Dr. Indrajit Roy PhD

Deputy Director, Biophotonics.
Institute for Lasers, Photonics and Biophotonics.
458 Natural Sciences Complex.
Department of Chemistry.
SUNY at Buffalo NY.



Dr. Indrajit Roy has received his Ph.D. degree in Physical Chemistry from the University of Delhi, India, in 2002. Following that, he has completed post-doctoral research at the State University of New York (SUNY) at Buffalo, as well as at the Johns Hopkins University: School of Medicine. During his doctoral and post-doctoral training, Dr. Roy has specialized in the use of inorganic-based nanoparticles (such as calcium phosphate, silica, organically modified silica, quantum dots and gold nanorods) for applications in targeted drug delivery, non-viral gene delivery, photodynamic therapy (PDT), and multimodal diagnostic imaging. He has published numerous articles in leading scientific journals, including lead-authored articles in the prestigious journals Journal of the American Chemical Society and Proceedings of the National Academy of Sciences (USA), in addition to holding two US patents. In 2005, he was presented with the Visionary Innovator Award by the technology transfer office at SUNY Buffalo for his invention of a novel drug delivery platform for applications in PDT. Presently, he is a Research Assistant Professor and the Deputy Director of the Biophotonics division at the Institute for Lasers, Photonics and Biophotonics (ILPB), which is a highly reputed institute within SUNY at Buffalo conducting research in various cutting edge areas at the interface of materials science, nanotechnology, photonics and medicine. In ILPB, he is leading a comprehensive multidisciplinary program in Nanomedicine focusing on the applications of various targeted nanoparticles in multimodal diagnostics, drug/siRNA delivery and externally activated therapies for the early diagnosis and therapy of number of diseases, pancreatic cancer in particular.