INTERESTING BEHAVIOR OF THE $Si_3O_2^+$ SILICON OXIDE CLUSTER CATION

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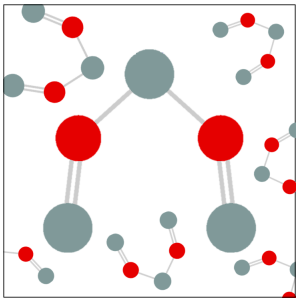

Silicon oxide cluster cations $Si_nO_m^+$ are especially interesting in the context of interstellar dust particles and might be carriers of the diffuse interstellar bands (DIBs). To date, SiO and different Si_nC_m clusters were found in circumstellar envelopes.

In this talk we present our results on the fairly small but nevertheless complicated $Si_3O_2^+$ system. We discuss the optical spectrum obtained by photodissociation in the gas phase and compare that to quantum chemical calculations.

Spoiler, the observed spectrum of $Si_3O_2^+$ does not match any known DIB.