

Mayra D. Manrique-Ortega

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FULL TIME PROFESSOR (From August 2021)

Centro de Investigación en Corrosión, Universidad Autónoma de Campeche, Av. Héroe de Nacozari 480, 24079 Campeche, Camp.

SNI-CONACyT: Candidate (2021–2024).

Total citations: 23

Education —

PhD

Material Science and
Engineering
UNAM
November 2019

Master

Material Science and
Engineering
UNAM
November 2014

Bachelor

Physics, UNAM
September 2012

Languages —

Spanish: *Native Language*

English: *Advanced
Reading and Writing*

Italian: *Intermediate
Reading and Writing*

French: *Intermediate
Reading and Writing*

LSM: *Intermediate*

Professional experience

2020-2021

Postdoctoral Research Associate • LANCIC • Institute of
Physics, UNAM

2019

Physic Lab Assistant • LANCIC • Institute of Physics, UNAM

2015

Lab Assistant • Coordinación Nacional de Conservación del
Patrimonio Cultural • INAH

The projects consisted on the analysis of Mesoamerican objects for the identification, classification and characterization, of the collections and, later, an analysis of their archaeometric implications.

Academic experience

2015-2019

PhD Student • LANCIC • Institute of Physics, UNAM • Dr. José Luis Ruvalcaba-Sil

2012-2014

Master Student • ANDREAH II • Institute of Physics, UNAM • Dr. José Luis Ruvalcaba-Sil

2010-2012

Undergraduate Student • ANDREAH I • Institute of Physics, UNAM • Dr. José Luis Ruvalcaba-Sil

In addition to the PhD project, a large variety of multidisciplinary investigations were supported as part of the LANCIC and the ANDREAH. For these investigations, the variety of materials included Pre-Hispanic objects (polychrome ceramics, metal artifacts, lithic and lapidary: green stones, turquoise, obsidian), Novo-Hispanics pieces (oil and mural paintings, polychrome sculptures, documents - codices, maps and canvases, tiles),

historical objects (metal sculptures, wax reliefs, documents), and Modern Art (murals - encaustic, fresco and glass mosaic; oil and acrylic paintings).

Technical skill —

Imaging techniques:

IRR
*Ultraviolet-
induced
fluorescent
imaging*
False Color

Spectroscopic techniques:

XRF
FTIR
Raman Spectrosc.
FORS
XRD
Colorimetry

Microscopy:

Optical Microsc.
SEM-EDS

Ion Beam Analysis

Techniques:

PIXE
Ionoluminescence

Publications

Articles:

M.D. Manrique-Ortega et al. (2020) *Mater. Manuf. Processes*, 35:13 1431-1445. DOI: [10.1080/10426914.2020.1743855](https://doi.org/10.1080/10426914.2020.1743855)

M.D. Manrique-Ortega et al. (2020) *Spectrochim. Acta, Part A* 234: 118205. DOI: <https://doi.org/10.1016/j.saa.2020.118205>

M.D. Manrique-Ortega et al. (2019) *Spectrochim. Acta, Part A* 217: 294-309. DOI: [10.1016/j.saa.2019.03.057](https://doi.org/10.1016/j.saa.2019.03.057)

Valentina Aguilar et al. (2019) *Appl. Spectrosc.* 73:9 1074-1086. DOI: <https://doi.org/10.1177/0003702819848478>

Mitrani et al. (2016) *Microsc. Microanal.* 22:6 1304–1315. DOI: [10.1017/S1431927616012010](https://doi.org/10.1017/S1431927616012010)

A. Delgado Robles et al. (2015) *Heritage Sci.* 3: 20-33. DOI: [10.1186/s40494-015-0048-z](https://doi.org/10.1186/s40494-015-0048-z)

Proceedings:

M.D. Manrique Ortega et al. (2014) *Mater. Res. Soc. Symp. Proc.* 1656: 293-307. DOI: <http://dx.doi.org/10.1557/opl.2015.2>

J.L. Ruvalcaba Sil et al. (2014) *Mater. Res. Soc. Symp. Proc.* 1656: 75-93. DOI: <http://dx.doi.org/10.1557/opl.2015.1>

M.D. Manrique-Ortega et al. (2015) *Mater. Res. Soc. Symp. Proc.* 1618: 17-29. DOI: <https://doi.org/10.1557/opl.2014.452>

W. Martínez Molina et al. (2012) *Mater. Res. Soc. Symp. Proc.* 1374: 215-226. DOI: <https://doi.org/10.1557/opl.2012.1391>