboratory Instructor / Teaching Assistant, <i>GEO-2EO3 Earth History</i>	Fall 2004
McMaster University, School of Geography & Earth Sciences	
Senior Field Assistant, <i>GEO-3FE3 Field Camp (White Fish Falls, ON, Canada)</i>	Summer 2004
McMaster University, School of Geography & Earth Sciences	
Tutorial Instructor , <i>GEO-3DD3 Geoarchaeology</i>	Spring 2004
McMaster University, School of Geography & Earth Sciences: 200 students	
Senior Laboratory Instructor / Teaching Assistant, <i>GEO-2EO3 Earth History</i>	Fall 2003
McMaster University, School of Geography & Earth Sciences	
Tutorial Instructor / Teaching Assistant, <i>GEO-3DD3 Geoarchaeology</i>	Spring 2003
McMaster University, School of Geography & Earth Sciences	
Teaching Assistant, <i>GEO-3QO3 Geochemistry and GEO-4KO3 Minerals and Society</i>	Fall 2002
McMaster University , School of Geography & Earth Sciences	
Senior Laboratory Instructor / Teaching Assistant, <i>EOS 201 Sedimentary Geology</i>	Spring 2001
University of Victoria, School of Earth & Ocean Sciences	
Senior Laboratory Instructor / Teaching Assistant, <i>EOS 110 / GEOG 216 Oceans & Atmosphere</i>	Fall 2000
University of Victoria, School of Earth & Ocean Sciences.	
Senior Laboratory Instructor / Teaching Assistant, <i>EOS 110 / GEOG 216 Oceans & Atmosphere</i>	Spring 2000
University of Victoria, School of Earth & Ocean Sciences	
Laboratory Instructor / Teaching Assistant, <i>EOS 110 / GEOG 216 Oceans & Atmosphere</i>	Fall 1999
University of Victoria , School of Earth & Ocean Sciences	

Colombia*Instructor & Lecturer*

Invited Lecturer	2021
Undergraduate Program, Department of Geosciences & Environment, Mines Faculty, National University of Colombia , Medellín	
a) Course: Introduction to Geological Engineering, <u>5 August 2021</u> (online), 60 students	
b) Course: Introduction to Quaternary Dating Methods, <u>1-3 September 2021</u> (online), 30 students	
Sessional Faculty	2021
M.Sc. Graduate Program, Earth Sciences Faculty, EAFIT University , Medellín, <u>May-October</u> (online)	
Quaternary Geology & Geochronology: 3 grad students	
Invited Lecturer	2020

Undergraduate Program, Department of Geosciences & Environment, Mines Faculty, National University of Colombia, Medellín, 27 August 2020 (online)

Introduction to Geological Engineering course: **80 students**

Sessional Faculty

2019

Ph.D. Graduate Program, Earth Sciences Faculty, EAFIT University, Medellín, 21 January – 10 February 2019
First official intensive graduate-level course on Luminescence Dating + Laboratory Sample Preparation + Fieldwork (60 hours): **2 grad students**

Laboratory Instructor & Lecturer, *Coastal Geomorphology (4th & 5th Year U/G course)*

1997 & 1998

EAFIT University, Department of Geology: **20 students**

Lecturer, *Environment & Natural Resources (1st & 2nd Year U/G course)*

1997 & 1998

EAFIT University, all University Programs: **500 students**

Note: In Colombia, as in most Latin American countries, an undergraduate program in Geology includes the Physical Geography - Geomorphology curriculum. The program is 5 ½ years-long, usually extended to 6 years due to the Honours Thesis, mandatory for all students. It is comparable to a European Diploma program (i.e. M.Sc. Level).

STUDENT MENTORSHIP, SUPERVISION & LABORATORY TRAINING

At both Academic Research and Internship – Apprenticeship levels:

Training of laboratory research fellows, students, and technicians on Optical Stimulated Luminescence (OSL) Dating, Sedimentology and Petrophysical Analyses of Sediments and Sediment Cores. Including, but not limited to, field sample & data collection/handling, laboratory sample preparation & physicochemical treatments, measurements & analysis of OSL and sedimentological data. General laboratory operation training, including maintenance, QA, and QC controls.

Internship Level:

EAFIT University (Medellín), Department of Geology (Colombia):

Year	Advising Level	Name	Degree (Start-End Date)	Program	Research Topic &/or Thesis Title	Main Supervisor	Overall Grade
2019	Mentor Thesis Co-Supervisor	Santiago Noriega Londoño	Ph.D. (2018-2022)	Geology	Evolución de la Cuenca del Río Cauca en el Depto. Antioquia.	Dr. María Isabel Marín	4 / 5

University of Burgos UBU – CENIEH Internships & Youth Job Programmes (Spain):

Year	Advising Level	Name	Degree (Year Level)	Program	Period (Start-End Date)	Internship / Apprenticeship Topic	Supervisor(s)
2019	Training Supervisor	Cristina Alonso Cortés	Recent graduate	Chemistry	2 years Oct 2019 – Sep 2021	Luminescence Lab support technician	Dr. G.I. López & Miren del Val (Lab. Tech.)
2019	Internship Supervisor	Nerea Marquínez	Undergrad (Year 4)	Chemistry	2 months 29-04-19 – 03-07-19	Luminescence Lab & Beta-Gamma Spectrometry sample preparation duties.	Dr. G.I. López
		Marta Castillo			2 months 24-04-19 – 28-06-19	Operation of MSCL. Operation of Portable OSL Reader.	
		Cristina García			2 months 07-02-19 – 15-04-19	Luminescence Lab & Beta-Gamma Spectrometry sample preparation duties.	
2018		Silvia Alonso			2 months 26-06-18 – 31-08-18	Luminescence Lab sample preparation duties.	Dr. G.I. López & Miren del Val (Lab. Tech.)
		Naira Miguel			2 months 26-06-18 – 31-08-18		
2016	Training Supervisor	David Martínez	Recent graduate	Chemistry	2 years Jul 2016 – Jun 2018	Luminescence Lab support technician	Dr. G.I. López & Carlos Pérez Verónica Guilarte (Lab. Techs.)

University of the Basque Country, UPV-EHU (Spain):

Year	Advising Level	Name	Degree (Start-End Date)	Program	Research Topic &/or Thesis Title	Supervisor	Overall Grade
2016	Research Supervisor	Xinfu Bao	M.Sc. (2015-2016)	Quaternary: Environmental Change & Human Ecological Footprint	Lateral intra-stratigraphic sedimentological variations in archaeologically-rich Quaternary karstic complexes: implications to luminescence dating – the case of Galería, Sierra de Atapuerca, Spain	Dr. G.I. López	9.5 / 10 Mention of Honour

National University of Colombia (Bogotá Campus), Department of Geosciences (Bogotá, Colombia):

Year	Advising Level	Name	Degree (Start-End Date)	Program	Research Topic &/or Thesis Title	Supervisor	Overall Grade
2015	Mentor Thesis Supervisor & Co-Director <i>ad honorem</i>	Erick Ricardo Velasco Reyes	Undergraduate (2010-2015)	Geology	Marco Conceptual para Estudios Tsunamigénicos en el Pacífico Colombiano. [Conceptual Framework for Tsunami Research in the Pacific Coast of Colombia]	Dr. G.I. López	5 / 5

Wageningen University, Soil Geography & Landscape Group, The Netherlands Centre for Luminescence Dating (Wageningen, The Netherlands):

Year	Advising Level	Name	Degree (Start-End Date)	Program	Research Topic &/or Thesis Title	Supervisor
2013 2014	Mentor Trainer <i>ad honorem</i>	Weiwei Wang	Ph.D. (2012-...) <i>Student dropped out.</i>	Environmental Sciences	Improvement of statistical analyses in Optical Dating	Dr. J. Wallinga

University of Haifa, Leon H. Charney School of Marine Sciences, Dept. of Marine Geosciences (Haifa, Israel):

From October 2010 to December 2014: Training and teaching various graduate students at the M.Sc. and Ph.D. levels in specifics related to disciplines such as Mineralogy, Petrography, Petrophysics, Sedimentology, Granulometry, Tsunami sediments & deposit identification and Stratigraphical correlation.

McMaster University, School of Geography & Earth Sciences, AGE Laboratory (Hamilton, Canada):

Year	Advising Level	Name	Degree (Start-End Date)	Program	Research Topic &/or Thesis Title	Supervisor
2010 2011	Mentor	Shakeel Ahmad	M.Sc. (2009-2011)	Earth & Environmental Sciences	Evolution of Cape San Blas, St. Joseph Peninsula, Florida, from textural analysis, GPR & organic matter isotope geochemistry.	Dr. E.G. Reinhardt
2010	Mentor	Brett DeHay-Turner	Undergraduate (2009-2010)	Environmental Sciences	Optical Dating of Indian Pass Peninsula beach ridges, Apalachicola, Florida, U.S.A.	Dr. W.J. Rink
2009	Supervisor Trainer	Lisa Laframboise	n/a	Laboratory Technician	Part time Optical Dating Technician	Dr. G.I. López
2008	Mentor	Chantel Iacoviello	Undergraduate (2008-2009)	Earth & Environmental Sciences	Optical Dating of 2 underwater cores taken in St. Joseph Bay by G.I. López to look for overwash evidence.	Dr. W.J. Rink
2006	Mentor Trainer	Kevin Burdette	Ph.D. (2006-2011)	Earth & Environmental Sciences	OSL & ESROD dating of selected ancient beach ridges across Florida, U.S.A.	Dr. W.J. Rink
2004	Trainer	Jeroen Thompson	Ph.D. (2003-2007)	Medical Physics	Optical Dating.	Dr. W.J. Rink
2003	Supervisor Trainer	Kathy Moretton	Undergraduate	Lab & field assistant	Summer OSL laboratory sample preparation & field assistant in Florida research.	Dr. G.I. López

2003	Supervisor Trainer	Jessica Pilarczyk	Undergraduate	Lab & field assistant	Summer OSL laboratory sample preparation & field assistant in Florida research.	Dr. G.I. López
2002	Supervisor Trainer	Jenn Etherington	Undergraduate	Lab & field assistant	Fall OSL laboratory sample preparation & field assistant in Florida research.	Dr. G.I. López

EAFIT University, Department of Geology, Luminescence Laboratory (Medellín, Colombia):

Year	Advising Level	Name	Degree (Start-End Date)	Program	Research Topic &/or Thesis Title	Supervisor
2006	Trainer Co-Supervisor <i>ad honorem</i>	Carolina García Londoño	M.Sc. (2005-2007)	Earth Sciences	Datación por Fotoluminiscencia de algunas formaciones superficiales del Llano de Ovejas, Cordillera Central, Antioquia. [Optical Dating of Andean Sediments & Palaeo-Morphologies.]	Dr. M. Hermelin

INVITED LECTURES, SEMINARS, WORKSHOPS, MEETINGS & TALKS

50. “La importancia de la investigación sobre los paleo-tsunamis” [**The importance of palaeotsunami research**]. Public Outreach Series “El Planeta Pide la Palabra”, monthly evento organised by the National Unit for Disaster Risk Management (UNGRD), Bogotá, Colombia, 10 November 2021, online.
45. “Tsunamis: ¿Cómo se estudian?” [**Tsunamis: how are they studied?**]. Public Outreach Series “La Tierra Contada”, monthly event organised by the Antioquia Chapter of the Colombian Geological Society and Parque Explora (a Science Museum & outreach hub), Medellín, Colombia, 8 June 2021, online.
44. “Riesgos por Tsunamis en Colombia” [**Tsunami Risk in Colombia**]. Webinar Event organised by the Geological and Environmental Risks Student Seedbed, Geosciences Department, Universidad Nacional de Colombia (UNal), Medellín Campus, Colombia, 21 May 2021, online.
43. “**An Introduction to OSL Dating**”. Undergraduate Course Geography 304 – Introduction to Geomorphology Mini-Conference, University of Wisconsin Eau-Claire (UWEC), USA, 23 April 2021, online.
42. “De la Ciencia a la Ciudadanía: Experiencias de inclusión, ayuda y aportes de/a comunidades costeras antes de que existiera la “Ciencia Ciudadana”” [**From Science to Citizens: Experiences of inclusion, help and contributions from / to coastal communities before there was “Citizen Science”**]. Webinar organised by Red ProPlayas: 3rd Workshop on Citizen Science “Conclusion, action and reaction of Citizen Science”, 18 March 2021, online.
41. “Introducción a los Lectores de Luminiscencia TL/OSL y diferencias con los equipos TLD” [**Introduction to the TL/OSL Luminescence Readers & differences with the TLD Readers**]. Invited talk organised by the Colombian National Cancer Institute and the Dept. of Medical Physics of the National University of Colombia, 15 March 2021, online.
40. “Retos para Identificar y Datar Depósitos de Paleotsunamis” [**Challenges in ID’ing and Dating Palaeotsunami Deposits**]. Webinar Event within World Tsunami Awareness Day, Universidad Técnica de Manabí (UTM), Ecuador, 5 November 2020, online.
39. “Eventos Marinos Extremos y Paulatinos en el Pacífico Colombiano” [**Extreme & Gradual Marine Events along the Pacific Coast of Colombia**]. Webinar Event: “Crisis Ambiental en Colombia: ¿variabilidad climática y/o efecto antrópico?”, EAFIT University Days of Applicable Science 2020 – Faculty of Sciences (22-23 September 2020), Colombia, 22 September 2020, online.
38. “Uso de Mascarilla en la Playa – Guía Práctica 1 Nueva Normalidad” [**Use of face masks in beaches – Practical Guide 1 New Normality**]. Webinar organised by Red ProPlayas in the context of the COVID-19 pandemic, 17 September 2020, online.
37. “**An introduction to OSL Dating & Luminescence Signals**”. SedsOnline Scientific Webinars, International Association of Sedimentologists, 8 July 2020, online.

36. "Geocronología del Cuaternario: una introducción" [**Quaternary Geochronology: an introduction**]. Webinar part of the "Cuarentena con Geociencias" Online Series organised by the Colombian Geological Society in the initial months of the COVID-19 pandemic (March-July 2020), 19 April 2020, online.
35. "Paleotsunamis: el secreto paleosísmico enterrado" [**Palaeotsunamis: buried palaeoseismic evidence**]. Webinar part of the "Cuarentena con Geociencias" Online Series organised by the Colombian Geological Society in the initial months of the COVID-19 pandemic (March-July 2020), 17 April 2020, online.
34. "Paleotsunamis: Evidencia física de inundación por tsunami" [**Palaeotsunamis: physical evidence of tsunami inundation**]. International Oceanographic Commission (IOC) - UNESCO Workshop (27-29 January 2020): ICG/PTWS Scientific Meeting of Experts to understand Tsunami sources, hazards, risk, and uncertainties associated with the Colombia-Ecuador Subduction Zone, 28 January 2020, Guayaquil, Ecuador.
33. "Edades a partir de granitos de cuarzo y reconstrucción de procesos superficiales a partir de sedimentos en bruto: dos caras de la Luminiscencia Óptica" [**Ages from grains of quartz and reconstruction of surface processes from bulk sediment: two faces of Optical Luminescence Dating**]. First Open Seminar on Quaternary Dating Methods, 7 February 2019, Universidad EAFIT, Medellín, Colombia.
32. "Cuevas, Neandertales y Arqueología: explicando complejidades sedimentarias utilizando la luminiscencia óptica" [**Caves, Neanderthals & Archaeology: explaining sedimentary complexities using optical luminescence**]. Scientific Seminar part of the bi-weekly "Seminario de Geología", 25 August 2017, Universidad EAFIT, Medellín, Colombia.
31. "**Universal Geochronology Service, Sub-Task 8.2.2**": raison d'être & plan of action. ERIHS Preparatory Phase Project Kick-Off Meeting, 29-31 March 2017, Auditorium ECRF, Florence, Italy.
30. "Aplicaciones de la Luminiscencia Óptica en el Holoceno: de método de datación a proxy sedimentario" [Applications of Optical Dating in the Holocene: from dating method to sedimentary proxy]. Scientific Seminar part of the bi-weekly "Seminario de Geología", 3 February 2017, Universidad EAFIT, Medellín, Colombia.
29. "Presentación Laboratorio de Dataciones por Luminiscencia del CENIEH" [**Presentation of the Luminescence Dating Laboratory at the CENIEH**]. Scientific Seminar, 23 January 2017, Servicio Geológico Colombiano (SGC), Bogotá, Colombia.
28. "La Luminiscencia Óptica: de método de datación a herramienta para entender depósitos de tsunamis" [**Optical Dating: from dating method to proxy to understand tsunami deposits**]. Scientific Seminar, 6 May 2015, Instituto de Investigaciones en Estratigrafía IIES, University of Caldas, Manizales, Colombia. <http://iies.ucaldas.edu.co/es/eventos/la-luminiscencia-ptica-de-m-todo-de-dataci-n-herramienta-para-entender-dep-sitos-de-tsunamis>
27. "La Luminiscencia como herramienta para entender depósitos sedimentarios: desde arenas de playa hasta tsunamis" [**Luminescence as a proxy to understand sedimentary environments: from beach sand to tsunami deposits**]. Scientific Seminar, 19 February 2015, Department of Geosciences, National University of Colombia, Bogotá, Colombia.
26. "**Akko, St. Jean d'Acre: Effects of coastline changes on ancient habitation patterns**". Scientific Seminar, 3 August 2014, Basin Analysis and Petrophysics Laboratory (Petrolab), Department of Marine Geosciences, University of Haifa, Haifa, Israel.
25. "**Tales of the Sands: Using Optical Dating to understand modern and ancient coastal and marine sedimentological processes**". Scientific Seminar, 4 August 2012, Institute of Marine Sciences, Middle Eastern Technical University, Mersin, Turkey.
24. "**Signal Impact Analysis: Luminescence as a Sedimentological Proxy?**". Special Scientific Colloquium, 3 May 2012, Department of Geosciences, Faculty of Science, University of Los Andes, Bogotá, Colombia.
23. "**The many faces of Sedimentary Geology**". Special Scientific Colloquium, 30 April 2012, School of Geography, Archaeology & Palaeoecology, Queen's University of Belfast, Northern Ireland, UK.
22. "**Optical Dating of Offshore Tsunamiogenic Deposits in Caesarea Maritima, Israel's Mediterranean Coast**". Research Colloquium, 30 March 2011, Azrieli Foundation Fellows Forum, Crown Plaza Hotel, Azrieli Center, Tel-Aviv, Israel.

21. **“Optical Dating of Coastal Sediments: Apalachicola Barrier Island Complex Late Quaternary Evolution re-visited”**. Special Scientific Colloquium, 1 March 2011, Faculty of Science, University of Los Andes, Bogotá, Colombia.
20. **“Palaeoseismology: The Importance of the Geological Aspect of Tsunamis”**. Special Seminar, 28 February 2011, Faculty of Science, University of Los Andes, Bogotá, Colombia.
19. **“The Late Quaternary Evolution of the Apalachicola Barrier Island Complex, North-East Gulf of Mexico, as determined from Optical Dating”**. Departmental Seminar, 22 November 2010. Leon H. Charney School of Marine Sciences, University of Haifa. Haifa, Israel.
18. **“The Dating Game: methods in Geochronology”**. Lecture for GEO 4EO3 Coastal Environments, Fall Term, October 2008. School of Geography & Earth Sciences, McMaster University. Hamilton, ON, Canada
17. **“Applications of Optical Luminescence Dating in Coastal Environments”**. Lecture for GEO 4QO3 Sedimentary Geochronology, Winter Term, 15 February 2008. School of Geography & Earth Sciences, McMaster University. Hamilton, ON, Canada
16. **“Mineral Structures and Crystal Morphologies”**. Lecture for GEO 2MM3 Gemstones, Winter Term, 21-23 January 2008. School of Geography & Earth Sciences, McMaster University. Hamilton, On, Canada.
15. **“Field Methods for Optical Dating”**. Departmental Workshop, November 2006. Geology Department, EAFIT University. Medellín, Colombia.
14. **“Precision & Accuracy in Optical Dating”**. Graduate Studies Seminar, November 2006. Geology Department, EAFIT University. Medellín, Colombia.
13. **“Luminescence Dating: an absolute radiometric dating technique”**. Lecture for GEO 3DD3 Geoarchaeology, Summer Term, 18 July 2006. School of Geography & Earth Sciences, McMaster University. Hamilton, ON, Canada.
12. **“A Tale from the Sands: Luminescence history of three coastal barriers along the NE shores of the Gulf of Mexico”**. Departmental Seminar, 15 March 2006. School of Geography & Earth Sciences, McMaster University. Hamilton, ON, Canada.
11. **“In the look-out for graduate positions and scholarships in foreign Universities – an experience”**. Graduate Studies Lecture, May 2004. EAFIT University. Medellín, Colombia.
10. **“The hydrodynamics of a Tsunami”**. Lecture for Advanced Hydrodynamics graduate course, May 2004. Geology Department, EAFIT University. Medellín, Colombia.
9. **“Geochronology: applications of Optical Stimulated and Thermal Luminescence in Coastal Environments”**. Departmental Seminar, May 2004. Geology Department, EAFIT University. Medellín, Colombia.
8. **“Optical Luminescence dating of Beach Ridges on Three Barrier Islands on Florida’s Northern Gulf Coast, USA: .** Special Seminar in honour of Dr. D.J. Stanley’s visit, 11 November 2003. School of Geography & Geology, McMaster University. Hamilton, ON, Canada.
7. **“Ancient and Modern Storms – A Geologist Perspective”**. Public talk, 7 August 2003. Estuarine Reserve Education Center, Florida Department of Environmental Protection. Apalachicola, Florida, USA.
6. **“Optical Stimulated Luminescence applications to Coastal Studies”**. Seminar Series, April 2003. School of Geography & Geology Seminar Series, McMaster University. Hamilton, ON, Canada.
5. **“Palaeoseismic Investigations on the Central West Coast of Vancouver Island, British Columbia, Canada – Prehistoric Tsunami Deposits in Coastal Lacustrine Environments”**. Seminar Series, 20 November 2002. School of Geography & Geology, McMaster University. Hamilton, ON, Canada.
4. **“Tsunami Deposits along the Northwest Coast of USA and Canada”**. Departmental Seminar, May 2002. Geology Department, EAFIT University. Medellín, Colombia.
3. **“Kakawis Lake and its record of Pre-historic Tsunami Deposits”**. Seminar Series, February 2001. School of Earth & Ocean Sciences, University of Victoria. Victoria, B.C., Canada.
2. **“Lacustrine Evidence of Tsunamis on the West Coast of British Columbia, Canada”**. CEOR Fifth Annual Research Workshop, University of Victoria, 23 February 2000. CEOR Report 2000-1, pp. 39-40, School of Earth & Ocean Sciences, University of Victoria. Victoria, B.C., Canada.
1. **“Generalities about Tsunami Events and Deposits”**. Seminar Series, September 1999. School of Earth & Ocean Sciences, University of Victoria. Victoria, B.C. Canada.

PARTICIPATION & PRESENTATIONS IN SCIENTIFIC CONFERENCES, SEMINARS, CONGRESSES & WORKSHOPS

(Attended conferences are not listed)

YEAR 2021

67. **López, G.I.**, 2021. Heat and Cold Stress on OSL samples: A word of caution regarding field and lab extreme temperatures. *16th International Conference on Luminescence & Electron Spin Resonance Dating – LED 2021*. Virtual Conference, World, September 13-17 (**abstract + poster**).
66. **López, G.I.**, 2021. Paleo-Tsunamis: Una amenaza dormida y un reto de investigación para Colombia. *XVIII Congreso Colombiano de Geología*, virtual conference. Medellín, Colombia, August 18-20 (**abstract + oral**).
65. **López, G.I.**, 2021. Luminiscencia al detalle: ¿Qué tanto se pueden diferenciar facies sedimentarias en una eolianita? Aplicaciones de la OSL como método de datación y proxy sedimentario. *XVIII Congreso Colombiano de Geología*, virtual conference. Medellín, Colombia, August 18-20 (**abstract + oral**).
64. del Val, M., Arriolabengoa, M., Iriarte, E., Aranburu, A., Álvarez, I., Bodego, A., López, G.I., Hermoso de Mendoza, A., 2021. Optically Stimulated Luminescence as a sedimentary proxy: a case study in the Alkerdi-Zelaieta karstic massif (Navarra, Spain). *X Congreso Geológico de España*, hybrid conference. Vitoria-Gasteiz, Spain, July 5-7 (**abstract + oral**).
63. **López, G.I.**, del Val, M., Alonso, C., 2021. Cross-beds and sedimentary facies: The applicability of OSL as a sedimentological proxy in aeolianites. *35th IAS Meeting of Sedimentology*, virtual conference. Prague, Austria, June 21-25 (**abstract + poster**).
62. Giaime, M., Jol, H.M., Salmon, Y., Abu Hamed, A., **López, G.I.**, Bergevin, L., Sailer-Haugland, E., Bauman, P., McClymont, A., Artzy, M., 2021. Late-Holocene coastal changes and their effects on settlement/anchorage patterns on Tel Akko (Israel). *Developing International Geoarchaeology*, virtual conference. Faro, Portugal, May 17-21 (**abstract + oral**).

YEAR 2020

61. Jol, H.M., Giaime, M., Bergevin, L., Salmon, Y., **López, G.I.**, Sailer-Haugland, E., Bauman, P., McClymont, A., Abu Hamid, A., Artzy, M., 2020. Geophysical analysis of a tell: Subsurface imaging using GPR and ERT. *Geological Society of America, 132nd Annual Meeting*, October 26-30 (**abstract + oral**), Abstracts with Program, v. 52, no. 6, doi: 10.1130/abs/2020AM-358311.

As a result of the COVID-19 pandemic that started in China in December 2019 and quickly spread throughout the World, by March 2020 all international, regional, and local scientific events were either cancelled or postponed until 2021/2022. Most of the early 2020 events had deadlines long overdue (mid-2019), for which I did not get registered envisioning an upcoming complicated year 2020 due to the termination of my 5 year-long contract with the CENIEH in June 2020, and the inability to know if I would be re-appointed as Head of the Luminescence Dating Laboratory, this time with an indefinite contract (as promised in the early days of my contract, pending yearly stellar reviews). For this reason, I only registered for international events that were to take place later in 2020., or affordable local events, or those with special considerations (virtual invited talks). Alas, all of these were either cancelled or postponed.

The following is a list of the scientific conferences I planned to attend and had contributed to, but were either cancelled or postponed:

- Congreso Colombia de Arqueología - CCA2020, 20-22 May 2020, Popayán, Colombia.
- X Congreso Geológico de España, 6-8 July 2020, Vitoria-Gasteiz, Spain.
- 16th International Conference on Luminescence & ESR Dating – LED2020, 13-17 July 2020, Burgos, Spain.
- 2020 Joint IGCP 639 Sea Level & ITFS Meeting, 1-7 November 2020, Puerto Varas, Chile
- 10th International INQUA Meeting on Paleoseismology, Active Tectonics & Archeoseismology Workshop – PATA Days, 8-12 November 2020, Hornitos, Chile.

YEAR 2019

60. Zea, S., Bernal, G., **López, G.I.**, Weber, M., García-Urueña, R.P. Los arrecifes sumergidos del Golfo de Salamanca en la plataforma continental del Caribe Colombiano son de arenisca. *XVIII Seminario Nacional de Ciencias y Tecnologías del Mar – SENALMAR*. Barranquilla, Colombia, October 22-25 (**abstract + oral**).
59. Zea, S., Bernal, G., **López, G.I.**, Weber, M., García-Urueña, R.P. Arrecifes de arenisca del Golfo de Salamanca en la plataforma continental del Caribe Colombiano. *VII Seminario sobre Las Ciencias del Mar en la Universidad Nacional de Colombia – CECIMAR*. Bogotá, Colombia, August 20-23 (**abstract + oral**).
58. Méndez, W., Chunga, K., **López, G.I.**, Toulkeridis, T., Martillo, C., Quiñonez, M., Romero, B. Indicadores para la zonificación y construcción de una escala de vulnerabilidad geomorfológica de la costa Manabita (Ecuador) ante eventos de tsunamis. *XVII Congreso Colombiano de Geología*. Santa Marta, Colombia, August 11 – 17 (**abstract + poster**).
57. **López, G.I.**, Chunga, K., Méndez, W., Martillo, C. Estratigrafías tsunamigénicas: primeras evidencias a lo largo de la Costa del Ecuador utilizando la señal de luminiscencia como guía de identificación de depósitos de tsunamis. *XVII Congreso Colombiano de Geología*. Santa Marta, Colombia, August 11 – 17 (**abstract + oral**).
56. **López, G.I.**, 2019. Geological & Archaeological applications of Luminescence Dating: from dating single grains of quartz to understanding complex stratigraphies (Special Session, Quaternary Geochronology Symposium). *XVII Congreso Colombiano de Geología*. Santa Marta, Colombia, August 11-17 (**abstract + oral**).
55. **López, G.I.**, Costa, P.M., Andrade, C., 2019. Luminescence analyses as a novel proxy for tsunamigenic stratigraphies (Oxford Abstract 2841). *INQUA*. Dublin, Ireland, July 25-31 (**abstract + poster**).
54. **López, G.I.**, Chunga, K., Mendez, W., Martillo, C., 2019. Pioneering multi-proxy palaeotsunami research along the Pacific Coast of Ecuador (Oxford Abstract 2820). *INQUA*. Dublin, Ireland, July 25-31 (**abstract + oral**).
53. Domínguez-Solera, S.D., Moreno, D., Pérez, C., López, G.I., Muñoz, M., 2019. El Provencio (Cuenca, Spain): the research possibilities of a new complete stratigraphic and archaeological sequence from the Lower to Middle Paleolithic. *XV Reunión Nacional de Cuaternario – AEQUA*. Bilbao, Spain, July 1-5 (**abstract + oral + paper**).
52. **López, G.I.**, Jol, H., Bauman, P., Giaime, M., abu Hamid, A., Quartermaine, J., Waldmann, N.D., Artzy, M., 2019. The elusive Phoenician/Persian harbour of Ancient Akko: where Geophysics, Petrophysics & Geology meet Archaeology. *GAC-MAC*. Québec City, Canada, May 12-15 (**abstract + oral**).
51. Andrade, C., Costa, P.M., **López, G.I.**, Teixeira, S., 2019. Sedimentological features of tsunami and storm deposits in Almargem (Central Algarve) (EGU 2019-9561). *European Geosciences Union EGU General Assembly*. Vienna, Austria, April 7-12 (**abstract + oral**).
50. Roskin, J., Ackermann, O., Porat, N., **López, G.I.**, Asher, Y., 2019. Pulsed-photon portable OSL (PPSL) profile signatures of multi-layer archaeological sites (EGU 2019-9780). *European Geosciences Union EGU General Assembly*. Vienna, Austria, April 7-12 (**abstract + poster**).
49. Bergevin, L. J., Jol, H., Beck, J. D., Artzy, M., **López, G.I.**, 2019. Examining ancient coastlines and archaeological features at Tel Akko, Israel: Using 3D ground penetrating radar imaging. *American Association of Geographers Annual Meeting*. Washington, DC, April 3-7 (**abstract + poster**).

YEAR 2018

48. Bergevin, L.J., Jol, H., López, G.I., Artzy, M., Beck, J. 2018. Examining ancient coastlines and archaeological features at Tel Akko, Israel. *20th Annual Batchelder Conference for Archaeology and Biblical Studies*. Omaha, Nebraska, November 9-10 (**abstract + poster**).
47. Poch, R.M., Plata, J.M., Boixadera, J., Balasch, J.C., **López, G.I.**, Rodríguez, R., 2018. Micromorphology of red palaeosols in Mediterranean loess sequences in the Ebro Valley. *21st World Congress of Soil Science – Rio18*, Rio de Janeiro, Brazil, 12-17 August (**abstract + oral**).

YEAR 2017

46. **López, G.I.**, Alvaro, A.I., Roskin, J., 2017. Arenas de Desierto Rubificadas: correlaciones de geo-proxies arqueométricos, geocronológicos y sedimentológicos. *XII Iberian Congress of Archaeometry*, Burgos, Spain, 25-27 October (**abstract + oral**).

45. **López, G.I.**, Bernal, G., 2017. Perfiles de señal lumínica: una novedosa herramienta para análisis estratigráfico de sedimentos bioclásticos – Caso Estudio Cayo Serrana, Caribe Colombiano. XVII Seminario Nacional de Ciencias y Tecnologías del Mar – SENALMAR, Medellín, Colombia, 22-26 October (**abstract + poster**).
44. Artzy, M., Morhange, C., Giaime, M., Abu-Hamid, A., Jol, H., **López, G.I.**, Killebrew, A.K., 2017. Coastline, river changes and their effects on anchorages / harbours and habitation patterns: Akko (Israel) as an example. The Honour Frost Foundation Conference of “Mediterranean Maritime Archaeology”, Nicosia, Cyprus, 20-24 October (**abstract + oral**).
43. **López, G.I.**, 2017. Beyond palaeo-record dating: luminescence as a new sedimentological proxy for the marine extreme events identification and characterization tool kit. IGCP Project 639 Sea Level Change from Minutes to Millennia, St. Lucia, South Africa, 17-23 September (**abstract + oral: Invited Keynote Speaker**).
42. Porat, N., **López, G.I.**, Gadot, Y., 2017. Using PPSL to obtain a time scale for soil accumulation and erosion within archaeological terraces in the Judea Mountains, Israel. *15th International Conference on Luminescence & Electron Spin Resonance Dating – LED 2017*. Cape Town, South Africa, September 10-17 (**abstract + poster**).
41. Moreno, D., **López, G.I.**, Carbonell, E., Bermúdez de Castro, J.M., 2017. First attempt of ESR dating of feldspars from Galería site (Atapuerca, Spain). *15th International Conference on Luminescence & Electron Spin Resonance Dating – LED 2017*. Cape Town, South Africa, September 10-17 (**abstract + poster**).
40. **López, G.I.**, Bao, X., Ortega, A.I., Parés, J.M., Carbonell, E., Bermúdez de Castro, J.M., 2017. Implications of Intrastratal Complexities on finite Luminescence Ages: the case of Galería, Sierra de Atapuerca, Spain. *15th International Conference on Luminescence & Electron Spin Resonance Dating – LED 2017*. Cape Town, South Africa, September 10-17 (**abstract + oral**).
39. **López, G.I.**, 2017. La Luminiscencia Óptica: de Método de Datación a Proxy Sedimentario – Avances y Aplicaciones en sus 30 años de existencia. *XVI Congreso Colombiano de Geología & III Simposio de Exploradores “Geología, Sociedad y Territorio”*. Santa Marta, Colombia, August 28 – September 1 (**abstract + oral; in Spanish**).
38. **López, G.I.**, 2017. Luminescence profiling as a geo-proxy to further understand stratigraphical contexts in archaeological sites. International Workshop “Archaeology, Life Science, and Environment”, Ariel University, Israel, 14-15 June (**invited; abstract + long-distance oral videoconference**).
37. **López, G.I.**, Bialik, O.M., Waldmann, N.D., 2017. Luminescence signal profiling: a new proxy for sedimentologically “invisible” marine Mass Transport Deposits (MTDs) (EGU 2017-11143). *European Geosciences Union EGU General Assembly*. Vienna, Austria, April 23-28 (**invited; abstract + oral**).
36. **López, G.I.**, Roskin, J., Bee’ri, R., 2017. Luminescence profiling of loess-dominated archaeological layers of a Chalcolithic site, Northern Negev Desert fringe, Israel (EGU 2017-18846). *European Geosciences Union EGU General Assembly*. Vienna, Austria, April 23-28 (**abstract + oral**).
35. Roskin, J., Sivan, D., Bookman, R., Porat, N., **López, G.I.**, 2017. Testing portable luminescence reader signals against Late Pleistocene to modern OSL ages of coastal and desert dune field sand in Israel (EGU 2017-11721). *European Geosciences Union EGU General Assembly*. Vienna, Austria, April 23-28 (**abstract + oral**).
34. Roskin, J., Sivan, D., Bookman, R., Porat, N., **López, G.I.**, 2017. Testing portable luminescence reader signals against Late Pleistocene to modern OSL ages of coastal and desert dune field sand in Israel. *Israel Geological Society*, Mitzpe Ramon, Israel, March 21-23 (**abstract + poster; in Hebrew**).

YEAR 2016

33. *Bao, X., Parés, J.M., **López, G.I.**, 2016. Lateral Intra-Stratigraphic Sedimentological Variations in an Archaeological Layer of the Galería Site and its implications on Sediment Provenance & Luminescence Dating. *GSGS Summer School on Dates & Rates of Change in the Quaternary*, University of Cologne, Germany, August 21-27 (**abstract + poster**).
32. Bartz, M., Duval, M., Klasen, N., López, G.I., Rixhon, G., Brückner, H., 2016. Chronological framework of Quaternary fluvial terraces along the Lower Moulouya River (NE Morocco) using luminescence and ESR dating techniques. *UK Luminescence and ESR Dating Meeting*. Liverpool, U.K., July 10-13 (**oral + abstract**).
31. **López, G.I.**, Mahan, S., 2016. LuNI: Luminescence Dating Laboratories Normalization Initiative. *UK Luminescence and ESR Dating Meeting*. Liverpool, U.K., July 10-13 (**oral + abstract**).

30. Reyes-Hernández, F., Gutiérrez-Yurrita, P., Salas de León, D., **López, G.I.**, 2016. Advances in Tsunami Disaster Risk Reduction in Latin America & the Caribbean. *Asamblea Regional Comisión Latinoamericana y del Caribe de Sismología (LACSC)*, San José, Costa Rica, June 20-22 (**oral + abstract; in Spanish**).

YEAR 2015

29. Jol, H.M., Freund, R.A., Darawsha, M., Artzy, M., Arav, R., Savage, C.E., **López, G.I.**, Zapata-Meza, M., Filin, S., 2015. UWEC's International Fellows Program in Israel: A transformative learning experience for students. *The Geological Society of America, North-Central Section, 49th Annual Meeting (Geoheritage & Place-Based Education)*, Madison, Wisconsin, U.S.A., May 19-20, Paper No. 6-9, Abstracts with Programs v. 47 (5), p 11 (**oral + abstract**).
28. **López, G.I.** & Universidad Nacional de Colombia - Sede Bogotá, 2015. First Palaeotsunami investigations along the Pacific Coast of Colombia: case study of the Nariño region. National Technical Committee of Tsunami Alert CTN-AT, Oceanographic Colombian Commission CCO, 1st Committee Meeting, CCCP-DIMAR, Tumaco, Colombia, March 17-19 (**invited; oral + workshop; in Spanish**).

YEAR 2014

27. Jol, H., **López, G.I.**, Cohen, H., Artzy, M., Luczak, J., Lind, C., 2014. Preliminary ground penetrating radar results from explorations near the ancient anchorage of Kursi, Sea of Galilee, Israel. *The 16th Annual Batchelder Conference for Biblical Archaeology*, W.H. Thompson Alumni Center, University of Nebraska-Omaha, Omaha, NE, November 13-15, Program, p. 5 (**oral + abstract**).
26. Jol, H.M., **López, G.I.**, Cohen, H., Artzy, M., 2014. Initial GPR Explorations near the Ancient Anchorage of Kursi, Sea of Galilee Israel. *The Geological Society of America, 126th Annual Meeting*. Vancouver, British Columbia, Canada, October 19-22, Abstracts with Programs v. 46 (6), p. 247 (**oral + abstract**).
25. Artzy, M., **López, G.I.**, Salmon, Y., Jol, H.M., 2014. The Effects of Coastline Changes on the Ancient Habitation Patterns of Tel Akko / Acre, Eastern Mediterranean. *The Geological Society of America, 126th Annual Meeting*. Vancouver, British Columbia, Canada, October 19-22, Abstracts with Programs v. 46 (6), p. 247 (**oral + abstract**).

YEAR 2012

24. **López, G.I.**, 2012. The Applicability of OSL as a Sedimentological Proxy: New Avenues to Distinguish Extreme Events. Abstract # 1500397, Paper # OS33B-1827 presented at 2012 Fall Meeting, American Geophysical Union (AGU) Fall Meeting. San Francisco, CA, U.S.A., December 3-7 (**abstract + poster**).
23. **López, G.I.**, Porat, N., 2012. Over-dispersion: a potential sedimentological proxy for underwater sediments? *UK Luminescence and ESR Dating Meeting*. Aberystwyth, U.K., September 12-14 (**abstract + poster**).
22. Goodman-Tchernov, B.N., Dey, H.W., **López, G.I.**, Sharvit, J., 2012. Searching for tsunamigenic signatures in the coastal deposits of Caesarea Maritima. *Special Session on Earthquakes and Tsunamis at Coastal Archaeological Sites – Seismological Society of America (SSA)*. San Diego, CA, U.S.A., April 17-19 (**abstract + oral**).

YEAR 2011

21. **López, G.I.**, Thompson, J.W., 2011. OSL and sediment accumulation rate models: understanding the history of sediment deposition. *13th International Conference on Luminescence & Electron Spin Resonance Dating – LED 2011*. Torun, Poland, July 10-14 (**abstract + poster**).

YEAR 2009

20. Reinhardt, E.G., Nairn, R., **López, G.I.** 2009. Sedimentation Patterns in the Rio Cruces after the May 1960 Chilean Earthquake and Tsunami. *American Geophysical Union (AGU) Joint Assembly – GAC-MAC: The Meeting of the Americas*. Toronto, Ontario, Canada, May 24-27 (**oral + abstract**).
19. Rink, W.J. and **López, G.I.**, 2009. Optical Dating and Holocene Evolution of Beach Ridges on St. Joseph Peninsula, Cape San Blas, St. Vincent island and Little St. George Island, North Gulf of Mexico, Florida, USA.

58th Annual Meeting, Southeastern Section, Geological Society of America. St. Petersburg, Florida, U.S.A., March 12-13 (**abstract + poster**).

YEAR 2007

18. García, C., Hermelin, M., **López, G.I.**, Sierra, G.M., Rink, W.J., 2007. Presentación del Laboratorio de Fotoluminiscencia de la Universidad EAFIT, Medellín. *XI Congreso Colombiano de Geología*. Bucaramanga, Santander, Colombia, August 14-17 (**oral + abstract**).
17. García, C., Hermelin, M., **López, G.I.**, Sierra, G.M., Toro, G.E., Rink, W.J., 2007. Datación por fotoluminiscencia de la stone line y otras formaciones superficiales del Llano de Ovejas, Cordillera Central, Antioquia. *XI Congreso Colombiano de Geología*. Bucaramanga, Santander, Colombia, August 14-17 (**oral + abstract**).
16. **López, G.I.**, Rink, W.J., 2007. Optical Ages and Supra-Tidal Late Holocene Evolution of the Apalachicola Barrier Island Complex, NE Gulf of Mexico. *5th New World Luminescence Dating and Dosimetry Workshop*. Chicago, IL, USA, October 13-14 (**oral + abstract**).

YEAR 2006

15. Reinhardt, E.G., Goodman, B.N., Boyce, J., **López, G.I.**, van Hengstum, P., Rink, W.J., Mart, Y., 2006. The Tsunami of December 13, 115 A.D. and the destruction of Herod the Great's Harbor at Caesarea Maritima, Israel. *The Geological Society of America Annual Meeting*. Philadelphia, PA, USA, October 22-25 (**oral + abstract + paper**).
14. **López, G.I.**, Rink, W.J., Reinhardt, E.G., Goodman, B.N., 2006. Dating Underwater Sediments at Herod the Great's Harbor, Caesarea Maritima, Israel. *2006 Archaeological Institute of America / APA Joint Annual Meeting*. Montréal, QC, Canada, January 5-8 (**poster with distinction**).

YEAR 2005

13. **López, G.I.**, Rink, W.J., 2005. Quartz SAR-OSL ages from St. Vincent Island beach ridge plain, NW Florida, U.S.A. *11th International Conference on Luminescence & Electron Spin Resonance Dating – LED 2005*. Cologne, Germany, July 24-29 (**abstract + poster**).

YEAR 2002

12. Berger, A., **López, G.I.**, 2002. Distinguishing Human from Non-Human Influences on the Landscape. *Natural and Cultural Landscapes: The Geological Foundation*. Dublin, Ireland, September 9-11 (**abstract + poster**).

YEAR 2001

11. **López, G.I.** and Bobrowsky, P.T., 2001. A 14,000 year-old-record from a coastal freshwater lake: Sedimentological evidence for tsunamigenic events on the west coast of Vancouver Island, British Columbia, Canada. *The Twentieth International Tsunami Symposium, 2001, Proceedings*. IUGG Tsunami Commission - PMEL - NOAA - USGS, Seattle, OR, USA, August 7-10, pp. 491 – 500 (**oral + paper**).

YEAR 2000

10. **López, G.I.**, Bobrowsky, P.T., 2000. Lacustrine Evidence for Seismic Sea Waves on the West Coast of British Columbia, Canada. *The Coastal Society 17th Conference - Coasts at the Millennium, Proceedings*. The Coastal Society - USGS, Portland, OR, USA, July 9-12, pp. 380-387 (**oral + paper**).
9. Boxwell, J.E., Hutchinson, I., Clague, J.J., Bobrowsky, P.T., **López, G.I.**, 2000. Diatom biostratigraphy as a tool to detect tsunamis in Kakawis Lake, Vancouver Island, Canada. *Geological Society of America - Cordilleran Section, 96th Annual Meeting – Abstracts with Program*. Vancouver, BC, Canada, April 27-29, 32 (6): A5 (**abstract**).

YEAR 1999

8. **López, G.I.**, Bobrowsky, P.T., Clague, J.J., Hutchinson, I., 1999b. The use of low-elevation lake core data as evidence of Late Holocene tsunamis. *CANQUA - CGRC Conference, Program and Abstracts Proceedings*.

CANQUA - University of Calgary - CGRC - GSC - CSPG, Calgary, AB, Canada, August 23-27, pp. 42 (**oral +abstract**).

7. **López, G.I.**, Bobrowsky, P.T., Clague, J.J., Hutchinson, I., 1999a. Tsunami Deposits in a Freshwater Lake: Kakawis Lake, B.C. *Canadian Coastal Conference 1999, Program and Abstracts*. CCSEA - VGI - Orca Tech. Intnal. Inc. - Viatic, Victoria, BC, Canada, May 19-22, pp. 943 (**oral +abstract**).
6. Bobrowsky, P.T., Clague, J.J., Hutchinson, I., **López, G.I.**, 1999. Earthquake Induced Land Subsidence and Sedimentation on the West Coast of Canada. *International Union for Quaternary Research -INQUA- XVth International Congress, Book of Abstracts*. INQUA, Durban, South Africa, August 3-11, pp. 25-26 (**abstract + poster**).

YEAR 1997

5. Correa, I.D., Ramos, J.G., **López, G.I.**, 1997. Geology for the Integral Management of Coastal Areas: Strengths and Weaknesses in the Colombian Context. *Memoirs of the I National Seminar on Integral Management of Coastal Areas and the IV Workshop about Environmental Regularization of our Coastal Areas*. Ministry of Environment – INVEMAR. Cartagena de Indias, Colombia, November 19 – 21, (**in Spanish; oral +paper**).
4. **López, G.I.**, 1997. Geomorphological Changes – Littoral Erosion and Accretion – on the El Choncho Island, San Juan River Delta, Pacific Coast of Colombia. *Geology for the Management of Littoral Areas: Basic Principles and Applications (Reference to special cases along the Colombian and Gulf of Mexico –USA- coasts)*, EAFIT University-COLCIENCIAS-CCO. EAFIT University, April 29- May 4, Medellín, Ant., Colombia (**Course for Workshop + paper; in Spanish**).

YEAR 1995

3. **López, G.I.**, Hermelin, M., 1995. Environmental Education in Academic Programs at the University Level: The case of EAFIT University. *Memoirs of the National Seminar on Environmental Education and Hazards Prevention*. Antioquia University, November 22- 24, Medellín, Ant., Colombia (**oral + paper; in Spanish**).

YEAR 1994

2. **López, G.I.**, Salazar, O., Tabares, N., Correa, I.D., 1994b. Sedimentology of El Choncho Beach, San Juan River Delta, Pacific Coast of Colombia. *Memoirs IX National Seminar on Marine Sciences and Technologies and Latin-American Congress on Marine Sciences*. EAFIT University, Medellín, Ant., Colombia, November 21-25, Diskette No.1 (**oral + paper; in Spanish**).
1. **López, G.I.**, Salazar, O., Tabares, N., Correa, I.D., 1994a. Geomorphology of El Choncho Island, San Juan River Delta, Pacific Coast of Colombia. *Memoirs IX National Seminar on Marine Sciences and Technologies and Latin-American Congress on Marine Sciences*. EAFIT University, Medellín, Ant., Colombia, November 21-25, Diskette No.1 (**oral + paper; in Spanish**).

VOLUNTEER SERVICE (COMMUNITY & PROFESSIONAL OUTREACH)

Manuscript Reviewer (since 2005) **Publons Identifier:** publons.com/a/1237475/

Journal of Coastal Research; Journal of Archaeological Science; Journal of Archaeological Science - Reports; Geomorphology; Natural Hazards; Marine Geology; Sedimentology; Quaternary International; Journal of African Earth Sciences; Methods & Protocols; Geochronometria; Catena; Journal of South American Earth Sciences; Journal of Earth Sciences; Geophysical Research Letters; Geosciences.

Editor or Co-Editor

Quaternary Geochronology – Special Issue LED2021 Conference Papers	2021-2022
Folleto Educativo “Uso de Mascarilla en la Playa”	2020
Guía Práctica 1 Nueva Normalidad. Creator, promoter, and Editor-in-Chief. Red Iberoamericana ProPlayas. http://proplayas.org/covid19/#mascarilla	
InTech Open Access Publishing Company	2012

Tsunami Series – 3rd book: “Tsunami – Analysis of a Hazard: from geological interpretation to human impact”. <http://www.intechopen.com/books/>

A-Z News 2011-2013

Azrieli Foundation Fellows Newsletter (Canada-Israel). Creator, promoter, and Editor-in-Chief.
http://fellows.azrielifoundation.org/newsletter_archives

Scientific and Outreach Contributor in Journals / Newsletters / Magazines / Social & Other Media

Red Iberoamericana ProPlayas 2020-present

Scientific Contributor & Coordinator of Blog, Newsletter, Social Media, Website, Outreach Campaigns...
<http://proplayas.org/>

STEM Talent Girl 2016-2020

Scientific Mentor (individual guidance of young girls); Jury of yearly scientific projects; Master Class talks
<http://talent-girl.com/mentoras/>

Atapuerca Newspaper – Atapuerca Foundation 2016-2020

Scientific Contributor
<http://www.atapuerca.org/apartado/303/periodico-de-atapuerca>

Coastal Education & Research Foundation (CERF) – The Journal of Coastal Research 2012-2017

Member & Scientific Contributor
<http://www.cerf-jcr.org/> (Profiles/Contributing Members)

A-Z News 2011-2013

Azrieli Foundation Fellows Newsletter (Canada-Israel). General topics contributor.

Friends of St. Joseph Bay Preserves 2007-present

Scientific Contributor & Research Advisor. Apalachicola National Estuarine Research Reserve (ANERR), Florida Department of Environmental Protection (FDEP) – NOAA
<http://www.stjosephbaypreserves.org/> (Research)

IOCARIBE (UNESCO – IOC) News & Newsletter 2004

Scientific Contributor.

Agenda Del Mar 2004-present

Scientific Contributor. A Latin American ocean-related educational agenda and daily-planner targeted to the general public www.agendadelmar.com

International Evaluation Committee Member of Faculty Tenure & Academic Promotion

EAFIT University (Colombia): evaluation of 1 Faculty member in the Geology Department. 2011

International Ph.D. Juror or Evaluation Committee Member

Ph.D. Graduate Program, Centro de Investigaciones en Geografía Ambiental CIGA, UNAM (Mexico): Ph.D. Theses in Palaeoseismology and Tsunami Hazard. 2012

International Grant Proposal Reviewer

Israel Science Foundation 2021-present

Committee Member / Representative

President, Geological Society of Colombia 2021-present

Vice-President & Council Board, Red Iberoamericana ProPlayas 2020-present

Active Member & Board of Directors, Geological Society of Colombia 2017-2021

Geochronology Technicians Hiring Committee, CENIEH (Burgos, Spain) 2017-2020

Geochronology Seminar Series Coordinator, CENIEH (Burgos, Spain) 2016-2017

Institutional Library Committee, CENIEH (Burgos, Spain) 2016-2020

Institutional Graduate Theses Committee, CENIEH (Burgos, Spain) 2016-2017

Scientists Hiring Committee, CENIEH (Burgos, Spain) 2015-2020

Active Member & General Coordinator Group, Red Iberoamericana ProPlayas	2015-present
Senior Graduate Service & Committees Coordinator McMaster University, School of Geography & Earth Sciences (Hamilton, ON, Canada)	2005-2007
Member of the Faculty Council of Science McMaster University, Faculty of Science (Hamilton, ON, Canada)	2005-2006
Faculty Hiring Committee McMaster University, School of Geography & Earth Sciences (Hamilton, ON, Canada)	2004-2006
Seminar Series Committee Coordinator McMaster University, School of Geography & Earth Sciences (Hamilton, ON, Canada)	2004-2006
Graduate Program and Selection Committee Representative McMaster University, School of Geography & Earth Sciences (Hamilton, ON, Canada)	2003-2004
Graduate Student Representative University of Victoria, School of Earth & Ocean Sciences (Victoria, BC, Canada)	1999-2001
Student Representative, Curriculum Committee EAFIT University, Department of Geology (Medellín, Ant., Colombia)	1989-1993

Community Outreach

Colombian Geological Society https://sociedadcolombianadegeologia.org/	2020, 2021
<ul style="list-style-type: none"> Numerous webinars, workshops & forums promoting various international events: International Day of Women & Girls in Science (#11F); Women's Day (#8M), Earth Hour, Earth Day, Colombian Geologist Day, etc. 2020, 2021, 2022 Cuarentena con Geociencias: multiple webinars & online courses promoting Geology and Earth Science throughout the 2 years of the peak COVID-19 pandemic 2020 & 2021 https://www.youtube.com/channel/UCj7MvLA29ZhQGIS0f85xwJA 	
SedsOnline https://sedsonline.com/scientific-webinars/	2020
International Association of Sedimentologists Scientific Webinars of various Earth Sciences topics targeted to Sedimentologists.	
Red Iberoamericana ProPlayas Multiple webinars & workshops aimed to promote Citizen Science and community outreach related to beach research and management. http://www.proplayas.org/	2018, 2019, 2020, 2021
International Science Week (November) CENIEH, Burgos Open Doors event with several scientific activities, including guided visits of the facilities & labs	2017, 2018
AR&PA – X Edition Valladolid, 10-13 November 2016 National Biennial Fair on Restoration and Management of Heritage Participation as CENIEH Stand Hostess Open Talk to the General Public: "The Geochronology Labs at the CENIEH & their Services"	2016
STEM Talent Girl Outreach program to empower young girls from last 2 years of high school	2016-2017, 2017-2018
Nuit Blanche CENIEH, Burgos International "open-door" cultural and scientific event showcasing what scientists do at the Centre	2016, 2017, 2018
Women & Science – V Edition CENIEH, Burgos, 8-10 March 2016, Open Panel Debate participant: "Awakening scientific calls"	2016
European Researchers Night Scientists for a Better World, CENIEH, Burgos, Spain	2015, 2016, 2017
Outreach Program & Scientific Network Member/Leader (Canada) McMaster University, School of Geography & Earth Sciences: Rock & Mineral Road-show Lectures.	2007-2010
Instructor (Canada)	2007-2010

McMaster University: Let's Talk Science initiative.	
Public Instructor & Science Judge (Canada)	2007-2010
Volunteer and Instructor of multiple events/sessions from "Hands On" activities to public lectures and science promotional activities: Annual Visions Hamilton Science Symposiums; Ancaster Gem & Mineral Show; All Science Challenge Ontario Middle School Championships; etc.	
Public Lecturer	2003-2010
Apalachicola National Estuarine Research Reserve (ANERR) Education Center, Florida Department of Environmental Protection (FDEP) – NOAA.	
Instructor (Canada)	2003-2004
McMaster University: Let's Talk Science initiative.	
International Educational & Outreach Researcher	2002-present
T.J. Stone Memorial St. Joseph Peninsula State Park, St. Joseph Bay Preserves & Apalachicola National Estuarine Research Reserve (http://www.stjosephbaypreserves.org/PreserveResearch.htm), St. George Island State Park (Florida Department of Environmental Protection) and St. Vincent Island National Refuge (U.S. Fish & Wildlife Service).	
Instructor of Teachers (Canada)	1999-2001
Canadian Geoscience Education Network (Canadian Geoscience Council) & University of Victoria: Ed-GEO Earth Sciences Workshops.	
Science Judge (Canada)	1998-2000
Greater Victoria Elementary Schools Science Fairs.	

Scientific / Professional / Technical Advisor / Contributor

IGCP Project 725 – Theme: Geohazards	2021-2025
<i>Forecasting Coastal Change</i> https://www.sfu.ca/igcp-725.html	
https://en.unesco.org/international-geoscience-programme/projects/725	
Scientific member and independent contributor of research.	
Universidad Técnica de Manabí (UTM), Ecuador	2021
Founding Faculty. Creation of the Geology Program (undergraduate level).	
IGCP Project 669 – Theme: Geohazards	2020-2023
<i>OLLIN</i>	
<i>Identification of seismogenic faults in populated areas of Latin America and its incorporation into seismic hazard assessment</i> https://en.unesco.org/international-geoscience-programme/projects/669	
Scientific member.	
International Academic Society for Luminescence & ESR Dating (SLED)	2017-present
Active Member of the International Working Group responsible for creating & establishing the Society for its launching and inauguration during the LED International Conference in 2020, now 2021.	
http://ancienttl.org/SLED/SLED.htm	
DTU, Denmark	2020-present
Liaison & scientific/technical advisor of RISØ TL/OSL Readers for several Colombian academic and governmental institutions: Geological Survey of Colombia (Nuclear Affairs Programme); National University of Colombia (Dept. Medical Physics); National Cancer Institute.	
GeoLatinas	2020-present
Member, mentor. https://geolatinas.weebly.com/	
COST Action CA18109	2019-present
<i>Accelerating Global Science in Tsunami Hazard and Risk Analysis - AGITHAR</i>	
Scientific member; Management Committee (MC) Substitute for Spain.	
Colombian Geological Society	2017-present
Board of Directors and Active Member. https://sociedadcolombianadegeologia.org/	
E-RIHS Preparatory Phase Project (under H2020-INFRADEV-2016-2017 program)	2016-2020

Leader Sub-Task 8.2.2 “Universal Chronology Service” (Feasibility study on the creation of a service comprising all relevant techniques used to date Heritage)

- Red Iberoamericana ProPlayas 2015-present
General Coordination Group; leader of several tasks; creator of ideas, campaigns, outreach initiatives, team builder & working groups. <http://proplayas.org/>
- IGCP Project 639 – Theme: Global Change 2016-2020
Sea Level Change from Minutes to Millennia <http://sealevelchange.org>
<https://en.unesco.org/international-geoscience-programme/projects/639>
Scientific member and independent contributor of research.
- INQUA Project 1202 2012
Rapid environmental changes and human impact on continental shelves
https://www.marum.de/en/inqua_project_1202.html#Section50737
Scientific member and independent contributor of research.
- IGCP Project 588 2012
Preparing for Coastal Change – A detailed process-response framework for coastal change at different time scales <http://www.coastal-change.org>
Scientific member and independent contributor of research.
- Friends of St. Joseph Bay Preserves 2007-present
Scientific Contributor & Research Advisor. Apalachicola National Estuarine Research Reserve (ANERR), Florida Department of Environmental Protection (FDEP) – NOAA. <http://www.stjosephbaypreserve.org/>
- Cogeo-Environment (IUGS) & the Geoinicators Initiative 1999-2005
Co-ordinator: Dr. Antony R. Berger (Victoria, BC, and Hamilton, ON, Canada).
- Pacific Geoscience Centre Laboratory Technician Volunteer 1999-2001
Natural Resources Canada (Sidney, BC, Canada)
- Scientific Geophysical Cruise (Gas-Hydrates Research Project) 1999
Volunteer laboratory and computer technician. University of Victoria – Pacific Geoscience Center, Natural Resources Canada. CCG Tully, July 30-August 11, North Pacific Ocean off Vancouver Island, Canada.
- Grupo REDUCE 1997
Creator of the Environmental and Ecological Group at EAFIT University (Medellín, Ant. Colombia). The group is still active.
- CITAD 1995-1997
EAFIT University Representative before the Inter-sector Council of Antioquia for the Environment and Development (Medellín, Ant., Colombia).
- Grupo GEMA 1995-1996
Technical and Professional Advisor and Project Manager of the Environmental Studies Group Secretariat (GEMA), EAFIT University (Medellín, Ant., Colombia).

Conference Organizer & Board Member

- Conference Organizer 2023
XIX Congreso Colombiano de Geología
- Member of the Scientific Committee 2022
XV Semana Técnica de Geología, Ingeniería Geológica, y Geociencias. Hybrid Student Conference. Universidad del Norte, Barranquilla, Colombia, 18-20 August.
- Conference Organizer & Member of the International Scientific Committee 2021
16th International Conference on Luminescence & ESR Dating. Virtual Conference, World, 13-17 September.
<https://led2021.wordpress.com/>
- Conference Organizer 2017-2020
16th International Conference on Luminescence & ESR Dating. CENIEH, Burgos, Spain, 13-17 July.
Postponed to 21-25 June 2021 due to the COVID-19 pandemic but cancelled by LED International Society as CENIEH refused to do it virtually. <https://led2020burgos.cenieh.es/>

- Conference Organizer & Member of the Scientific Committee 2017
XII Iberian Congress of Archaeometry. CENIEH, Burgos, Spain, 25-27 October.
<https://www.cenieh.es/en/node/1300>
- Conference Assistant 1999
Geological Society of America Annual Meeting. Denver, CO, USA, 24-28 October.
- Conference Organizer & Member of the Scientific Committee 1993
VI Congreso Colombiano de Geología. EAFIT University – INGEOMINAS, Medellín, Colombia, July 13-16.
- Conference Organizer & Member of the Scientific Committee 1992-1993
Multiple cultural and scientific events for the Celebration of the 10 years of the Geology Program at EAFIT University. Medellín, Colombia.

Managerial & Organizational Services (besides own research projects)

- Colombian Geological Society 2021-present
Internal management re-organization; change of visibility strategies; implementation of Social Media & new financial strategies; re-incorporation of research & legal advice activities; creation & promotion of new specialised courses & seminars
- Field & Laboratory Coordinator for a Geochronological multi-method contract 2017-2019
Spanish-wide palaeoseismic characterization project involving 5 dating techniques, CENIEH, Burgos, Spain.
- Field & Laboratory Coordinator 2014-present
Landscape Archaeology Component, Tel Akko Total Archaeology Project, University of Haifa.
- Affiliated Scientist & Consultant for the Vice-Rector Office, University of Haifa 2011-2012
Israel-Colombia academic & research cooperation initiative, Charney School of Marine Sciences, University of Haifa, Israel.
- Field Coordinator 2011
Caesarea Maritima underwater geo-archaeological excavations: C-CAP 2011, University of Haifa, Israel.
- Field & Laboratory Coordinator & Manager – Field Safety Officer 2009-2010
In charge of all field and laboratory related courses and activities at the undergraduate level in the School of Geography & Earth Sciences, McMaster University, Hamilton, ON, Canada.
- Fieldwork Coordinator & Manager 2002-2007
Multiple field trips to Florida, U.S.A., for Ph.D. and post-Ph.D. related research activities. McMaster University, School of Geography & Earth Sciences, Hamilton, ON, Canada.
- Project Administrator & Financial Manager 1997-1998
“Geomorphological, Sedimentological and Biological Indicators of the San Juan River Delta, Pacific Coast of Colombia, Phase II (1997-2000)”. EAFIT University, Department of Geology. Medellín, Colombia.

Translator / Interpreter / Teacher

- Spanish/English Translator 2005-present
Professional geological documents, reports, research permits and projects for various particulars and institutions. The realm of translations spans a multitude of fields particular to the Earth Sciences such as: underwater cave diving exploration reports, presentations, and webpages (Mexico – U.S.A.); confidential reports on structural geology of active mines (Mexico – Canada); research permits for academic research in coastal geology, cave systems exploration, and Andes geomorphological evolution studies (Costa Rica – Mexico – Colombia).
- Spanish/English Tutor 2004-2010
Beginners through conversational levels. Hamilton, ON, Canada.
- Spanish Teacher and Tutor 1999-2002
Beginners through conversational levels. Non-profit work at a religious institution. Victoria, BC, Canada.

Media Appearances & Public Outreach

- 18 Mar 2022 Alumni Story interview by the Alumni Awards & Recognition Office, McMaster University, a follow up past Alumni Award Recipients.
- 16 Feb 2022 #SpamDeCientíficas Interview by Andrew Wight, Science Journalist, regarding the success of a viral hashtag promoting Colombian Female Scientists.
- 8 Feb 2022 Interview for EOS Journal and Forbes Magazine by Andrew Wight, Science Journalist.
- 18 Mar 2021 Citizen Science Workshop (online) organised by Red Iberoamericana ProPlayas.
- 17 Sep 2020 Public Awareness Webinar (online) organised by Red Iberoamericana ProPlayas: “Uso de Mascarilla en la Playa – Guía Práctica 1 Nueva Normalidad” [Use of face masks in beaches – Practical Guide 1 New Normality].
- 29 Jan 2020 Public Awareness Talk (televised) as part of the Public Awareness Event organised by International Oceanographic Commission (IOC) - UNESCO during the final day of the ICG/PTWS Scientific Meeting of Experts to understand Tsunami sources, hazards, risk, and uncertainties associated with the Colombia-Ecuador Subduction Zone (27-29 January 2020), Guayaquil, Ecuador.
- 2 Dec 2017 Masterclass for STEM Talent Girl (Human Evolution Museum, Burgos, Spain): encouraging, empowering, and mentoring the new generation of high school female students to study STEM.
- 30 Nov 2017 Interview for CST NTN24 with Luis Quevedo (International Broadcast): A Colombian Scientist as Head of the Luminescence Dating Laboratory in a Centre for Human Evolution, as part of a series of interviews on #evolution.
- 19 Oct 2017 Interview for “CyL TV 7 Noticias” on Regional Channel 7 (Castilla y León, Spain): Mentor in the STEM Talent Girl program.
- 5 Oct 2017 Press Conference at CENIEH inviting all media, local and national level, to present the winning of the Candidacy to Host the International LED Conference in 2020, the most important conference in Luminescence and ESR dating.
- 6 Aug 2017 Newspaper article in “El Correo de Burgos” (Burgos, Spain): “The Richness of the Stones” – Interview focusing on the collaboration aspect and novelties in research of the Luminescence and ESR Laboratories of the CENIEH.
- 20-21 Dec 2016 Various newspaper articles related to the OPEN LAB event inviting the local and National press for the inauguration of the new facility (#2) of the Luminescence Dating Lab at CENIEH: “El Correo de Burgos”, “Burgos Conecta”, “Diario de Burgos”, “Semaforo Verde”.
- Nov 2016 Newspaper article contribution “The ages of the Earth” in “El Periódico de Atapuerca” (Atapuerca Foundation, Burgos, Spain): article explaining the importance of detailed sedimentological, mineralogical and petrophysical research along sedimentary units before taking any samples for Geochronology, specially OSL.
- 6 Jul 2016 Newspaper main photograph for article in “El Correo de Burgos” (Burgos, Spain): “The framework of the caves of Atapuerca”.
- 27-28 Apr 2016 Invited Outstanding Alumni for the “Experiencia EAFIT” (Medellín, Colombia). Annual gathering of all soon-to-graduate high school students so they can see the different university programs and potential fields of professional development. EAFIT ask me to participate as an example for the Geology Program.
- 27 Oct 2015 Newspaper article in “El Correo de Burgos” (Burgos, Spain): “The archaeology of tsunamis”.
- 7 Apr 2015 Interview (45 minutes) for Cuatro6 Magazine, Barranquilla, Colombia. Scientific background on coastal erosion along the Caribbean Coast of Colombia and the situation of the Ciénaga Grande de Santa Marta.
- 17 Mar 2015 Live interview (40 minutes) for local TV debate program, Tumaco, Colombia. Scientific background on tsunami hazard along the Pacific Coast of Colombia with emphasis on Tumaco (Nariño, Colombia).
- 17 Jul 2013 Live interview (30 minutes) on the “La Nocturna” Program, RCN Radio, national news radio, Colombia. Scientific and Personal Profile: overlook at Gloria López scientific track, personal life, and tsunami research.

- 17 Jul 2013 Newspaper article in "El Colombiano" Scientific Tendencies Section (Medellín, Colombia). Scientific Profile: overlook at Gloria López tsunami research and luminescence as a sedimentary proxy (from Caesarea Maritima 2003 to Kenya 2012) – “The Tsunami Hunter”.
- 28 Jun 2013 Magazine article in "Gente", a supplement of newspaper "El Colombiano" (Medellín, Colombia). Scientific Profile: life, personal and professional achievements – “Looking for Tsunamis, that’s what Gloria López does”.
- 22 May 2012 Alumni Profile – Alumni Channel & Centre, EAFIT University (Medellín, Antioquia, Colombia): Coverage regarding Tsunami Research around the World:
<http://www.eafit.edu.co/egresados/noticias/perfiles/Paginas/tras-las-huellas-de-los-tsunamis.aspx>
- 27 Jul 2011 National Geographic coverage of Caesarea Maritima underwater excavations.
- 17 Mar 2011 Online Interview for "The Hamilton Spectator" (Hamilton, ON, Canada). Causes of tsunami and earthquake hazards following the M_w 9.0 earthquake and devastating tsunami in Japan on 11 March 2011.
- 12 Mar 2011 Live interview for "CHCH Television" (Hamilton, ON, Canada). Causes of tsunami and earthquake hazards following the M_w 9.0 earthquake and devastating tsunami in Japan on 11 March 2011.
- 16 Mar 2010 Video interview for “Ask a MAC Expert - Earthquakes”, McMaster Daily News (Hamilton, ON, Canada). Causes surrounding massive earthquakes and seismic hazard around the World, following the M_w7.0 earthquake in Haiti on 12 January 2010. <http://dailynews.mcmaster.ca/story.cfm?id=6656>

DEGREE HOMOLOGATIONS

Ph.D. (McMaster U, Canada)	(in process)	Ministry of Education, Colombia	2021
Ph.D. (McMaster U, Canada)	Ref. No. 2017/Q00013 (U Registry: 22)	U Burgos, Spain	2017

CERTIFICATIONS & LICENSES

Radioactive Facility Supervisor (5 yr-valid license)	National Security Council CSN, Spain	2018-2023
Open Water II Scuba Diver	NAUI	1993
Open Water I Scuba Diver	NAUI	1993
Paraglider	Parafly – Antioquia’s Paragliding Club & School, Colombia	1993
Professional Geologist (Registration No. 1377)	Professional Geology Council CPG, Colombia	1993
Driver License (up to 12 passengers) Cat. 3, Colombia, 1986, renewal 1998-life; Class G, ON Canada, 2010-2019; Cat. B, Spain, 2019-2029		

PROFESSIONAL AFFILIATIONS & MEMBERSHIPS

European Geosciences Union	EGU	Member since 2017
International Union for Quaternary Research	INQUA	Scientific Member since 2012
International Geosciences Program	IGCP	Scientific Member since 2012
Coastal Education & Research Foundation & Journal of Coastal Research	CERF-JCR	Contributing Member since 2012
Royal Geographical Society: Fellow	RGS	Fellow since 2012
Quaternary Research Association	QRA	Member since 2012
International Association of Sedimentologists	IAS	Member since 2005
American Geophysical Union	AGU	Member since 2005
Archaeological Institute of America	AIA	Member since 2005
Canadian Geomorphological Research Group	CGRC	Member since 1999
Geological Association of Canada	GAC	Member since 1999
Geological Society of America	GSA	Member since 1999
Canadian Quaternary Association	CANQUA	Member since 1999
American Association of Petroleum Geologist	AAPG	Member 1991 to 1993
Colombian Geological Society	SCG	Member since 1993

PROFESSIONAL DEVELOPMENT & TRAINING

Marine Litter: <i>Massive Open Online Course (MOOC) on Marine Litter</i>	2020
Online Course, 26 Oct – 8 Nov, Intensity: 2 weeks. Open Universiteit / UN Environmental Programme.	
Environmental Law: <i>Pasivos Ambientales Mineros</i>	2020
Online Workshop, 22-23 Sep, Intensity: 2 days. ASGMI, Colombia.	
Sustainability: <i>Hogares Ecológicos [Ecological Homes]</i>	2020
Online Workshop, 7-11 Sep, Intensity: 4 days. EcoHouse, Colombia.	
Sustainability: <i>Crecimiento Verde [Green Growth]</i>	2020
Online Course, 28 Apr – 30 May, Intensity: 4 weeks. DNP, Government of Colombia.	
Laboral Risk Prevention: <i>Aspectos Generales del SARS-CoV-2 [General Aspects of SARS-CoV-2]</i>	2020
Online, CENIEH (Burgos, Spain), 6-7 May, Intensity: 1 hr. Quirón Prevención, Spain.	
Laboral Risk Prevention: <i>Prevención de trastornos musculoesqueléticos por el uso de pantallas de visualización [Prevention of musculoskeletal disorders due to the use of display screens]</i>	2020
Online, CENIEH (Burgos, Spain), 5 May, Intensity: 2 hr. FREMAP Prevención, Spain.	
Laboratory Quality Management & ISO: <i>Curso de Calidad en Laboratorios de acuerdo con ISO 17025:2017 [Laboratory Quality Control in accordance with ISO 17025:2017]</i>	2019
Online, 5 Nov – 5 Dic, Intensity: 4 weeks. Universidad de Salamanca, Spain.	
Communication & Outreach: <i>Manejo y Optimización de los Social Media para la Divulgación Científica [Management & Optimization of Social Media for Scientific Dissemination]</i>	2019
CENIEH (Burgos, Spain), 3 Oct, Intensity: 8 hrs. Escuela de Organización Industrial, Spain.	
Organizational Management: <i>Time Management: Planificación y Organización [Time Management: Planning and Organization]</i>	2019
CENIEH (Burgos, Spain), 28 May, Intensity: 5 hrs. Escuela de Organización Industrial, Spain.	
Organizational Management: <i>Toma de Decisiones y Trabajo en Equipo [Decision Making & Teamwork]</i>	2019
CENIEH (Burgos, Spain), 14 May, Intensity: 5 hrs. Escuela de Organización Industrial, Spain.	
Organizational Management: <i>Comunicación Interna y Visión Compartida [Internal Communication & Shared Vision]</i>	2018
CENIEH (Burgos, Spain), 15 Nov, Intensity: 5 hrs. Escuela de Organización Industrial, Spain.	
Outreach & Media: <i>Crafting your Science Message for Journalists</i>	2018
Webinar (ID #719-311-387), 13 Sep. Intensity: 1 hr. Sharing Science, AGU.	
Laboral Risk Prevention: <i>Riesgos y Medidas Preventivas en Trabajos de Campo [Risks & Preventive Measures during Fieldwork]</i>	2018
CENIEH (Burgos, Spain), 30 May, Intensity: 1.5 hrs. Quirón Prevención, Spain.	
Laboral Risk Prevention: <i>Primeros Auxilios [First Aid]</i>	2018
CENIEH (Burgos, Spain), 30 May, Intensity: 2.5 hrs. Quirón Prevención, Spain.	
Organizational Management: <i>Comunicación Eficaz y Trabajo en Equipo [Effective Communication & Teamwork]</i>	2018
CENIEH (Burgos, Spain), 24 Apr, Intensity: 5 hrs. Escuela de Organización Industrial, Spain.	
Funding & Research: <i>Reunión informativa sobre el Consejo Europeo de Investigación ERC [Informative meeting on the European Research Council ERC]</i>	2017
CENIEH (Burgos, Spain), 12 Dec, Intensity: 3 hrs. ERC National Contact Point.	
Organizational Management: <i>Gestión del Tiempo y Organización Personal [Time Management & Personal Organization]</i>	2017
CENIEH (Burgos, Spain), 24 Nov & 5 Dec, Intensity: 6 hrs. Escuela de Organización Industrial, Spain.	
Metrology & Quality Control: <i>Instrumentos de Pesaje [Weighing Instruments]</i>	2017
CENIEH (Burgos, Spain), 19 Jul, Intensity: 5 hrs. Mettler-Toledo S.A.E., Spain.	
Heritage Science: <i>Tecnologías 4.0 para el Patrimonio [Technologies 4.0 for Heritage]</i>	2017

- CENIEH (Burgos, Spain), 9 May, Intensity: 6 hrs. CENIEH-AEICE-CDTI-CARTIF, Spain.
- Laboratory Quality Management & ISO:** *Sistemas de Gestión de Calidad ISO 9001:2008 Análisis, Interpretación y Puesta en Práctica [Quality Management Systems ISO 9001: 2008 Analysis, Interpretation & Implementation]* 2016
CENIEH (Burgos, Spain), 28 Jun, Intensity: 8 hrs. Universidad de Salamanca, Spain.
- Laboratory Quality Management & ISO:** *Buenas Prácticas de Laboratorio [Good Laboratory Practices]* 2016
CENIEH (Burgos, Spain), 24 May, Intensity: 5 hrs. Mettler-Toledo S.A.E., Spain.
- Radioactive Facilities:** *Curso de Capacitación Supervisores de Instalaciones Radiactivas [Radioactive Facilities Supervisors Training Course]* 2016
CENIEH (Burgos, Spain), 8-12 Feb, Intensity: 40 hrs. GD Energy Services, Spain.
- Coastal Disasters:** *Tsunamis & Storm Surges: Introduction to Coastal Disasters* 2016
Online Course, 18 Jan – 30 Mar, Intensity: 10 weeks. Waseda University, Japan.
- Funding & Research:** *Reunión informativa sobre el Consejo Europeo de Investigación ERC [Informative meeting on the European Research Council ERC]* 2015
Ikerbasque (Bilbao, Spain), 24 Jun, Intensity: 3 hrs. ERC National Contact Point.
- Geochronology:** *Short Course in Luminescence Dating: Theory, Methods and Application* 2015
9-13 Nov, Intensity: 1 week. Aberystwyth Luminescence Research Laboratory, Aberystwyth University, U.K.
- Critical Scientific Thinking:** *Critical Thinking in Global Challenges* 2013
Online Course, 28 Jan – 4 Mar, www.coursera.org. Intensity: 5 weeks. The University of Edinburgh, U.K.
- Critical Scientific Thinking:** *Science from Superheroes to Global Warming* 2013
Online Course, 21 Jan – 1 Apr, www.coursera.org. Intensity: 10 weeks. University of California at Irvine, U.S.A.
- Ethics:** *Research & Publication Ethics (Ethical boundaries in scientific research & publishing)* 2013
Webinar, 31 Jan, 14:00 GMT+1, ethics.elsevier.com. Intensity: 1 hr. Elsevier.
- PR & Self-Promotion:** *Science Won't Speak for Itself – Amplify your research & get noticed* 2013
Webinar, 17 Jan, 12:30 EST, www.labguru.com/webinars. Intensity: 1 hr. LabGuru, U.S.A.
- Coastal Management:** *Managing Cultural Resources on Submerged Lands* 2010
Webinar www.submergedlandconference.com, 29th International Submerged Lands Management Conference. Intensity: 2 hrs. Florida Department of Environmental Protection, U.S.A.
- Coastal Engineering:** *Structures for Coastal Protection and Coastal Observation Systems.* 1997
University of Cantabria – Valle University. International Course. Intensity: 25 hrs. Santiago de Cali, Valle, Colombia.
- Coastal Geology:** *Geology for the Management of Littoral Areas, Basic Principles and Applications* 1997
International Course with reference to Special Cases along the Colombian and Gulf of Mexico coasts.
EAFIT University – USGS – COLCIENCIAS – Colombian Oceanographic Commission. Intensity: 5 days.
Medellín, Ant., Colombia.
- Marine Geology:** *Marine Sedimentation: Basic Aspects and Applications* 1996
International Course with Special focus on the Colombian Coasts. Intensity: 5 days.
EAFIT University – Bordeaux I University – Colombian Oceanographic Commission – COLCIENCIAS. Medellín, Ant., Colombia.
- Mineralogy:** *Genesis of Clays within Palaeosols and Sols* 1996
International Course with relation to Erosion in Recent Sediments. Intensity: 5 days.
INGEOMINAS – Université de Liège – Université de Savoie. Santafé de Bogotá, DE, Colombia.
- GIS:** *Introduction to ARC INFO* 1996
Training Course. Intensity: 7 days. PROSIS. Medellín, Colombia.
- Environmental Geology:** *Formation in Geological Aspects of Environmental Protection.* 1995
UNESCO – UNICAMP – PNUMA International Workshop. Intensity: 10 days. Campinas, SP, Brazil.
- Environmental Geology:** 1995
Fluvial Geomorphology in the Prevention of Natural Disasters and Environmental Studies.
National Course. Intensity: 5 days. School of Engineers of Antioquia. Medellín, Ant., Colombia.
- Geophysics:** *Applied Geophysical Methods for Exploration of Natural Resources.* 1993

National Course. Intensity: 5 days. Centre of Continuing Studies, EAFIT University. Medellín, Ant., Colombia.

PROFESSIONAL & ADDITIONAL TECHNICAL & DESIGN SKILLS MAJOR ANALYTICAL INSTRUMENTS & FIELD TECHNIQUES

Field surveying (theodolite and total station)	Gamma & Beta Spectrometry
Field mapping & Orienteering	Preparation & processing of samples for OSL, TL & ESR
Field profiling	Special sampling for Optical Dating (OSL & TL) & ESR
Global Positioning Systems	¹³⁷ Cs Dating & Sampling
Vibra- and Percussion- Sediment Coring (land; raft/boat; underwater)	²¹⁰ Pb Dating & Sampling
Surface Sediment Sampling (land & underwater)	¹⁴ C Sampling
Grab-, box-corer and freeze-corer sampling	Field & laboratory sediment peels
Ground Penetrating Radar	Sediment Core X-ray
NAA & ICPMS isotopic analyses	Sediment Petrophysical Properties
RISØ TL-OSL Reader & accessories	Granulometry: Sieving, Pipette, Laser Diffraction
SUERC Portable OSL Reader & accessories	Various laboratory sedimentological techniques
Multi-Sensor Core-Logger (MSCL) operation & analysis	Various laboratory petrophysical techniques
Design, Construction & Set-Up of Luminescence Dating Laboratories, Sedimentology & Petrophysics laboratories	Skipper
Operation & Management of Luminescence Dating Laboratories, Sedimentology & Petrophysics laboratories	Skin-Diver
Radiation Dosimetry & Protection (radioactive source handling)	Advanced Level Scuba Diver in Open Water
	Paraglider
	Craftsmanship, mechanics & tool-handling
	First Aid – CPR
	Photography
	Underwater caisson archaeological excavation

QUALITIES

I have excellent interpersonal, communication and presentation skills. I excel in terms of organization, multi-tasking, reliability, and self-driven capabilities as well as resourcefulness, not only in the office but also in the laboratory and most especially out in the field. I am a person eager to learn and meet new challenges by applying all the breadth of knowledge I possess or by acquiring new knowledge. I am a hardworking, responsible professional who is effective as both an independent worker and a team member. I commend collaboration and most encourage it. I am proficient not only in various technical software programs (used for a diverse range of specialized geological equipment) but also in more normal applications such as Corel, Adobe, Photoshop, Canva, Microsoft Office (various tools), Mathematica, SigmaPlot, R, various communication platforms (Slack, Trello, etc.), among other various programmes.