

Figure 1: Infrared absorbance change of the infrared active region for a SiN_x (green) and SiO_2 (blue) surface after exposure to benzaldehyde at a substrate temperature of 70°C .

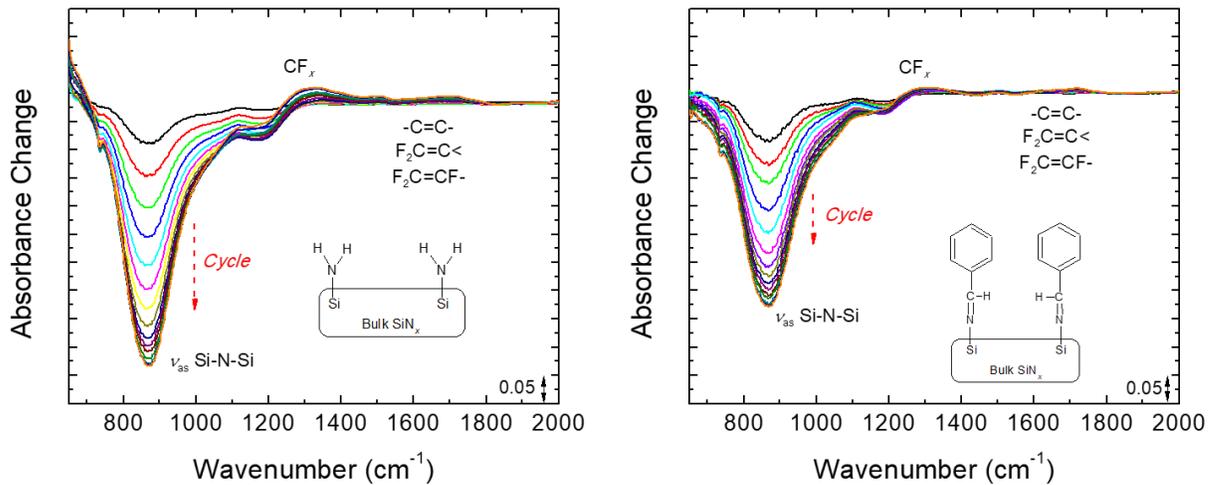


Figure 2: **a)** The left panel shows the infrared absorbance change for 15 cycles of ALE on the bare SiN_x surface. **b)** The right panel shows the infrared absorbance change for 15 cycles of ALE on the benzaldehyde functionalized SiN_x surface. All spectra are plotted on the same scale for comparison and use the starting surface as the reference spectrum. The inset shows a representative schematic of the starting SiN_x surface.