

Ricardo Amaral

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🌐 <http://linkedin.com/in/rdamaral>

📄 <https://scholar.google.com/citations?user=BRWeIHIAAAA>

PROFILE

- Materials Engineer with +9 years of R&D projects and lab operation experiences.
- PhD Candidate and Member of the Phases R&D Group at PSU.
- Former Chief Executive Officer and Authorized Signatory at NanoBusiness (CGCRE ISO/IEC 17025).
- Former Substitute-coordinator of the NanoBusiness Analytical Lab at National System of Nanotechnology Laboratories (SisNANO).

SKILLS

TECHNOLOGIES

Materials-Synthesis

- Nanocomposites: ●●●●●
- Hydrothermal/ Sol-gel/ Wet impregnation
- Thin Films: ●●●○○
- Spin coating/ PE-CVD

Materials-Characterization

- X-Ray-Diffraction ●●●●●
- Thermal-Analysis ●●●○○
- DRS/UV-Vis Spectroscopy ●●●●●
- Electronic Microscopy ●●●○○
- Atomic Force Microscopy ●●●○○

Computational Methods

- ThermoCalc ●●●○○
- DFT/VASP ●●●●●
- FEM ●●●○○

Programming

- Python ●●●●●
- R ●●●○○
- Bash ●●●○○

MANAGEMENT

- ISO/IEC17025 ●●●●●
- PMBOK-PMI & SCRUM ●●●○○
- Version Control ●●●○○
- Project-Valuation ●●●●●
- IP Management ●●●○○

LANGUAGES

- Portuguese-BR ●●●●●
- English ●●●○○

FORMAL EDUCATION

- Aug/2021 - Current **PhD. Energy and Mineral Engineering**
University: Pennsylvania State University
Local: Pennsylvania, USA
- Apr/2018 **MSc. Materials and Chemical Processes Engineering**
University: Pontifical Catholic University of Rio de Janeiro (PUC-Rio)
Local: Rio de Janeiro, Brazil
- Nov/2016 **BSE. Dual Degree Nanotechnology and Materials Science and Engineering**
University: Federal University of Rio de Janeiro (UFRJ)
Local: Rio de Janeiro, Brazil

WORK EXPERIENCE

- Aug/2021 - Current **Research/Teaching Assistantship at Penn State**
Organization: The Pennsylvania State University
- Jan/2018 - Jun/2020 **Chief Executive Officer at NanoBusiness LLC**
Organization: NanoBusiness Informação e Inovação LLC
- Jul/2015 - Nov/2020 **Researcher (Project Coordinator) at NanoBusiness LLC**
Organization: NanoBusiness Informação e Inovação LLC
- Jul/2014 - Jun/2015 **Project Consultant for UNESCO/MCTI**
Organization: Project No 914BRZ2018-UNESCO/MCTI
- Jul/2012 - Jun/2014 **Engineering Internship at FMC Technologies LLC**
Organization: FMC Technologies do Brasil LLC

HONORS AND AWARDS

- Aug/2022 **WAAIME Scholarship**
Organization: Society for Mining, Metallurgy & Exploration
- Aug/2021 **Graduate-PhD Assistantship**
Organization: The Pennsylvania State University
- Aug/2017 **GM-CNPq Masters Fellowship**
Organization: National Council for Scientific and Technological Development (CNPq)
- Jun/2015 **Student Recognition: Junior Enterprise foundation**
Organization: Federal University of Rio de Janeiro (UFRJ)
- Jun/2014 **CNPq/PIBIC Scientific Initiation Scholarship**
Organization: National Council for Scientific and Technological Development (CNPq)

MAIN ACHIEVEMENTS

- Author of 2x Patents;
- Author of 4x Articles (+2 under revision);
- Author of 4x congress presentations (1x opening session);
- R&D Projects Grants > \$800,000.00;
- Founder of the Non Profit Organization [Auger Nanotecnologia](#);
- Founder of the Academic Event "I Nanotechnology Journey UFRJ";
- Appointed Sub-coordinator of the NanoBusiness Analytical Lab at the Brazilian National System of Nanotechnology Laboratories ([SisNANO/MCTIC, 2020](#));
- Appointed Member of the Human Resources Working Group at the Brazilian Nanotechnology Competitiveness Forum (MDIC, 2011-2012);