Bio Alam:

Dr. Todd M. Alam is a Principal Research and Development Materials Scientist in the Electrical, Optical and Nanostructured Materials Department at Sandia National Laboratories, Albuquerque, NM, where he has been the lab's NMR spectroscopist for the last 18 years. Dr. Alam's career has centered on the use and development of both high-resolution solution and solid state NMR spectroscopy for materials characterization. His research efforts have included studies of polymers, ceramics, glasses, nanomaterials, sol-gels, biomembranes, self-assembled templated materials, inorganic clusters, composites, thin films, and liquid crystals. Dr. Alam has published 185+ papers involving the NMR characterization of materials, NMR studies of adsorption on zeolites and MOFs, studies of structural/NMR correlations in phosphate glasses and polymers, NMR investigations of reaction mechanisms and kinetics ranging from polymer degradation, sol-gel formation and chemical agent decontamination, NMR relaxation theory, *ab initio* computation of NMR parameters, along with the development of novel solution and solid state NMR experimental techniques. Dr. Alam is also responsible for all NMR quality control and surveillance analysis covering a wide range of materials within the nuclear weapons complex.

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