Department of Physics and Astronomy California State University, Northridge

Dear Professor Miroslav Peric,

I am pleased to offer my recommendation for Nihal Gozlukluoglu to your academic program. Nihal worked closely with me at the University of California, Los Angeles during my post-doctoral work from September 2016 to June 2018 with the CUORE (Cryogenic Underground Observatory for Rare Events) experiment under the guidance of Professor Huan Z. Huang. During this time, I had the chance to mentor Nihal while working on a project developing particle transport simulation codes modeling the response of cryogenic bolometers to nuclear decay products as well as the shielding of these detectors from ambient radiation backgrounds to search for neutrinoless double beta decay. I was able to personally witness her work routine and assess her future potential in furthering her academic studies.

Nihal is a diligent student that works hard to learn concepts and apply them in a research environment. She will quickly absorb new ideas and skills to perform original work. During her time with me, she took on the task of investigating case studies for employing various shielding schemes and materials for the detectors using the GEANT4 Monte Carlo particle transport library. Her work has provided valuable insight into potential improvements for the project toward placing more aggressive limits on the decay rate of neutrinoless double beta decay. Additionally, I would also like to highlight her ability to work responsibly as a team player, and maintain a professional and friendly relationship with both her mentors as well as her peers. She has a bright and friendly personality and is liked by all in the research group.

I see Nihal having high potential for furthering her education and developing as a professional researcher. I believe she can grow at any institution, but she has chosen your particular program as the place to further her studies. I am confident that her admission will be a decision you will not regret.

I would be happy to answer any questions you may have or to discuss my recommendation in further detail. Please feel free to contact me at the information provided below.

Sincerely,

Michinari Sakai, PhD Senior Professional Staff

The Johns Hopkins University – Applied Physics Laboratory