

Date of birth: 14/12/1986 | **Nationality:** Spanish | **Gender:** Female | (+34) 652719248 | julenearamendia@gmail.com |

Adress: Azurtegiendo 10 3izq, 48620, Plentzia, Spain

● WORK EXPERIENCE

01/02/2014 - 31/10/2014 - Leioa, Spain
POSTDOC – UNIVERSITY OF THE BASQUE COUNTRY

Research in Analytical Chemistry Department on spectroscopy laboratory. 9 months

15/11/2014 - 15/08/2015 - Paris, France
FMSH/PIERRE ET MARIE CURIE UNIVERSITY POSTDOC – EUROPEAN COMMISSION

Marie Curie Special Actions Confund (Fernand Braudel Postdoctoral Fellowship) at the Pierre et Marie Curie University, MONARIS department.
Postdoc doing semi-quantitative Raman imaging works. 9 months

16/08/2015 - 07/03/2018 - Leioa, Spain
DOCTOR RESEARCHER – UNIVERSITY OF THE BASQUE COUNTRY

Researcher at the Department of Analytical Chemistry. Spectroscopy lab manager. Collaborator and PI in research projects. Collaborator in the preparation of national, European and international research proposals. Supervisor and co-supervisor of thesis, master and bachelor thesis. 2 years and a half.

08/03/2018 - 21/10/2018 - Donostia, Spain
TEACHING AND RESEARCH CONTRACT – UNIVERSITY OF THE BASQUE COUNTRY

Teaching Analytical chemistry at Chemistry degree at the university and research activities. 50% teaching and 50% research contract. 8 months

22/10/2018 - 30/06/2019 - Pasadena, California, United States
POSTDOC AT JPL/NASA/CALTECH – UNIVERSITY OF THE BASQUE COUNTRY

Raman spectroscopy for astrobiogeochemistry for MARS2020 under the cover of Basque Country University mobility fellowship. 7 months

01/07/2019 - 31/12/2019 - Leioa, Spain
DOCTOR RESEARCHER – UNIVERSITY OF THE BASQUE COUNTRY

UV Raman development for ice studies and astrobiogeochemistry

01/09/2020-31/08/2021-Benevento, Italy
DOCTOR RESEARCHER - UNIVERSITÀ DEGLI STUDI DEL SANIO

Raman, SERS and TERS for breast, liver, thyroids cancer detection through machine learning and chemometrics.

1/10/2021-28/02/2022-Aarhus, Denmark
DOCTOR RESEARCHER/ASISTANT PROFESSOR - Aarhus Institute for Advances Studies (AIAS)

AIAS-COFUND fellowship. Understanding Raman spectroscopy as a key tool in future Mars exploration missions (MARS2020 and EXOMARS2022) for the search of biosignatures

1/03/2022-Current-Leioa, Spain
DOCTOR RESEARCHER - UNIVERSITY OF THE BASQUE COUNTRY

Maria Zambrano EU Next Generation fellowship.

● EDUCATION AND TRAINING

01/10/2004 - 10/07/2009 - Barrio Sarriena s/n, Leioa, Spain

BACHELOR DEGREE IN ENVIRONMENTAL SCIENCES – University of the Basque Country

<https://www.ehu.eus/en/en-home>

01/10/2009 - 12/10/2010 - Barrio Sarriena s/n, Leioa, Spain

MASTER IN ENVIRONMENTAL POLLUTION AND TOXICOLOGY – University of the Basque Country

<https://www.ehu.eus/en/web/master/master-environmental-contamination-toxicology>

01/01/2010 - 12/12/2013 - Barrio Sarriena s/n, Leioa, Spain

INTERNATIONAL AND CUM LAUDE PHD IN ENVIRONMENTAL POLLUTION AND TOXICOLOGY (UPV/EHU EXTRAORDINARY AWARD) – University of the Basque Country

● LANGUAGE SKILLS

Mother tongue(s): SPANISH | BASQUE (C1)

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
FRENCH	A2	A2	A2	A2	A2
ITALIANO	B2	B2	B2	B2	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● PUBLICATIONS (40 indexed publications (43 in total), h-index: 13 (Scopus), 14 (Google scholar))

New Findings by Raman Microspectroscopy in the Bulk and Inclusions Trapped in Libyan Desert Glass

Spectroscopy Letters, vol. 44, issue 7-8, pp. 521-525

2011

AUTHORS: Aramendia, Julene; Gomez-Nubla, Leticia; de Vallejuelo, Silvia Fdez-Ortiz; Castro, Kepa; Murelaga, Xabier; Madariaga, Juan Manuel

Quality metrics:

Citations: 6 Scopus, 9 Google Scholar

Journal ISSN: 00387010

Impact Factor (2011): 0.719

Position: 37/42, Q2 in Spectroscopy

Portable Raman study on the conservation state of four CorTen steel-based sculptures by Eduardo Chillida impacted by urban atmospheres

Journal of Raman spectroscopy, vol. 43, issue 8, pp. 1111-1117,

2012

AUTHORS: J. Aramendia, L. Gomez-Nubla, K. Castro, I. Martinez-Arkarazo, D. Vega, A. Sanz López de Heredia, A. García Ibáñez de Opakua and J. M. Madariaga

Quality metrics:

Citations: 37 Scopus, 40 Google Scholar

Journal ISSN: 0377-0486

Impact Factor (2012): 2.679
Position: 11/43, Q1 in Spectroscopy

Is the weathering steel resistant to all environments? study of some weathering steel facades exposed to Bilbao urban atmosphere

MACLA, 16, 66-67
2012

Authors: Julene Aramendia Gutierrez; Leticia Gomez Nubla; Olivia Gomez Laserna; Kepa Castro Ortiz de Pinedo; Juan Manuel Madariaga

Journal ISSN: 1885-7264

Spectroscopic Integrated Method in the Way Towards the Search of the Origin of Libyan Desert Glass

MACLA, 16, 70-71
2012

Authors: LETICIA GOMEZ-NUBLA, JULENE ARAMENDIA, SILVIA FERNÁNDEZ-ORTIZ-DE-VALLEJUELO, KEPASTRO, AINHOA ALONSO-OLAZABAL, M^a CRUZ ZULUAGA, LUIS-ÁNGEL ORTEGA, XABIER MURELAGA, JUAN-MANUEL MADARIAGA

Journal ISSN: 1885-7264

From portable to SCA Raman devices to characterize harmful compounds contained in used Black slag

Journal of Raman Spectroscopy, vol. 44, pp. 1163-1171
2013

AUTHORS : L. Gomez-Nubla, J. Aramendia, S. Fedz.Ortiz de Vallejuelo, K. Castro, J. M. Madariaga

Quality metrics:

Citations: 17 Scopus, 22 Google Scholar

Journal ISSN: 03770486

Impact Factor (2013): 2.519

Position: 14/44, Q1 in Spectroscopy

Multianalytical approach to study the dissolution process of weathering steel: the role of urban pollution

Corrosion Science, vol. 76, pp. 154-162
2013

AUTHORS : J. Aramendia, L. Gomez-Nubla, I. Arrizabalaga, N. Prieto-Taboada, K. Castro and J.M. Madariaga

Quality metrics:

Citations: 32 Scopus, 32 Google Scholar

Journal ISSN: 0010938X

Impact Factor (2013): 3.686

Position: 2/75, D1 in Metallurgy and Metallurgical Engineering

Determination of the pigments present in a wallpaper of the middle nineteenth century: The combination of mid-diffuse reflectance and far infrared spectroscopies

Spectrochimica acta Part A, vol. 124, pp. 308-314
2014

AUTHORS: I. Arrizabalaga, O. Gómez-Laserna, J. Aramendia, G. Arana, J. M. Madariaga

Quality metrics:

Citations: 13 Scopus, 14 Google Scholar

Journal ISSN: 13861425

Impact Factor (2014): 2.353

Position: 15/44, Q2 in Spectroscopy

Spectroscopic speciation and Thermodynamic modeling to explain the degradation of weathering steel surfaces in SO₂ rich urban atmospheres

Microchemical Journal, vol. 115, pp. 138-145
2014

AUTHORS: J. Aramendia, L. Gomez-Nubla, K. Castro, J. M. Madariaga

Quality metrics:

Citations: 20 Scopus, 20 Google Scholar

Journal ISSN: 0026265X

Impact Factor (2014): 2.746

Position: 20/74, Q2 in Analytical Chemistry

Applicability of a Diffuse Reflectance Infrared Fourier Transform handheld spectrometer to perform in situ analyses on Cultural Heritage materials

Spectrochimica acta Part A, vol. 129, pp. 259-267

2014

AUTHORS: I. Arrizabalaga, O. Gómez-Laserna, J. Aramendia, G. Arana, J. M. Madariaga

Quality metrics:

Citations: 29 Scopus, 35 Google Scholar

Journal ISSN: 13861425

Impact Factor (2014): 2.353

Position: 15/44, Q2 in Spectroscopy

Raman spectroscopic study of the degradation of a middle age mural painting: the role of agricultural activities

Journal of Raman Spectroscopy, vol. 45, pp. 1110-1118

2014

AUTHORS: M. Veneranda, M. Irazola, M. Díez, A. Iturregui, J. Aramendia, K. Castro, J. M. Madariaga

Quality metrics:

Citations: 18 Scopus, 18 Google Scholar

Journal ISSN: 03770486

Impact Factor (2014): 2.671

Position: 11/44, Q1 in Spectroscopy

Protective ability index measurement through Raman quantification imaging to diagnose the conservation state of weathering steel structures

Journal of Raman Spectroscopy, vol. 45, pp. 1076-1084

2014

AUTHORS: J. Aramendia, L. Gomez-Nubla, L. Bellot-Gurlet, K. Castro, C. Paris, Ph. Colomban, J. M. Madariaga

Quality metrics:

Citations: 29 Scopus, 34 Google Scholar

Journal ISSN: 13861425

Impact Factor (2014): 2.353

Position: 15/44, Q2 in Spectroscopy

The effect of calcium oxalates in the weathering steel surface

Science, Technology and Cultural Heritage, pp. 211-216

2014

AUTHORS: J. Aramendia, L. Gómez-Nubla, K. Castro, L. Bellot-Gurlet, J.M. Madariaga

Book ISBN: 978-131571242-0;978-113802744-2

Bioimpact on weathering steel surfaces: oxalates formation and the elucidation of their origin

International Biodeterioration & Biodegradation, vol. 04, pp. 59-66

2015

AUTHORS: J. Aramendia, L. Gomez-Nubla, L. Bellot-Gurlet, K. Castro, G. Arana and J.M. Madariaga

Quality metrics:

Citations: 8 Scopus, 11 Google Scholar

Journal ISSN: 09648305

Impact Factor (2015): 2.429

Position: 74/225, Q2 in Environmental Sciences

Darwin impact glass study by Raman spectroscopy in combination with other spectroscopic techniques

Journal of Raman Spectroscopy, vol. 46, pp. 913-919

2015

AUTHORS: L. Gomez-Nubla, J. Aramendia, A. Alonso-Olazabal, S. Fdez-Ortiz de Vallejuelo, K. Castro, L.A. Ortega, M.C.

Zuloaga, X. Murelaga and J.M. Madariaga

AUTHORS: J. Aramendia, L. Gomez-Nubla, L. Bellot-Gurlet, K. Castro, G. Arana and J.M. Madariaga

Quality metrics:

Citations: 11 Scopus, 11 Google Scholar

Journal ISSN: 03770486

Impact Factor (2015): 2.395

Position: 15/43, Q1 in Spectroscopy

Structural and chemical analyzer system for the analysis of deposited atmospheric particles and degradation

compounds present on the surface of outdoor weathering steel objects

Microchemical Journal, vol. 123, pp. 267-275

2015

AUTHORS : J. Aramendia, L. Gomez-Nubla, K. Castro and J.M. Madariaga

Quality metrics:

Citations: 14 Scopus, 15 Google Scholar

Journal ISSN: 0026265X

Impact Factor (2015): 2.893

Position: 17/75, Q1 in Analytical Chemistry

In-situ and laboratory Raman spectroscopic analysis on beachrock deposits: characterisation of the trapped materials

Journal of Raman Spectroscopy, vol. 47, pp. 329-336

2016

AUTHORS: A. Iturregui, N. Arrieta, J. Aramendia, I. Arrizabalaga, X. Murelaga, J.I. Baceta, M.A. Olazabal, I. Martinez-

Arkarazo and J.M. Madariaga

Quality metrics:

Citations: 5 Scopus, 5 Google Scholar

Journal ISSN: 03770486

Impact Factor (2016): 2.969

Position: 8/42, Q1 in Spectroscopy

Raman and SEM-EDX analyses of the 'Royal Portal' of Bordeaux Cathedral for the virtual restitution of the statuary polychromy

Journal of Raman Spectroscopy, vol. 47, pp. 162-167

2016

AUTHORS: Floréal Daniel, Aurélie Mounier, Julene Aramendia, Leticia Gómez, Kepa Castro, Silvia Fdez-Ortiz de Vallejuelo and Markus Schlicht

Quality metrics:

Citations: 10 Scopus, 9 Google Scholar

Journal ISSN: 03770486

Impact Factor (2016): 2.969

Position: 8/42, Q1 in Spectroscopy

Characterization of archaeometallurgical artefacts by means of portable Raman systems: corrosion mechanisms influenced by marine aerosol

Journal of Raman Spectroscopy, 48, pp. 258-266

2017

AUTHORS: M. Veneranda, J. Aramendia, O. Gomez-Laserna, S. Fdez-Ortiz de Vallejuelo, L. Garcia-Boullosa, I. Garcia-Camino, K. Castro, A. Azkarate and J. M. Madariaga

Quality metrics:

Citations: 9 Scopus, 13 Google Scholar

Journal ISSN: 03770486

Impact Factor (2017): 2.897

Position: 8/42, Q1 in Spectroscopy

Multispectroscopic methodology to study Libyan desert glass and its formation conditions

Analytical and Bioanalytical Chemistry, 409, 3597-3610

2017

AUTHORS: L. Gomez-Nubla, J. Aramendia, S. Fdez-Ortiz de Vallejuelo, A. Alonso-Olazabal, K. Castro, M.C. Zuluaga, L.A. Ortega, X. Murelaga and J.M. Madariaga

Quality metrics:

Citations: 13 Scopus, 16 Google Scholar

Journal ISSN: 16182642

Impact Factor (2017): 2.307

Position: 16/81, Q1 in Analytical Chemistry

Contamination study of forest track soils located in a recreational area filled with steel industry waste 30 years ago

Science of the Total Environment, 598, 28-37

2017

AUTHORS: L. Gómez-Nubla, J. Aramendia, S. Fdez-Ortiz de Vallejuelo and J.M. Madariaga

Quality metrics:

Citations: 5 Scopus, 5 Google Scholar

Journal ISSN: 00489697
Impact Factor (2017): 4.610
Position: 16/125, Q1 in Environmental Chemistry

Focused Ultrasound energy over steel slags as a fast tool to assess their environmental risk before and after their reuse in agriculture and civil constructions

Microchemical Journal, 132, 268-273
2017
AUTHORS: L. Gomez-Nubla, J. Aramendia, S. Fdez-Ortiz de Vallejuelo, J.A. Carrero and J.M. Madariaga
Quality metrics:
Citations: 6 Scopus, 6 Google Scholar
Journal ISSN: 0026265X
Impact Factor (2017): 2.746
Position: 40/126, Q2 in Analytical Chemistry

Geochemical study of the NWA 6148 Martian Meteorite and its terrestrial weathering processes

Journal of Raman Spectroscopy, 48, 1536-1543
2017
AUTHORS: I. Torre-Fdez, J. Aramendia, L. Gomez-Nubla, K. Castro and J.M. Madariaga
Quality metrics:
Citations: 8 Scopus, 12 Google Scholar
Journal ISSN: 03770486
Impact Factor (2017): 2.879
Position: 8/43, Q1 in Spectroscopy

Overview of the techniques used for the study of non-terrestrial bodies: Proposition of novel non-destructive methodology

TrAC (Trends in Analytical Chemistry), 98, 36-46
2018
AUTHORS: J. Aramendia, L. Gomez-Nubla, K. Castro, S. Fdez-Ortiz de Vallejuelo, G. Arana, M. Maguregui, V. G. Baonza, J. Medina, F. Rull, J. M. Madariaga
Quality metrics:
Citations: 10 Scopus, 18 Google Scholar
Journal ISSN: 01659936
Impact Factor (2018): 8.428
Position: 3/84, D1 in Analytical Chemistry

Analytical methodology to elemental quantification of weathered terrestrial analogues to meteorites using a portable Laser-Induced Breakdown Spectroscopy (LIBS) instrument and Partial Least Squares (PLS) as multivariate calibration technique

Microchemical Journal, 137, 392-401
2018
AUTHORS: L. Gomez-Nubla, J. Aramendia, S. Fdez-Ortiz de Vallejuelo, and J.M. Madariaga
Quality metrics:
Citations: 18 Scopus, 21 Google Scholar
Journal ISSN: 0026265X
Impact Factor (2018): 3.206
Position: 20/84, Q1 in Analytical Chemistry

Metallurgical residues reused as filler after 35years and their natural weathering implications in a mountain area

Science of the Total Environment, 618, 39-47
2018
AUTHORS: L. Gómez-Nubla, J. Aramendia, S. Fdez-Ortiz de Vallejuelo and J.M. Madariaga
Quality metrics:
Citations: 3 Scopus, 3 Google Scholar
Journal ISSN: 00489697
Impact Factor (2018): 5.589
Position: 17/119, Q1 in Analytical Chemistry

The green grass was never green: How spectroscopic techniques should have assisted restoration works

Microchemical Journal, 138, 154-161

2018

AUTHORS: I. Constantini, M. Veneranda, M. Irazola, J. Aramendia, K. Castro and J.M. Madariaga

Quality metrics:

Citations: 5 Scopus, 5 Google Scholar

Journal ISSN: 0026265X

Impact Factor (2018): 3.206

Position: 20/84, Q1 in Analytical Chemistry

Red and blue colours on 18th–19th century Japanese woodblock prints: In situ analyses by spectrofluorimetry and complementary non-invasive spectroscopic method

Microchemical Journal, 140, 129-141

2018

AUTHORS: Mounier, A., Le Bourdon, G., Aupetit, C., Lazare, S., Biron, C., Pérez-Arantegui, J., Almazán, D., Aramendia, J., Prieto-Taboada, N., Fdez-Ortiz de Vallejuelo, S., Daniel, F.

Quality metrics:

Citations: 13 Scopus, 16 Google Scholar

Journal ISSN: 0026265X

Impact Factor (2018): 3.206

Position: 20/84, Q1 in Analytical Chemistry

FTIR spectroscopic semi-quantification of iron phases: A new method to evaluate the protection ability index (PAI) of archaeological artefacts corrosion systems

Corrosion Science, 133, 68-77

2018

AUTHORS: Veneranda, M., Aramendia, J., Bellot-Gurlet, L., Colomban, P., Castro, K., Madariaga, J.M.

Quality metrics:

Citations: 21 Scopus, 23 Google Scholar

Journal ISSN: 0010938X

Impact Factor (2018): 6.355

Position: 2/76, D1 in Metallurgy and Metallurgical Engineering

Detection of organic compounds in impact glasses formed by the collision of an extraterrestrial material with the Libyan Desert (Africa) and Tasmania (Australia)

Analytical and Bioanalytical Chemistry, 410, 6609-6617

2018

AUTHORS: Gómez-Nubla, L., Aramendia, J., Fdez-Ortiz de Vallejuelo, S., Castro, K., Madariaga, J.M.

Quality metrics:

Citations: 1 Scopus, 2 Google Scholar

Journal ISSN: 16182642

Impact Factor (2018): 3.286

Position: 18/84, Q1 in Analytical Chemistry

Non-destructive characterization of the Elephant Moraine 83227 meteorite using confocal Raman, micro-energy-dispersive X-ray fluorescence and Raman-scanning electron microscope-energy-dispersive X-ray microscopies

Analytical and Bioanalytical Chemistry, 410, 7477-7488

2018

AUTHORS: Torre-Fdez, I., Aramendia, J., Gomez-Nubla, L., Castro, K., Maguregui, M., FdezOrtiz de Vallejuelo, S., Arana, G., Madariaga, J.M.

Quality metrics:

Citations: 5 Scopus, 7 Google Scholar

Journal ISSN: 16182642

Impact Factor (2018): 3.286

Position: 18/84, Q1 in Analytical Chemistry

The combination of Raman imaging and LIBS for quantification of original and degradation materials in Cultural Heritage

Journal of Raman Spectroscopy, 50, 193-201

2019

AUTHORS: Aramendia, J., Gómez-Nubla, L., Fdez-Ortiz de Vallejuelo, S., Castro, K., Arana, G., Madariaga, J.M

Quality metrics:

Citations: 4 Scopus, 5 Google Scholar

Journal ISSN: 03770486

Impact Factor (2019): 2.000

Position: 19/42, Q2 in Spectroscopy

Chemical study of degradation processes in ancient metallic materials rescued from underwater medium

Journal of Raman Spectroscopy, 50, 289-298

2019

AUTHORS: Estalayo, E., Aramendia, J., Matés Luque, J.M., Madariaga, J.M.

Quality metrics:

Citations: 4 Scopus, 4 Google Scholar

Journal ISSN: 03770486

Impact Factor (2019): 2.000

Position: 19/42, Q2 in Spectroscopy

Analytical methodology to evaluate the Terrestrial Weathering of Libyan Desert Glasses and Darwin Glasses after their formation

Analytical and Bioanalytical Chemistry, 411, 7869-7877

2019

AUTHORS: Gómez-Nubla, L., Aramendia, J., Fdez-Ortiz de Vallejuelo, S., Castro, K., Madariaga, J.M.

Quality metrics:

Citations: 0 Scopus, 1 Google Scholar

Journal ISSN: 16182642

Impact Factor (2019): 3.637

Position: 18/86, Q1 in Analytical Chemistry

Study of a terrestrial Martian analogue: Geochemical characterization of the Meñakoz outcrops (Biscay, Spain)

Journal of Raman Spectroscopy, 2020, 51(9), pp. 1603-1612

2020

AUTHORS: Ruiz-Galende, P., Torre-Fdez, I., Aramendia, J., Gómez-Nubla, L., Castro, K., Arana, G., Madariaga, J.M.

Quality metrics:

Citations: 1 Scopus, 1 Google Scholar

Journal ISSN: 03770486

Impact Factor (2019): 2.000

Position: 19/42, Q2 in Spectroscopy

New Raman-visible near-infrared database of inorganic and mineralogical planetary and terrestrial compounds and its implications for Mars: Phyllosilicates

Journal of Raman Spectroscopy, 51, 1750-1760

2020

AUTHORS: Ruiz-Galende, P., Torre-Fdez, I., Aramendia, J., Gomez-Nubla, L., Castro, K., Arana, G., de Vallejuelo, S.F.-O., Maguregui, M., Medina, J., Baonza, V.G., Rull, F., Madariaga, J.M.

Quality metrics:

Citations: 1 Scopus, 2 Google Scholar

Journal ISSN: 03770486

Impact Factor (2019): 2.000

Position: 19/42, Q2 in Spectroscopy

Raman spectroscopy to investigate the speciation and origin of hazardous elements associated to suspended particulated matter during a large flood event

Journal of Raman Spectroscopy, 2020, 51(9), pp. 1480-1492
2020

AUTHORS: Gredilla, A., Fdez-Ortiz de Vallejuelo, S., Gomez-Nubla, L., Aramendia J., RuizRomera E., de Diego A., Antigüedad, I., Madariaga, J.M.

Quality metrics:

Citations: 1 Scopus, 1 Google Scholar

Journal ISSN: 03770486

Impact Factor (2019): 2.000

Position: 19/42, Q2 in Spectroscopy

SuperCam Calibration Targets: Design and Development

Space Science Reviews, 2020, 216(8), 138
2020

Authors: J. A. Manrique, G. Lopez-Reyes, A. Cousin, F. Rull, S. Maurice, R. C. Wiens, M. B. Madsen, J. M. Madariaga, O. Gasnault, J. Aramendia et al.

Quality metrics:

Citations: 18 Scopus, 18 Google Scholar

Journal ISSN: 00386308

Impact Factor (2019): 6.125

Position: 7/101, D1 in Space and Planetary Science

Long-term in situ non-invasive spectroscopic monitoring of weathering processes in open-air prehistoric rock art sites

Analytical and Bioanalytical Chemistry, 2020, 412(29), pp. 8155-8166
2020

Authors: Aramendia, J., de Vallejuelo, S.F.-O., Maguregui, M. Martinez-Arkarazo, I., Giakoumaki, A., Martí, A.P., Madariaga, J.M., Ruiz, J.F.

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 16182642

Impact Factor (2019): 2.000

Position: 18/86, Q1 in Analytical Chemistry

The interaction of sediments with the archeological iron remains from the recovery shipwreck of Urbieta (Gernika, North of Spain)

Journal of Raman Spectroscopy, 2021, 52(1), 230-2402020

Authors: Estalayo, E., Aramendia, J., Bellot-Gurlet, L., Garcia, L., Garcia-Camino, I., Madariaga, J.M.

Quality metrics:

Citations: 1 Scopus, 1 Google Scholar

Journal ISSN: 03770486

Impact Factor (2019): 3.637

Position: Position: 19/42, Q2 in Spectroscopy

Bizkaiko itsaspeko sumendiaren analisi geokimikoa

EKAIA (Scientific Journal in Basque), 37, 83-101
2020

Authors: Garazi Fernández-González, Patricia Ruiz-Galende, Imanol Torre-Fernández, Julene Aramendia, Gorka Arana, Kepa Castro, Juan Manuel Madariaga

ISSN

0214-9001

eISSN

2444-3255

Development of innovative non-destructive analytical strategies for Mars Sample Return tested on Dar al Gani 735 Martian Meteorite

Talanta, 2021, 224, 121863
2021

Authors: C. García-Florentino, Torre-Fdez, P. Ruiz-Galende, J. Aramendia, K. Castro, G. Arana, M. Maguregui, S. Fdz Ortiz de Vallejuelo, J.M. Madariaga

Quality metrics:

Citations: 3 Scopus, 3 Google Scholar
Journal ISSN: 03770486
Impact Factor (2019): 3.637
Position: Position: 19/42, Q2 in Spectroscopy

Characterization of sedimentary and volcanic rocks in Armintza outcrop (Biscay, Spain) and its implication for Oxia Planum (Mars) exploration

Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 251, 119443
2021

Authors: P. Ruiz-Galende, G. Fernández, I. Torre-Fdez, J. Aramendia, L. Gomez-Nubla, C. García-Florentino, K. Castro, G. Arana, J.M. Madariaga

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 13861425

Impact Factor (2019): 3.232

Position: 9/41, Q1 in Spectroscopy

Mineralogy of the RBT 04262 Martian meteorite as determined by micro-Raman and micro-X-ray fluorescence spectroscopies

Journal of Raman Spectroscopy, 2021, <https://doi.org/10.1002/jrs.6291>

Authors: Jennifer Huidobro, Julene Aramendia, Cristina García-Florentino, Patricia Ruiz-Galende, Imanol Torre-Fdez, Kepa Castro, Gorka Arana, Juan Manuel Madariaga

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 13861425

Impact Factor (2019): 3.232

Position: 9/41, Q1 in Spectroscopy

Interrelationships in the Gypsum Syngenite-Görgeyite System and Their Possible Formation on Mars

Astrobiology, 2021, 21(3), 332-344

Authors: Cristina García-Florentino, Leticia Gomez-Nubla, Jennifer Huidobro, Imanol Torre-Fdez, Patricia Ruíz-Galende, Julene Aramendia, Elisabeth M Hausrath, Kepa Castro, Gorka Arana, Juan Manuel Madariaga

Quality metrics:

Citations: 2 Scopus, 2 Google Scholar

Journal ISSN: 15311074

Impact Factor (2021): 4.335

Geochemical Characterization of the NWA 11273 Lunar Meteorite Using Nondestructive Analytical Techniques: Original, Shocked, and Alteration Mineral Phases

ACS Earth and Space Chemistry, 5(6), 1333-1342
2021

Authors: Huidobro, J., Aramendia, J., Arana, G., Madariaga, J.M.

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 24723452

Impact Factor (2020): 3.475

Position: 32/88, Q2 in Geochemistry and Geophysics

A new semi-quantitative Surface-Enhanced Raman Spectroscopy (SERS) method for detection of maleimide (2,5-pyrroledione) with potential application to astrobiology

Geoscience Frontiers, 12(5), 101226
2021

Authors: J. Aramendia, L. Gomez-Nubla, M. Tuite, K. H. Williford, K. Castro, J.M. Madariaga

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 16749871

Impact Factor (2020): 6.853

Position: 8/200, D1 in Geosciences Multidisciplinary

Detection of unexpected copper sulfate decay compounds on late Gothic mural paintings: Assessing the threat of environmental impact

Microchemical Journal, 169, 106542

2021

Authors: Costantini, I., Aramendia, J., Tomasini, E., Castro K., Manuel Madariaga, J., Arana, G.

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 0026-265X

Impact Factor (2020): 4.821

Position: 16/87, Q1 in Analytical Chemistry

Original and alteration mineral phases in the NWA 10628 Martian shergottite determined by micro-Raman spectroscopy assisted with micro-energy dispersive X-ray fluorescence imaging

Journal of Raman Spectroscopy, <https://doi.org/10.1002/jrs.6305>

2022

Authors: Prieto-de la Vega, I., García-Florentino, C., Torre-Fdez, I., Aramendia J., Huidobro J., Arana G., Castro, K., Madariaga, J.M.

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 13861425

Impact Factor (2020): 3.133

Position: 9/43, Q1 in Spectroscopy

Characterization of atmospheric aerosols in the Antarctic region using Raman Spectroscopy and Scanning Electron Microscopy

Spectrochimica Acta Part A, Molecular and Biomolecular Spectroscopy, 266, 120452

2022

Authors: C. Marina-Montes, L.V. Pérez-Arribas, J. Anzano, S. Fdez-Ortiz de Vallejuelo, J. Aramendia, L. Gómez-Nubla, A. de Diego, J.M. Madariaga, J.O. Cáceres

Quality metrics:

Citations: 1 Scopus, 1 Google Scholar

Journal ISSN: 1386-1425

Impact Factor (2020): 4.098

Position: 5/43, Q1 in Spectroscopy

Reviewing in situ analytical techniques used to research Martian geochemistry: From the Viking Project to the MMX future mission

Analytica Chimica Acta, 1197, 339499

2022

Authors: Huidobro, J., Aramendia, J., Arana, G., Madariaga, J.M.

Quality metrics:

Citations: 0 Scopus, 0 Google Scholar

Journal ISSN: 0003-2670

Impact Factor (2020): 6.558

Position: 10/87, Q1 in Analytical Chemistry

PROJECTS

Grupo Consolidado Tipo A, GV-EJ

Funding entity: Basque Government, (ref. IT-245-07) Duration: January 2007- December 2012 PI: Juan Manuel Madariaga Mota Number of researchers: 10 Funding: 478.140 euros. Role: Collaborator

Innovative analytic methodologies for the diagnosis of combustion gases and GHG in urban buildings

Funding entity: Science and Innovation Spanish Ministry (MICINN), Construction Programme, (ref. BIA2008-06592) Duration: January 2009-December 2011 PI: Juan Manuel Madariaga Mota Number of researchers: 5 Funding: 173.393 Euros. Collaborator.

CAUTAPA: Materials, Degradation products and development of new treatment for weathering steel surf

Funding entity: University-Enterprise programme +Euskadi09, Basque Government (ref.UE09+/109)) Duration: January 2010-December 2010 PI: Juan Manuel Madariaga Number of researchers: 5 from the UPV/EHU and 2 from the Guggenheim Museum Bilbao Funding: 84.350 Euros. Collaborator

Ismec 2010 (International Symposium on Metal Complexes XXI Italian-Spanish Congress on thermodynam)

Funding entity: a) Science and Innovation Spanish Ministry (MICINN) (ref.CTQ2010-09904-E), b) Basque Government, c) UPV-EHU. Duration: January 2010- October 2010. PI: M^a Angeles Olazabal Dueñas. Number of researchers: 10 Funding: 42.150 euros. Collaborator

Study of associated materials to meteoritic impacts.

Funding entity: Universidad del Pais Vasco (UPV/EHU) Duration: 15-10-2011 to 30-01-2012 PI: Javier Murelaga Bereicua Number of researchers: 5 Funding: 5000 Euros. Collaborator.

UFI Global Change and Heritage

Funding entity: UPV/EHU, (ref. UFI11-26) Duration: November 2011-December 2015 PI: Juan Manuel Madariaga Mota Number of researchers: 23 Funding: 83.825,20 Euros. Collaborator

Constructions Stone based materials degradation induces by urban pollutants

Funding entity: Science and Innovation Spanish Ministry (MICINN) (ref. BIA2011-28148) Duration: January 2012- December 2014 PI: Juan Manuel Madariaga Mota Number of researchers: 5 Funding: 191.180 Euros. Collaborator

Grupo Consolidado

Funding entity: Basque Government, ref. IT-742-13 Duration: January 2013- December 2018. PI: Juan Manuel Madariaga. Number of researchers: 14 Funding: 601.798 euros. Collaborator

Metorites and impact products: Common processes in the Solar System

Funding entity: Universidad del Pais Vasco (UPV/EHU), ref. AE13/28 Duration: 01-07-2013 to 30-06-2014 PI: Javier Murelaga Bereicua Number of researchers: 5 Funding: 3500 Euros. Collaborator

Enhancement of the Punta Begoña Galeries: Chemical aspects of the construction materials and their

Funding entity: Getxo City Council, (ref. CONV14/10) Duration: October 2014 - December 2015 PI: Juan Manuel Madariaga Mota Number of researchers: 28 Funding: 160.697,22 Euros. Collaborator

Innovative Analytic methodologies for the diagnosis of the pollution impact in silicate construction

Funding entity: Economy and Competitiveness Ministry (MINECO) (ref. BIA2014-28148-P) Duration: January 2015 - December 2017 PI: Juan Manuel Madariaga Mota Number of researchers: 5 Funding: 150.000 Euros. Collaborator

RAMAN instruments development for the EXOMARS Mission: Support Science, Test Support Equipment and

Funding entity: Economy and Competitiveness Ministry (MINECO) (ref. ESP2014-56138-C3-2-R) Duration: January 2015 - December 2016 PI: Fernando Rull Pérez Number of researchers: 12 Funding: 895.000 Euros. Collaborator

Spanish net for performing the cross calibration of the spectroscopic techniques from the SuperCam

Funding entity: Economy and Competitiveness Ministry (MINECO) (ref. ESP2015-71965-REDT) Duration: January 2016 - December 2017 PI: Fernando Rull Pérez Funding: 30.000 Euros

Portable Visible- Near Infrared Reflectance spectroradiometer (Vis-NIR, 350 to 2500 nm))

Funding entity: Universidad del Pais Vasco (UPV-EHU) (ref. INF16/11) Duration: January 2016 to December 2016 PI: Juan Manuel Madariaga Number of researchers: 3 Funding: 40.375,00 Euros

Materials laboratory for the Solar System research (MAToforESP)

Funding entity: Economy and Competitiveness Ministry (MINECO), FEDER (ref. UNPV15-EE-3214) Duration: January 2015 to December 2015 PI: Juan Manuel Madariaga Number of researchers: 3 Funding: 135.695,00 Euros

Elemental and molecular quantitative analysis using LIBS-RAMAN spectroscopies (QUEMA)

Funding entity: Science, Innovation and Universities Ministry (MICIU), Convocatoria Retos Colaboración 2017 (ref. RTC-2017-6306-5) Duración, October 2018 to December 2021 Subproject PI: Juan Manuel Madariaga Number of researchers: 3 Funding: 73.867,00 Euros

Science and Instrumentation for the study of the bio geochemical processes in Mars.

Funding entity: Economy and Competitiveness Ministry (MINECO), Programa de Redes de Investigación (ref. RED2018-102600-T) Duration, January 2020 to December 2021 PI: Juan Manuel Madariaga Mota

The conservation of the weathering steel in artistic applications (ref. UPV/EHUOTRI2009-0237)

Funding enterprise: Guggenheim Bilbao Museoa Duration: May 2009 - December 2009 PI: Juan Manuel Madariaga Number of researchers: 2 Funding: 6.800 Euros

Collaboration agreement between Getxo City Council and the UPV/EHU for the enhancement of the Punta

Funding enterprise: Getxo City Council (ref. 2014.0639) Duration: March 2014-March 2016 PI: Juan Manuel Madariaga Mota Funding: 937.119,95 Euros

In situ analysis and identification of degradations in rock paintings from Solana de las Covachas

Funding enterprise: Nerpio City Council (Albacete) Duration: 12/01/2016 to 30/06/2016 PI: Silvia Fernández Number of researchers: 4 Funding: 6.050 Euros

Quantitative analysis of plastic samples through LIBS technology for the detection and quantification

Funding enterprise: Gaiker Duration: 03/10/2016 to 14/10/2016 PI: Julene Aramendia Number of researchers: 2 Funding: 6500 Euros

Study of the corrosion in Gerdau steels (ref. UPV/EHU-OTRI 2015.0447)

Funding enterprise: Gerdau S. L. Duration: 27/10/2015 to 30/11/2015 PI: Kepa Castro Number of researchers: 2 Funding: 670,59 Euros

Raman spectroscopy analysis of a red painted "trisquel" from the Iron Age (ref. UPV/EHU-OTRI 2017.0)

Funding enterprise: Terra Arqueo SL Duration: 22/09/2017 to 30/12/2017 PI: Silvia Fernández Number of researchers: 4 Funding: 280,90 Euros

Mobility of research staff. United States, JPL NASA.

Funding enterprise: University of the Basque Country. Duration: November 2018 to May 2019. PI: Julene Aramendia. Number of researchers: 1. Funding: 5370 euros

01/09/2020 - CURRENT

NeON - Nanofotonica per nuovi approcci diagnostici e terapeutici in Oncologia e Neurologia

Funding enterprise: Ministero dell'Istruzione UFFICIO SCOLASTICO REGIONALE PER LA CAMPANIA
PI: Prof. Andrea Cusano
CUP F26C18000170005

01/09/2020 - CURRENT

NANOCAN – NANOfotonica per la lotta al CANcro

Funding enterprise: Ministero dell'Istruzione UFFICIO SCOLASTICO REGIONALE PER LA CAMPANIA
PI: Prof. Andrea Cusano Funding: 7.000.000 euros
CUP B51C17000050007 SURF 17061BP000000004

Understanding Raman spectroscopy as a key tool in future Mars exploration missions (MARS2020 and EXOMARS2022) for the search of biosignatures.

Funding enterprise: AIAS/European Commission. Duration: October 2021 to September 2024. PI: Julene Aramendia. Number of researchers: 1. Funding: Salary + 3000 euros per year

MOST RELEVANT AND RECENT COMUNICATIONS TO CONFERENCES

- J. Aramendia, L. Gomez-Nubla, M. Tuite, K. H. Williford, J.M. Madariaga, K. Castro. Surface-enhanced Raman spectroscopy method for determination of maleimide, a key molecule in mars early life exploration. 51st Lunar and Planetary Science Conference 2020.
- J.A. Manrique, M. Veneranda, G. Lopez-Reyes, F. Rull, J.M. Madariaga, R.C. Wiens, S. Maurice, J. Aramendia et al. Ca-Mg-Fe carbonates characterization using RLS and SuperCam-like Raman and Raman-LIBS data sets. Europlanet Science Conference 2020.
- M.J. Egan, R.C. Wiens, S.K. Sharma,.....J. Aramendia et al. Detection limits for SuperCam's transmission spectrometer aboard the perseverance rover: capabilities and implications for Raman spectroscopy on Mars. AGU Fall 2020.
- The ExoMars Rover Science Operations Working Group (RSOWG) Macro Mapping Team (I am member). HiRISE-scale characterization of the Oxia Planum landing site for the Exomars 2022 Mission. Europlanet Science Conference 2020.
- J. M. Madariaga, J. Huidobro, C. Garcia-Florentino, J. Aramendia, P. Ruiz-Galende, I. Torre-Fdez, E. M. Hausrath, K. Castro, G. Arana. Temperature transformation of calcium and potassium Martian sulfates as seen by an Exomars 2022 RLS-like Raman instrument. Europlanet Science Conference 2020.
- I. Torre-Fdez, J. Aramendia, C. Garcia-Florentino, A.M. Ollila, J. Huidobro, P. Ruiz-Galende, G. Arana, S. Bernard, P. Bernardi, O. Beyssac, P. Caïs, K. Castro, S.M. Clegg, A. Cousin, M. Egan, O. Forni, O. Gasnault, I. Gontijo, G. Lopez-Reyes, J.M. Madariaga, J.A. Manrique, S. Maurice, A. Misra, G. Montagnac, T. Nelson, R. Newell, P. Pilleri, S. Robinson, F. Rull, S.K. Sharma, M. Veneranda, R.C. Wiens, P. Willis and the SuperCam Science team. Perseverance's SuperCam-Raman: a quality assurance of analytical spectral variables. AGU Fall 2020.
- J. Aramendia, K. Castro, M. L. Tuite, K. H. Williford, J. M. Madariaga. Organic compounds detection in geologic samples by Raman image and Raman-SEM-EDS combination. GeoRaman 2020.
- J. Aramendia, J. M. Madariaga, M. Koehler, M. L. Tuite and K. H Williford. Kerogen H:C ratio calculation based on chemometric analysis of Raman spectroscopic results. AGU Fall 2020.

HONOURS AND AWARDS

Collaboration fellowship for students – Basque Government

Fellowship for collaborating with the Analytical Chemistry Department during the last year of Environmental Sciences degree.

Spanish Ministry mobility award – Education Ministry

Fellowship for official Master students mobility. I spent 2 months during my Master studies at the Valencia University under Prof. Miguel de la Guardia supervision.

01/01/2010

PhD Basque Government Fellowship – Basque Government

Award for carrying out the PhD. 4 years of contract duration. At the end I was awarded for the thesis quality with a 3000 euros amount

15/11/2014

Marie Curie Special Actions Confund – European Commission

UPV/EHU Extraordinary PhD award 2013/2014

01/11/2021

AIAS COFUND Personal Fellowship

01/03/2022

Maria Zambrano EU Next Generation Personal Fellowship

● NETWORKS AND MEMBERSHIPS

Member of the Science Team of the Raman Laser Spectrometer (RLS) in the EXOMARS2020 Mission

Member of ExoMars Rover Science Operations Working Group (RSOWG) Macro Mapping Team.

● MANAGEMENT AND LEADERSHIP SKILLS

Analytic study of the degradation processes in subaquatic archaeological pieces

Supervised PhD.

PhD: Estafania Estalayo Mena University: Universidad del Pais Vasco (UPV/EHU) Faculty: Science and Technology Faculty
Date: 04/2022

Study of physic-chemist alteration on Martian analogues and meteorites in sulphate presence

Supervised PhD.

PhD: Jennifer Huidobro University: Universidad del Pais Vasco (UPV/EHU) Faculty: Science and Technology Faculty Date:
In progress

Geochemical study of the NWA 6148 Martian meteorite and its terrestrial weathering processes

Supervised Master Thesis

Student: Imanol Torre Fernandez University: Universidad del Pais Vasco (UPV/EHU) Faculty: Science and Technology
Faculty Oficial Master: Paisaiaren Kudeaketa. Ondarea, Lurraldea eta Hiria Masterra / Máster en Gestión del Paisaje.
Patrimonio, Territorio y Ciudad Date: 20/07/2016

CorTen steel: A solution to atmospheric degradation in acid and marine environments

Supervised Master Thesis

Student: Patricia Ruiz Galende University: Universidad del Pais Vasco (UPV/EHU) Faculty: Science and Technology Faculty
Oficial Master: Paisaiaren Kudeaketa. Ondarea, Lurraldea eta Hiria Masterra / Máster en Gestión del Paisaje.
Patrimonio, Territorio y Ciudad Date: 20/07/2016

Archaeometric study of Basque iron

Supervised Master Thesis

Student: Eneko Orueta Iradi University: Universidad del Pais Vasco (UPV/EHU) Faculty: Science and Technology Faculty
Oficial Master: Paisaiaren Kudeaketa. Ondarea, Lurraldea eta Hiria Masterra / Máster en Gestión del Paisaje.
Patrimonio, Territorio y Ciudad Date: 27/09/2018

Geochemical degradation processes: specifications on Lunar meteorite

Supervised Master Thesis

Student: Jennifer Huidobro University: Universidad del Pais Vasco (UPV/EHU) Faculty: Science and Technology Faculty
Oficial Master: Paisaiaren Kudeaketa. Ondarea, Lurraldea eta Hiria Masterra / Máster en Gestión del Paisaje.
Patrimonio, Territorio y Ciudad Date: 19/07/2019

Characterization of geological materials through non-destructive analytic techniques employed in s

Supervised Bachelor thesis

Student: Jennifer Huidobro Martin University: Universidad del Pais Vasco (UPV/EHU) Faculty: Science and Technology
Faculty Degree: Chemistry Date: 07/2018

● OTHERS

- Referee for ISI scientific journals such as Journal of Raman Spectroscopy, Corrosion Science and Nuclear Inst. and Methods in Physics Research B
- Organization of 2 international congresses: International symposium on Metal Complexes (ISMEC 2012) and TECHNART 2017.
- Doctorate Special Award by the University of the Basque Country in 2016.

- Attendance to several international conferences such as RAA, GeoRaman, EPSC, LPSC, Technart and Technoheritage conferences.
- Poster Awards in RAA conference and Congreso Ibérico de Espectroscopia.
- Principal Investigator of a R&D project.
- C1 certificate of English and Basque
- Accreditation ANECA Profesor ayudante Doctor (2016)
- Accreditation UNIBASQ Personal Doctor Investigador (2018)
- Accreditation UNIBASQ Profesor Adjunto (2018)