

From: Margaret Hall [margot.hall@usm.edu]
Sent: Thursday, January 30, 2014 5:19 PM
To: David Kumar David
Subject: RE: support letter request

January 30, 2014

To Whom It May Concern:

I fully support the grant proposal of Dr. David Kumar (please see below). I think that his proposal to use the Scanning Tunneling Microscope (STM) as a method of improving the knowledge of elementary school teachers and college/university teachers in training is both timely and important. Recently there has been a distinct effort to improve the content knowledge of k-12 science teachers and with it (hopefully) the interest of k-12 students in the sciences, technology, engineering, and math (STEM). Anything that Dr. Kumar and others can do to advance that objective is most important!! It is to be hoped that the use of the Scanning Tunneling Microscope in school demonstrations, pre-service education courses, and scientific meeting presentations will accomplish this objective. As a university professor I value and appreciate individuals like Dr. Kumar who are constantly trying new approaches to help their community modernize their math/science curricula and the instruction which is given to our future generations.

Additionally, I have known Dr. Kumar for two decades and have admired his work for the American Institute of Chemists and his continuing efforts to improve science education in his area of Florida.

If I can be of further service, please don't hesitate to contact me at the address given below.

Sincerely,

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From: David Kumar David [mailto:david@fau.edu]

Sent: Thursday, January 30, 2014 3:55 PM

To: Margaret Hall

Subject: support letter request

dear margot,

I am applying for a small an internal grant at Florida Atlantic University and I need a letter of support from you. Title and brief Abstract follow.

Title: STEM Education with Scanning Tunneling Microscope

Abstract: This project aims to implement Scanning Tunneling Microscope (STM) (educators version - NanoSurf NaioSTM™) in selected classes of pre-service elementary teacher training at Florida Atlantic University to improve their understanding of STEM through nanoscale and nanotechnology, and to use STM to promote STEM awareness among local K-12 school students through STM demonstrations linking nanotechnology. A pilot study will be designed and implemented among the students in selected K-9 Science Methods to measure the effect of learning with the STM.