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To Whom it May Concern:

I am writing this letter on behalf of Dr. Brett Kraabel. I have known Brett since 1997 when he started his work in our laboratory as a postdoctoral fellow. He came to Los Alamos with a solid background in laser optics and polymer physics that allowed him to quickly begin productive work on several projects. His initial assignment was designing and building an experiment for polarization sensitive femtosecond transient absorption studies of conjugated polymers. It took him only 4 months to develop a complex femtosecond system and to start measurements. In these experiments, Brett studied nonlinear optical responses and dynamics of initial photoexcitations in a series of pi-conjugated polymers. The important result of this work was the development of a unifying model for excited-state spectra for a large group of conjugated molecules that was published as a comprehensive review in *Phys. Rev. B.*

Brett was also involved in the project on the development of polymeric and quantum dot materials for applications in ultrafast optical holography. In order to maximize the dynamic grating amplitude and to reduce losses in the probe beam, he applied a novel nondegenerate configuration in which the grating was probed in the spectral region of the optical amplification. This configuration allowed him to demonstrate record numbers for holographic efficiencies in thin polymer films. Brett extended this work to novel nanomaterials based on colloidal quantum dots. He observed large and stable holographic responses in solids of CdSe nanoparticles. This work, which was published in *Appl. Physics Lett*., was featured in *Laser Focus World* and *Microtechnology Alerts*. The results of this work were used to file a patent application "Ultrafast dynamic holography using semiconductor quantum dots."

In both projects described above, Brett performed extremely well. In addition to designing two new experiments and performing spectroscopic measurements, he was in charge of coordinating the optical work with the efforts of our chemistry team and directing the work of students involved in the projects. Brett has excellent writing skills and is a good presenter. While at Los Alamos, he prepared several important manuscripts and a patent application. On several occasions, he helped me with preparing progress reports for the holography project. He also designed and maintained our group's web site.

I was more than satisfied with Brett's performance in my laboratory and I offered him an extension of his postdoctoral appointment. However, for family reasons he decided to move to the UK and took a job at Viewgate Networks (UK) as a C++ software engineer.

With his strong background in physical and computer sciences, his experience in coordinating the work within complex research projects, and his strong motivation to deliver high quality work, Brett is well suited for both research or project manager positions in academic or R&D institutions. Brett's impressive list of research accomplishments at Los Alamos and my personal interactions with him allow me to recommend him without any hesitation for a position in your institution. Feel free to contact me for more information.

Sincerely,
Victor Klimov
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