Profile:

Doctor in Engineering and Material Science from the Institute of Physics of the Universidad Autónoma de San Luis Potosí in 2019. He is a Researcher at Micro and Nanotechnology Research Center from Universidad Veracruzana. Membership: National Researchers System (SNI, Level 1). Dr. Delgado-Alvarado has research focused to Colloidal Physical-Chemistry, Surfactant Systems, Synthesis and Processing of Polymers, Synthesis and Chemical Modification (Functionalzation) of Nanoparticles and Nano/structures for applications in the industrial sector (Paints, Food, Medicine). He has develop Nanotechnological Formulations, and Advanced Characterization Methodologies. Also, he develops physicochemical modification methods to investigate how the influence of functional groups present in a nanomaterial can modulate the macroscopic properties of polymers as well as peptides (by analyzing molecular docking study). Selective functionalization has allowed it to develop functional materials (functional polymers/biopolymers) with antimicrobial, anti-corrosion, packaging, packaging properties, and nanomaterials used in energy harvesting and medicine, among other applications. Dr. Delgado-Alvarado develops applied research projects with his research group Polymers and Nanotechnology. In addition, he is reviewer of International Journal as International Journal Biological Macromolecules, Journal Thermal Analysis and Calorimetry , MSR communications as well , Editor Guest in Material Today of Elsevier and Frontier sensor.

My scientific and technological experience has allowed me to generate high-impact scientific research, national and international cooperation projects, technological developments of high-added value for the industrial sector, the training of highly specialized human resources, a Bachelor's degree (thesis), Master's, and Doctorate levels, and international research stays.

This robust academic background lays the foundation for an interdisciplinary approach to materials research

His areas research interests include physics, chemistry, materials science, and engineering.

My Research Group: **Polymers and Nanotechnology.**

LGC.:

- ✓ Synthesis and Processing of Polymers and Biopolymers.
- ✓ Synthesis and Chemical Modification (Chemical Organic and Chemical Asymmetric)
- ✓ Peptides (Molecular Docking Study)
- ✓ Colloidal Physical-Chemistry, Surfactant Systems
- ✓ Nanomaterials used in energy harvesting.

Research Projects To Be Developed:

- ✓ "Surface Modification of Polyhedral Structures to Impart Antimicrobial Properties to Plastic and Green Energy".
- ✓ " Development of biopolymers matrices for Blue Energy production".
- ✓ Development of Biopolymeric Matrices and Advanced Composite Materials for Energy Harvesting Application".
- ✓ " Modification of Metal Oxides with Ag to Confer Antimicrobial Properties to Polymers".
- ✓ "Study of the agglomeration behavior of Nanoparticles TiO_2 in complex fluid systems for good colloidal stability.
- ✓ Design of a microfluidic system to develop an electrochemical sensor for protein detection in blood.

Personal Information:
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Level SNI: I
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