



Name: Alicia Rodríguez Pulido Full profesor SNI Level I Tel. 52 618-1301120 Fax. 52 618-1301111 Email: investigacion\_arp@hotmail.com

Education

**Post PhD in Nanotechnology** from the US Air Force (Arizona University-IPICYT).

Post PhD in Nanotechnology National Laboratory LINAN, IPICYT, San Luis Potosi.

PhD in Materials Science, The University of Sheffield, UK.

**Master of Materials Science**, Technological Institute of Saltillo - Advanced Chemical and Extractive Industries Engineering School of the National Polytechnic Institute, Zacatenco City

Engineering in Metallurgy, Technological Institute of Saltillo.

## **Professional Experience**

UJED, Universidad Juarez del Estado de Durango, Research Professor. (Actually)

**UANE**, Northeastern University, AC, and **UAC**, Autonomous University of Coahuila Advisor and Consultant of Research and Graduate Studies).

**FORDECYT- CONACYT** / Technological University of Matamoros. Fordecyt Research Project. **CNMN-IPN**, Center for Nanoscience and Micro and Nanotechnology of the National Polytechnic Institute, Deputy Director of the Nanoscience CNMN-IPN.

**COMIMSA**, Corporation for Materials Research Mexicana, SA de CV, Researcher manufacturing area **Research interests** 

Development, processing, characterization and degradation of new nanostructured polymeric ceramic metal.

Development of ceramic nanoestruturados WC-Co,  $ZrO_2$ -oxides, SiO<sub>4</sub> -B; MWNT synthesis of CNT. Analysis of fracture materials

Fracture mechanisms of metallic ceramic materials in the productive sector.

Biomaterials and bioenergy.

Development of composite materials, nano-structured materials, analysis of contaminants through chemical analysis and dendrochronology, biodiesel and energy efficiency

**Selected Publications** 

"Anchorage of Inorganic Nanoparticles on Nitrogen doped Multiwalled Carbon Nanotubes", NT09, China, 2009.

"Effect of the substrate on the properties of ZnO-MgO thin films grown by AP-MOCVD", Thin Solid Films, 6044-6052, (2011).

*" Indentation size effect on the Fe2B/substrate interface", Surface and Coatings Technology, 206, (2011), 1816-1823* 

"Processing and Structural Characterisation of 3Y-TZP Ceramics Resistant to Hydrothermal Ageing"; Key Eng. Mat. 206-2, pp.1053, 2002

**Funded projects** 

"Development of ceramic nanostructured for oil and gas drilling" (Varel International Co.) "Detection of contaminants in gallery trees in regions at risk by analytical chemistry and dendrochronology science" (C. SENER Cenid Raspa).

"Energy potential of sustainable desert oil derived from organic products" (funded CONACYT SENER, CONANP, INIFAP);

"Bio nano organic coatings for competitiveness in the field" (CIIDIR-IPN, Soc. Productiva de la Frontera SA de CV, funded CONACYT SENER).

"Bioclimatic Fibrocerments for energy efficiency" (CIIDIR-IPN)