



Dr. Gabriela Desireé Tormet-González

I am a passionate chemist with educational background and proven work ethic to guide scientific research and innovation. Creative thinker with a strong background in biochemistry and analytical chemistry. Great at working together with people to ensure projects consistently meet or exceed established goals. Exceptional training and academic qualifications, including knowledge of data analysis.

EDUCATION

DOCTOR OF PHILOSOPHY (PH.D.) IN CHEMISTRY, SEPTEMBER 2019; *University of Campinas, Brazil*

MASTER OF SCIENCE (M.SC.) IN ORGANIC CHEMISTRY, FEBRUARY 2015; *University of Campinas, Brazil*

BACHELOR OF SCIENCE (B.SC.) IN CHEMISTRY, OCTOBER 2010; *Central University of Venezuela, Venezuela*

RESEARCH EXPERIENCE

Ph.D. Thesis: "Bioreduction of alkenes alpha substituted by groups -CH₂"; Area: Biotechnology and Biocatalysis

- Project focused on evaluation of the biocatalytic feasibility of oxidoreductases recombinant enzymes and whole cells of *Saccharomyces cerevisiae* to catalyze the bioreductions of different nitro alkenes.
- Participated in diverse collaborative projects within the chemical department to enrich my research, e.g. theoretical chemistry groups for analyzing protein-substrate interactions.
- Developed new protocols from scratch to produce recombinant enzymes in a traditional organic chemistry group.
- Received grant funding from Coordination of Improvement of Higher Education Personnel (CAPES), Brazil for students research support.

Master Dissertation: "Characterization of α , β and LEH epoxide hydrolases from actinomycetes of the genus *Streptomyces*";

Area: Biotechnology and Enzymology

- Project focused on the functional characterization of wild type hydrolases-cyclases found *via* genome mining in *Streptomyces* sp. to evaluate its potential as novel epoxide hydrolases.
- Received grant funding from CAPES, Brazil for students research support.

Bachelor Research Project: "Characterization of asphaltenes from different Venezuelan crude oil"; Area: Analytical Chemistry

- The project included the design of a Dynamic Light Scattering equipment to determine the structure of asphaltenes from Venezuelan oils.

SKILLS

IT

Python, HTML and CSS, SQL, Pandas, NumPy, Data Visualization, GC/MSD Chemstation, Mnova, UNICORN - ÄKTA purification software, I-Tasser, Phyre2, ChemDraw, AutoDock Vina, Mascot Server, PyMol

Laboratory

Protein purification (IMAC column and FPLC with ÄKTA); protein spectroscopic tests: Bradford, adrenaline for Epoxide Hydrolases, circular dichroism for structural determination; Gel Electrophoresis; culture maintenance; bacterial and yeast transformation; DNA isolation; PCR; restriction enzyme digestion; expression of recombinant proteins; organic synthesis and characterization of small molecules via chromatography (HPLC, GC-MS, GC-FID), IR, NMR, UV/VIS spectroscopy and DLS

Languages

Spanish (Native), Portuguese (Fluent), English (Advanced), Italian (Intermediate)

LEADERSHIP EXPERIENCE

International Younger Chemists Network (IYCN), worldwide, January 2018 to Present

Webmaster board member

- Conceptualize website of the organization and leverage expertise in current chemistry-marketing paradigms to inform future decision making.
- Part of international chemists organization to increase network and share experiences.

Becas.LA, Latin American NGO, January 2016 to Present

Founder

- Launched and managed a social initiative to help students from Latin America find study opportunities.
- Conducted market research and tests; met with societies and allies to increase awareness.

University of Campinas, Campinas-Brazil, February 2014 to December 2016

Teaching Assistant

- Facilitating Organic and Analytical chemistry laboratory classes for undergraduate students.

INTERNATIONAL EVENTS

- Course: Combining synthetic and systems biology for the design of efficient cell factories. UNICAMP, Campinas, Brazil (April 2019)
- Chemical Abstract Service training for the SciFinder Future Leaders in Chemistry. Columbus, Ohio. USA (August 2017)
- International Summer School on Natural Products. University of Naples, Federico II. Naples, Italy (July 2017)
- European Summer School on Industrial Biotechnology. Bioprocess design and optimization for the production of recombinant proteins. Autonomous University of Barcelona, Bellaterra, Spain (September 2016)

PUBLICATIONS

Journal Articles:

- Article under revision: Tormet-González, G. D.; et al. Epoxide hydrolase from endophytic *Streptomyces* shows unique structural features and wide biocatalytic activity. Journal: *ChemBioChem* Manuscript number: cbic.201900638
- Article to be resubmitted: Tormet-González, G. D., et al. Biocatalysis of (Z)-3-azidomethyl-4-phenyl-3-buten-2-one by OYE2: One substrate and two mechanisms. Journal: *ChemCatChem*. Manuscript number: cctc.201900977.
- Tormet-González, G. D., et al. Recent Advances in Genetic Manipulation of Organisms for the Production of Nonribosomal Peptides. *Rev Virtual Química* 8, 1998–2025 (2016).
- de Oliveira, L. G., Tormet-González, G. D., et al. Genome Sequence of *Streptomyces wadayamensis* Strain A23, an Endophytic Actinobacterium from *Citrus reticulata*. *Genome Announc.* 2, 1–2 (2014).

Patents:

- Tormet-González, G. D. and Oliveira, L. G. de. Title: Vector, recombinant microorganism, method of production of the recombinant enzyme epoxide hydrolase and its use. Nro. International Process: PCT/BR2017/000056 Status: Required Patent 30/05/2017.

Book Chapters:

- Tormet-González, G. D. et al. Chapter title: Estratégias genoma-guiadas para a procura de enzimas com interesse biotecnológico. Book: 5th volume of the series Biotransformações e Biotecnologias. Fundamentos e aplicações. 2016.

RECENT AWARDS AND HONORS

- Honored by the International Union of Pure and Applied Chemistry (IUPAC) as the element Beryllium in the Periodic Table of Younger Chemists (2018) ([link](#))
- SciFinder Future Leader 2017 Award. Program sponsored by CAS, a division of American Chemical Society (2017) ([link](#))

ADDITIONAL INFORMATION

Professional affiliations: American Chemical Society, Brazilian Chemical Society, International Younger Chemists Network.

Certificates: IBM Data Science Professional Certificate (currently coursing)