The graph shows the relationship between RMS roughness (nm) and distance (µm) for different H/C ratios in the presence of C₂H₂ and H₂. The lines represent the following compositions:

- **H/C = 1 (100% C₂H₂)**
- **H/C = 1.33 (75% C₂H₂ : 25% H₂)**
- **H/C = 2 (50% C₂H₂ : 50% H₂)**
- **H/C = 4 (25% C₂H₂ : 75% H₂)**
- **H/C = 10 (10% C₂H₂ : 90% H₂)**

The mean line is indicated by a horizontal line at the 2.0 nm level. The gray shaded area represents the range of RMS roughness values for all H/C ratios.