



# ESCOLA POLITÉCNICA DA UNIVERSIDADE DE SÃO PAULO

Departamento de Engenharia de Construção Civil

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São Paulo, March 8<sup>th</sup>, 2009

Dear Sirs,

I had distinct pleasure of having the engineer Leandro Francisco Moretti Sanchez as a student in my graduate course “Concrete Mix Design Technology” and “Corrosion of Reinforced Steel in Concrete Structures”, and on my scientific studies program at University of Sao Paulo, under the theme “Alkali-Aggregate Reactions in Concrete”.

The academics of University of Sao Paulo are most challenging, and Leandro fulfilled all the requirements with the added challenge of honors and advanced courses. He is an outstanding professional and student. His activities developed during his scientific study under my supervision required extensive research and persuasive skills, achieving very important contacts that turned possible a rich and useful international study.

The alkali-aggregate reaction (AAR) in Brazil also is one of the most important pathology that has been affecting concrete structures in the last ten years.

Leandro has studied the used test methods that have been carried out in the laboratory to prevent AAR. He made a comparative analysis among them and developed a new and accelerated test method. He also participated in an international interlab program with some countries as Canada and USA studying and testing aggregates. After three years working with concrete tests methods and AAR, I believe that his experience gained through his Master of Science studies makes him a great candidate to pursue the research in this area.

I could always count on him to academic activities and researchers on my line of studies. During his studies and researches for MSc he wrote some important papers and presented them in congresses.

Since his classmates, I hold him in the highest esteem. I sincerely recommend Leandro Sanchez as student researcher for Laval University.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Paulo Helene', written in a cursive style.

Eng. Paulo Helene

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