

Fig.1. TEM images: a) Pure WS_2 showing clear basal orientation; b) WS_2 /a-C coating showing WS_2 platelets randomly distributed in amorphous carbon matrix.

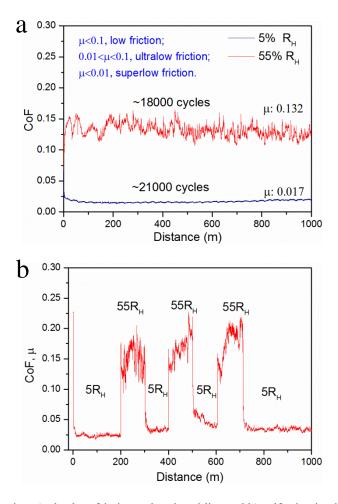


Fig.2. Tribotests showing a) ultralow friction at low humidity and b) self-adaptive behavior to humidity.