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 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 and has been an outstanding researcher in the field of wind engineering and hurricane research.

I would like to familiarize you with my ability to accurately assess Mr. Liu-Marques’ research potential in the field of wind engineering. I am Dr. Emil Simiu with over 30 years experience in this field. At present, I am a Distinguished Research Professor at Florida International University (FIU). I have worked extensively on the estimation of wind and wave effects on buildings and bridges. I have developed the database-assisted design concept, an essential step pertaining to the development of performance-based standards. I am the co-author of various books including Design of Buildings and Bridges for Wind (Wiley, 2006) and Wind Effects on Structures (3rd Ed., Wiley, 1996). I am the author or co-author of about 100 publications in refereed journals. I am the 1984 recipient of the Federal Engineer of the Year award from the National Society of Professional Engineers, the inaugural recipient of American Society of Civil Engineers’ (ASCE's) Robert H. Scanlan Medal (2003), and the recipient of five U.S. Department of Commerce Medals, including two Gold Medals. Please see the attached copy of my bio-sketch for more details.

Being a team member for FIU’s wind engineering program has allowed me to interact and collaborate with Mr. Liu-Marques while fulfilling my research activities. Being part of one the leading centers for hurricane research and damage mitigation, the Laboratory for Wind Engineering Research (LWER) at the International Hurricane Research Center (IHRC), allows me to assess his contributions and capabilities from a research perspective.

Mr. Liu gained unique experience on full-scale testing while assisting on the setup and commissioning of the RenaissanceRe Wall of Wind. His Master’s Thesis involved the study and improvement of the wind field generated by the RenaissanceRe Wall of Wind and testing different devices and techniques to manage the flow and recreate hurricane characteristics. His study helped the facility to become a unique laboratory with capabilities that allows testing structures under simulated hurricane conditions and a controlled environment. Also, his findings together with the post-doctoral work of Dr. Peng Huang, generated a paper presented at 4th International Conference on Advances in Wind and Structures (AWAS’08) and a peer-reviewed publication on Wind and Structures.

His interest in the field of hurricane research and his proven eagerness to contribute on the mitigating effects and damage from windstorms, presented him with the opportunity to form part of the wind engineering team as a Research Scientist at the LWER at the IHRC. This role also led him to coordinate and participate on the efforts FIU has taken on surface wind measurements under tropical cyclone conditions. FIU is a collaborator on the Florida Department of Community Affairs (FL DCA) sponsored Florida Coastal Monitoring Program (FCMP) which takes portable weather towers to locations nearby landfall sites of tropical cyclones along the United States coastline. The towers collect meteorological information about the storm and make it available real-time to scientists at the National Hurricane Center, emergency managers and wind engineering community. Mr. Liu-Marques coordinated FIU’s efforts on the Florida Hurricane Alliance Round 3 on Surface Wind Measurements, which is a multi-university program sponsored by the National Oceanic and Atmospheric Administration (NOAA) and managed by IHRC.

The stated accomplishments are proof that Mr. Liu-Marques is a valuable asset to support the research activities at the LWER led by Dr. Arindam Gan Chowdhury. In my professional opinion, Roy is an excellent candidate for permanent residency in the United States and his contributions on hurricane research are of great benefit in the efforts to mitigate wind damage nationwide. I recommend him for permanent residency.

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

Sincerely,

Emil Simiu, Ph.D., P.E., F.ASCE

Distinguished Research Professor

No phone

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