

Surface Characterization of Insulin Proto-filaments and Fibril Polymorphs Using Tip Enhanced Raman Spectroscopy (TERS)

Dmitry Kurouski,^{†,#} Tanja Deckert-Gaudig,[‡] Volker Deckert^{‡,§} and Igor K. Lednev^{†*}

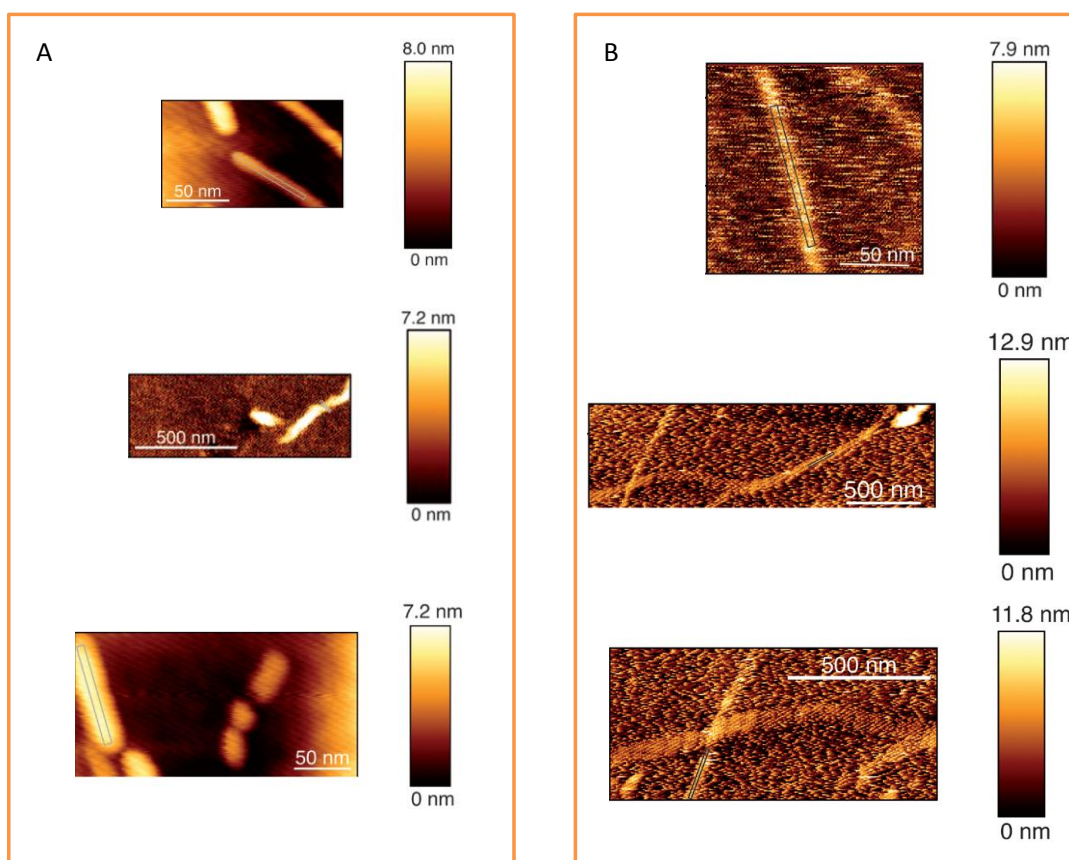
[†] Department of Chemistry, University at Albany, SUNY, 1400 Washington Ave., Albany, NY 12222, USA

[#] Department of Chemistry, Northwestern University, 2145 Sheridan Rd., Evanston, IL, 60208, USA

[‡] Institute of Photonic Technology, Albert-Einstein-Str. 9, Jena, Germany 07745

[§] Institute for Physical Chemistry and Abbe Center of Photonics, University of Jena, Helmholtzweg 4, Jena, Germany 07743

Supplementary Information



Supplementary Figure S1. AFM topography images of selected flat (A) insulin fibrils and proto-filaments (B) measured with TERS probes prior to the actual TERS experiments. Areas of TERS spectral acquisition are marked by grey rectangles. TERS spectra were acquired on randomly chosen positions. Topologies of twisted fibrils were previously reported (1).

1. Kurouski, D., T. Deckert-Gaudig, V. Deckert and I. K. Lednev. 2012. Structure and composition of insulin fibril surfaces probed by TERS. *J. Am. Chem. Soc.* 134:13323-13329.