Abstract Submitted for the NEF12 Meeting of The American Physical Society

Incorporating Nanotechnology into High School Curricula GARY SMITH, AAPT — In the summers of 2010 and 2011, I was a participant in a summer RET experience hosted by Boston University's Electrical and Computer Engineering department. As a part of my experience, I worked with Prof. Hatice Altug, gaining insight into novel techniques her group has developed in constructing nanoplasmonic antenna arrays through lithographic techniques. In addition Prof. Altug and I worked to develop classroom materials that would introduce high school students to the promise of nano-scale science, while providing them with some essential conceptual background in the subject. I have now implemented these techniques into a second year (non-AP) course in high school physics. This course emphasizes themes of sustainability, fundamental physical principles, and ways in which new developments in materials are leading to the next generation of engineering developments. I currently work as a physics teacher and science department head for a Massachusetts Catholic high school.

Gary Smith AAPT

Date submitted: 15 Oct 2012

Electronic form version 1.4