

Thursday, March 26, 2009
POSTER SESSION II: INTERSTELLAR ORGANIC MATTER
6:30 p.m. Town Center Exhibit Area

Dobrica E. Engrand C. Quirico E. Montagnac G. Duprat J.

[*Immature Carbonaceous Matter in CONCORDIA Antarctic Micrometeorites*](#) [#1688]

Raman spectroscopy of Antarctic micrometeorites reveals abundant and highly disorganized carbonaceous matter in all types of unmelted to partially melted particles. The cyanide functional group was found in an ultracarbonaceous micrometeorite.

Floss C. Stadermann F. J.

[*Interstellar Components in the Primitive CR3 Chondrites QUE 99177 and MET 00426*](#) [#1083]

QUE 99177 and MET 00426 contain abundant N- and C-anomalous phases of interstellar origin. High abundances carbonaceous matter with C isotopic anomalies in these meteorites suggests that their scarcity in other samples is due to secondary processes.

Croat T. K. Bernatowicz T. J. Stadermann F. J.

[*Auger and NanoSIMS Investigations of Pristine Presolar SiC Surfaces*](#) [#1887]

From Auger Electron Spectroscopy of 15 pristine SiC surfaces (prepared without harsh acids) and subsequent NanoSIMS measurement of three SiCs, we find evidence for C-rich, Si-poor coatings and C and N isotopic distinctions between surface and bulk.

De Gregorio B. T. Stroud R. M. Nittler L. R. Cody G. D.

[*Variety of Organic Matter in Stardust Return Samples from Comet 81P/Wild 2*](#) [#2260]

Cometary organics show a wide variety of morphology and chemistry, including a growing population of N-rich organic matter.

Nuth J. A. III

[*Fischer-Tropsch-Type Catalytic Activity in the Primitive Solar Nebula: Results of New Experimental Studies Using Graphite and Noble Gases*](#) [#2401]

A carbonaceous coating forms via Fischer-Tropsch type reactions that is a better catalyst than amorphous iron silicates. Such a coating on grain surfaces could explain rich deposits of macromolecular carbon found in primitive meteorites and could have other consequences.