Michael F. Thorpe, Foundation Professor
Physics, Chemistry & Biochemistry
Bateman Physical Sciences PSF 359
Tempe, AZ 85287-1504

Fax: (480) 965-4669
Tel: (480) 965-3085
mft@asu.edu
phy.asu.edu/thorpe

Molecular Imaging Corporation Endowment Committee. 20 February, 2011

I should like to support the awarding of an Molecular Imaging Award to **Mr. Avishek Kumar**.

Avishek joined the graduate program at ASU in 2009 with a prestigious GANN fellowship for his first year. This is given to only the very best domestic students who have demonstrated initiative and excellence at the undergraduate level. In his fist year Avishek developed new techniques to computer generate two dimensional random networks appropriate for amorphous graphene. The 2010 Nobel prize in physics was given in 2010 for the synthesis of graphene which is a promising new material for micrelectronics. The work that Avishek is doing is multi-disciplinary and has important applications in cell biology through the structure of cucumbers, and in geology in rock formations like Fingal's cave and in the morphology of the cracks found in dried lake beds. In the time that Avishek has been working in my lab, he has made a substantial impact and it is a pleasure to have such a conscientious and pleasant person working with us in advancing our understanding of these disparate areas from a very new perspective. Progress in Science is often made by either talented younger researchers, or by people who cross disciplinary boundaries, bringing fresh insights. Avishek Kumar falls into both categories.

Avishek is a scholastically outstanding graduate student who I anticipate will have an illustrious career. His undergraduate degree is from Carnegie Mellon University. He has maintained a straight 4.0 GPA at ASU.

I am spending considerable time as Leverhulme Professor at Oxford University in England and Avishek visited in 2010 and will visit again in 2011 to discuss his work with interested collaborators there. This is unusual but I felt that Avishek has already accomplished enough to make these visits worthwhile. The receipt of a prestigious Molecular Imaging Corporation award would recognize Avishek's early achievements and energize his future research work.

M. F. Thorpe, Leverhulme Visiting Professor, Oxford University 2009-2011.