June 14, 2010

Department of Homeland Security

U.S. Citizenship and Immigration Services

Texas Service Center

Re: I-140 Immigrant Petition for Alien Worker, filed on behalf of Roy Liu-Marques, as a Professional holding an advanced degree or of Exceptional Ability in the National Interest

To Whom It May Concern:

This testimonial letter is submitted in support of the Form I-140, Immigrant Petition for Alien Worker, filed on behalf of Roy Liu-Marques, as a foreign national who is a professional of exceptional ability in the field of hurricane research and wind damage mitigation.

By way of introduction I am Jason Lin, PhD. At present, I am Vice President of WeatherPredict Consulting, Inc. (WPC), an US affiliate of Bermuda-based RenaissanceRe. WPC focuses on modeling atmospheric hazards and vulnerability. I have over 25 years of research and development experiences in building aerodynamics, structural dynamics, wind engineering, risk modeling as well as wind energy and aircraft design. I developed the concept of aerodynamics tailoring to reduce wind loads for buildings and pioneered its application for hurricane resistant buildings. I developed a wind load estimation system for predicting wind damage to buildings and developed industry-leading, engineering science-based probabilistic model for estimating hurricane vulnerability for a variety of buildings. I am the inventor for 6 US and international patents or pending patents, that include the aerodynamic devices to suppress vortices known as AeroEdgeTM.

[DESCRIPTION OF WRITER’S PROFESSIONAL BACKGROUND AND DETAIL REGARDING EXPERIENCE, PROFESSIONAL MEMBERSHIPS IN COMMITTEES, SERVING ON PANELS, EDITOR/CO-EDITOR OF JOURNALS, # OF PUBLICATIONS, PRESENTATIONS, LECTURES, ETC.]

Through the research and development process for the AeroEdgeTM, several tests of full-scale specimens were performed at the Wall of Wind facility at the International Hurricane Research Center (IHRC) at Florida International University (FIU). In the course of this work I became thoroughly familiar with the work performed by Mr. Liu-Marques and his involvement with the Wall of Wind and the Laboratory for Wind Engineering Research (LWER). I met Roy when he was a Masters student at FIU, working on his thesis related to the improvement of the RenRe Wall of Wind wind field through the development of flow management devices and techniques that gave the facility the capability to closely simulate hurricane characteristics.

With the continuation of his work at the LWER as a Research Scientist he has been able to support the important endeavor that the IHRC has taken together with RenaissanceRe, towards the study of the performance of structures and components under tropical cyclone wind loads simulated by the RenRe Wall of Wind. His acquired expertise has been fundamental to the outstanding performance of an innovative laboratory setup like the RenRe Wall of Wind. Being a member of the wind engineering team at FIU, Mr. Liu-Marques will be able to strongly support the setup of the new 12-fan electric system being built at the LWER at FIU. His collaboration, under Dr. Arindam Gan Chowdhury’s leadership, has contributed to building a strong wind engineering team that has been nationally and internationally recognized by its achievements.

Mr. Liu-Marques has been able to build on his wind engineering expertise not only by contributing on building a state-of-the-art full-scale testing facility like the RenRe Wall of Wind, but also by supporting several other hurricane-related research activities carried out by the LWER and the IHRC. These activities include numerous community outreach events that are important for disseminating the outcomes of the hurricane research taking place at FIU and creating awareness of the importance of hurricane preparation by structural mitigation and community preparedness. Mr. Liu-Marques and I had the opportunity of forming part of the judging panel on the technical performance of wind damage mitigation techniques created by teams of high school students during the “Wall of Wind Contest” on May 2010.

He has also actively participated in the deployment of instrumented portable meteorological towers during hurricane landfall along the U.S. coastline as part of the Florida Coastal Monitoring Program (FCMP). Besides acquiring valuable information on the hurricane wind characteristics that is analyzed and input into the RenRe Wall of Wind simulations, these activities present a unique opportunity for evaluating wind damage on structures and correlating it with observed wind speeds from the deployed towers.

Roy has proven interest in the field of hurricane research and given his employment with one of the leading research centers in hurricane research, I shall expect many contributions towards understanding the effects of hurricanes on structures and wind damage mitigation. These accomplishments are evidence that Mr. Liu-Marques is a valuable asset to support the research activities at the LWER and that he is an excellent candidate for permanent residency in the United States.

If you require any further information, please do not hesitate to contact me.

Sincerely,

Jason Lin, Ph.D.

Vice President, Engineering Science

WeatherPredict Consulting, Inc.

3200 Atlantic Avenue, Suite 114

Raleigh, North Carolina 27604

Phone: (919) 256-8248

E-mail: jason.lin@weatherpredict.com