The role of water in hydrogen electrocatalysis

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8. Curriculum Vitae

Isis was born in Barquisimeto, Venezuela, in January 1983. She moved to Caracas to pursue studies at Simón Bolívar University when she was 15 years old, and spent six years reading about world-class literature, philosophy and Latin-American history, striving between a humanistic career (Literature) and a scientific career (Chemistry). In 2007, Isis started teaching basic chemistry courses, which motivated her to start working in the Electroanalysis lab and, later, in the Solid State Physics lab of the university *(ad honorem)*. In her Master thesis, Isis worked on the synthesis and characterization of a family of double layered hydroxides, known as hydrotalcites, as the catalytic support for a biosensor based in an immobilized enzyme. Ultimately she built and tested a biosensor for the detection of halogenated pollutants from wastewaters, based on immobilized horseradish peroxidase. She finished her Chemistry studies in 2011 and moved to The Netherlands, to work in a PhD project under the supervision of Professor Marc Koper. The project was aimed to understand the role of the solvent in the hydrogen oxidation and evolution reactions. In her PhD project, she demonstrated the preferential solvation of protons in not-completely-dry acetonitrile solutions and elucidated the origin of the slow kinetics of the hydrogen evolution on platinum in aqueous alkaline electrolytes. The results of her work are presented in this thesis.