



Dr. Omar Solorza Feria is Professor of Electrochemistry at the Chemistry Department at CINVESTAV. He is Industrial Chemical Engineer from ESIQIE-National Polytechnic Institute and MSc and PhD at CINVESTAV-IPN, Mexico. He did his post-doctoral training at the Solid, liquids et electrochimie at University of Paris and at the Hahn-Meiner Institute, Berlin, Germany. Since 1985 is a full time researcher in the Chemistry Department of the CINVESTAV-IPN. His interest area of research include the synthesis and characterization of electrocatalysts produced in liquid solvent at low temperature, for electrochemical energy conversion in polymer electrolyte membrane fuel cells. Professor Solorza-Feria has participated in more than 150 published articles and received approach 2000 citations, and mentored over 25 M.S. and Ph.D. students and postdoctoral associates at CINVESTAV.

His scientific interest concern the improvement of the ORR kinetics of nanocatalysts, performance studies on the specific and mass activities of alloyed, bi- and three-metallic electrocatalysts with low Pt-content for the cathodic reaction in PEM fuel cells. He has developed a chemical methodology for core-shell nanocatalysts fabrication used as cathode electrodes in H_2/O_2 fuel cells. For structure and physical analyses he is widely using FTIR, XRD, SEM, HRTEM, XPS, TGA and BET electronic infrastructure. He is also dedicated in the design and manufacture of hybrid H_2 -PEMFC-Battery vehicular transport prototypes. He has received funding from CONACYT and ICYTDF. He is founder of the Mexican Electrochemical Society and Mexican Hydrogen Society.