



Subject: Dr. Clement Riedel's petition for EB2 NIW, Second Preference Worker with Exceptional Ability
Barcelona, 29th May 2014.

To Whom it may Concern:

This letter is submitted in support of Dr. Clement Riedel's petition for permanent resident status in the United States. It is my professional opinion that his admission and ability to work permanently in the United States will be greatly beneficial to the fundamental research on nanotechnology and biophysics at the nanoscale. Considering his qualifications, he certainly has proven himself to be an outstanding researcher with extraordinary ability in science and great potential.

As an Associate Professor at the Department of Electronics, University of Barcelona (Spain), and group Leader at the Institute for Bioengineering of Catalonia (Spain) I am considered an expert in the merging fields of electronics and biology. My research focus on microsystems for biological applications on-a-chip and on Atomic Force Microscopy for the electrical study of biological samples. I have authored and co-authored over 60 full length articles in prestigious international peer reviewed journals such as Nature Material, Nano Letters and Nanotechnology. I have never worked with Dr. Riedel, and in fact I do not know him personally, besides occasional meetings in international conferences. My evaluation is based only on his outstanding contributions to the field of nanotechnology in the subdiscipline that I have been specializing in.

Dr. Riedel has a promising academic background with 12 publications in international peer reviewed journals in a short time interval. These publications had an important impact on the scientific community. They have inspired and been independently cited by research groups in Europe, Asia and USA. He is currently working in the Prof. Bustamante Lab, at the University of California in Berkeley (one of the most prestigious university to perform research in our field of endeavour.) His research has covered polymer dynamics at the nanoscale and atomic force microscopy (in the electrostatic and liquid mode) and, currently, he is working in enzymology and single molecule biophysics, although I'm less familiar with these fields of research and will not judge the relevance of his works in these fields.

Dr. Riedel notably made groundbreaking findings by understanding and quantifying the electrodynamic interaction between an atomic force microscope tip and soft materials. Dr. Riedel main contributions were in the description of the lateral resolution in Electrostatic Force Microscopy (EFM) for dielectric samples (results published in the journal Nanotechnology), in the prediction of contrast inversion effects in electrostatic force microscopy imaging of charges trapped below the surface of a dielectric (also published in the Nanotechnology journal), and in the prediction of the tomographic capabilities of Electrostatic Force Microscopy as a non invasive subsurface characterization technique (published in Applied Physics Letters). These works provided new insights into the mechanisms of EFM image formation and the potentialities of this emerging nanoscale technique. I have to underline that Dr. Riedel is the first authors in this three papers (and in 10 total) meaning that he was the driving force in this research.

Dr. Riedel brings a unique blend of talents to his research endeavour. It is my opinion that he should be able to continue to contribute greatly and uniquely to the national interest of United States. Dr. Riedel is an asset to the scientific community. I support his application for permanent resident status enthusiastically and without reservation, and urge you to approve his petition for EB2 NIW, Second Preference Worker with Exceptional Ability.

Yours sincerely,

Dr. Gabriel Gomila
Group Leader-IBEC