AURELIO ÁLVAREZ IBARRA

PhD in Chemistry • Professional translation • Technical translation • Published scientist Project evaluator • Academic advisor • International speaker • College professor Data structuring and presentation • Scientific programming • High performance computing Code optimization • Parallel computing • Numerical methods • Physical chemistry simulations

PROFESSIONAL TRANSLATION EXPERIENCE

Professional Translator | Infoestratégica Latina / Instituto Mexicano de la Administración del Conocimento, A.C.

2013 - Present

- Over 10,000 documents translated, from English to Spanish and from Spanish to English.
- Over 5,000 documents reviewed and corrected during my leadership in translation projects.
- Promoted the generation of more than 10 new translation professionals from areas like chemistry, engineering, and computer sciences.
- Translated technical, scientific, legal, and commercial documents for more than 20 companies related to the pharmaceutical, health, and hygiene industries, including Abbott Laboratories, Abbvie, Baxter International, Inc. (including Gambro), Church & Dwight Co., Inc, Edwards Lifesciences Corporation, Eisai, Takeda Pharmaceutical Company (including ARIAD Pharmaceuticals, SARcode Bioscience Inc,. Shire and Baxalta) and Upfield Holdings B.V. (including ARIVIA S.A.).

Certified Translator | Poder Judicial del Estado de Veracruz

2021

- Certification SREP-0320-PJEV2021 issued by Poder Judicial del Estado de Veracruz.
- More than 100 certified documents about pharmaceutics and legal affairs.

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ACADEMIC AND SCIENTIFIC EXPERIENCE

Engineering Professor | Universidad Iberoamericana Puebla

2022

• Showed how to solve problems related to chemistry and biology using Python to students of Chemical and Biotechnological Engineering.

Associated Researcher | Université Paris-Sud

2017 - 2019

- Achieved the simulation of chemical phenomena in the range of attoseconds $(10^{-18}s)$ by the implementation of the Ehrenfest Molecular Dynamics module in *deMon2k*.
- Shared the details and results of the implementations in 3 international conferences and 3 articles on computational chemistry for international indexed journals.
- Advised 10 international students about computational chemistry theory, use of *deMon2k* in parallel, high-performance computation systems, Bash scripting, and report writing.

Postdoctoral Fellow | CINVESTAV-IPN

2016 - 2017

• Scaled the computation time down and increased accuracy of results in modules such as infrared spectra and perturbation theory by working out higher order derivatives in deMon2k.

- Published 1 book chapter on computational chemistry in the Handbook of Computational Chemistry, as well as the Enciclopedia del Plástico in collaboration with the Instituto Mexicano del Plástico Industrial/Centro Empresarial del Plástico.
- Advised 5 PhD students about computational chemistry theory, use of *deMon2k* in parallel, high-performance computation systems, Bash scripting, and report writing.

Postdoctoral Fellow | CINVESTAV-IPN

2013 - 2015

- Reduced the calculation time up to 90% for the most demanding calculation types in *deMon2k* by the creation and implementation of the double asymptotic expansion and the mixed selfconsistent field methods.
- Gave 4 national and international lectures and authored 6 articles on computational chemistry for international indexed journals on the results of the implementations.
- Instructed 3 PhD students and 3 BSc students about computational chemistry theory, use of deMon2k in parallel, high-performance computation systems, Bash scripting, and report writing.

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OTHER EXPERIENCE

Basic Sciences Professor | Universidad Iberoamericana Ciudad de México 2019-2021

Basic Sciences Professor | Colegios La Salle Ciudad de México 2019-2021

Academics Coordination | Instituto Mexicano del Plástico Industrial 2015 - 2016



EDUCATION

PhD, Chemistry | CINVESTAV-IPN BSc, Chemical Engineering | Instituto Tecnológico de Veracruz



COMPETENCES

- SDL Trados
- Microsoft Office, Google Docs Editors, Libre Office, Star Office, LaTeX
- Mac OS, Windows, Linux, Unix
- Microsoft Teams, Zoom, Google Meet.
- English language (TOEFL-iBT score 106/120)

AWARDS

- Mexico's National Researchers System, Level 1 – CONACYT – 2019-2021
- Associated Researcher Fellowship Centre National de la Recherche Scientifique • (France) -2017-2019
- Postdoctoral International Fellowship CONACYT (Mexico) 2017-2018
- Postdoctoral National Fellowship CONACYT (Mexico) 2016-2017
- Mexico's National Researchers System, Level Candidate CONACYT (Mexico) 2015-2018
- Postdoctoral National Fellowship (Mexico) CONACYT (Mexico) 2013-2015
- PhD National Fellowship (México) CONACYT (Mexico) 2007-2013