Syed Ahsan Ali Bokhari Research and Development Division, Pakistan Meteorological Department, Islamabad Pakistan February 28, 2020

Organisers Summer School, ESiWACE2 University of Reading, UK, RG6 6UR

Dear Sir/Madam,

I read the information about the "Summer School on Effective HPC for Climate and Weather" on your website. With this letter, I would like to express my interest in participation in the summer school. I am working in the IT unit of the Pakistan Meteorological Department (PMD) with a responsibility to set up, maintain, and upgrade the High-Performance Computing (HPC) hardware and software of the atmospheric modeling center of PMD. I am managing a small-sized HPC center with 672 cores and 21 TFLOPs peak computational power. The HPC system is being used to generate medium-range weather forecasts (countrywide, 3-10 days) using a suite of NWP models and also for climate research. I have been working with the research scientists to develop and maintain an internal webbased display and visualization system for weather and climate prediction. I have always been committed to ensuring efficient use of the HPC facilities, including associated servers and file storage systems, by managing competing requirements and usage, liaising with the vendor for support, monitoring operational jobs and implementing a general user guide.

I am eager to learn technical aspects of modern leading-edge HPC technologies and skills to exploit the full potential of available resources. I have not yet received any appropriate training in HPC management and maintenance, chiefly because there are not enough learning opportunities available in Pakistan and also the HPC equipment is mostly Grant-in-Aid with no training given at the time of deployment. Besides having limited access to knowledge, I have been able to keep up the job of HPC handling with self-learning through open resources, however, routinely there are emerging issues being faced in the management and efficient use of the HPC resources which definitely demand capacity building in the area. The school will provide me this opportunity and support my aim to gain the proper skills necessary for efficient workflow management, regular maintenance and future up-gradation of HPC. As a group project, I would like to develop, with the support of group members, a high-performance Web-based system for spatiotemporal data visual analytics for Climate and Weather studies.

I take immense pleasure in learning new concepts. This inquisitive nature of mine along with a desire to realize my full potential drives me to pursue research. I am aware that research calls for complete dedication and commitment. I consider myself to be mature, perceptive, persistent and open to criticism, qualities which I believe are essential for group research. I regularly supervise interns from local universities who are working on the topics of climate and weather data post-processing and visualization. Therefore, upon my return to the home country, I would be glad to share the learned knowledge with my peers and academia working on the relevant topics.

Thank you for your time and consideration. I look forward to hearing a positive response from you.

Sincerely,

Syed Ahsan Ali Bokhari