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Sandia National Laboratories

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To whom it may concern,

I am writing in support of the NSF proposal "Faculty Early Career Development (CAREER) Program" (solicitation # 11-690) by Professor Diedrich A. Schmidt of the North Carolina A&T State University. His proposal will focus on studying the optical properties of graphene films in THz regime, and on understanding the structure-property relationship of nano-patterned graphene. I will be collaborating with Professor Schmidt by providing large-area epitaxial graphene samples.

Professor Schmidt and I have been actively collaborating in the last few years through studying the physical properties of graphene. At Sandia National Laboratories, we have a dedicated facility to produce epitaxial graphene samples on silicon-carbide substrate, supported by internally and externally funded research programs to develop a graphene-based optical-detector. The outcome of Professor Schmidt's research group through this collaboration will serve as an essential part of our research program in understanding the dielectric response of graphene to the electric field, crucial for detector's responsiveness.

Knowing that North Carolina A&T State University is well established in higher education for minorities, not only will this collaboration produce leading edge scientific and technological advances but also train and educate the next generation of minority researchers in the cross-disciplinary research environment. The interaction between us (i.e., a national laboratory) and the future workforce representing minorities will continue diversifying the workforce to represent the demography of the US.

Sincerely,

Taisuke Ohta
Senior Member of Technical Staff