

Abstract Submitted
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Raman spectroscopy investigation in the NWA 3118 meteorite: Implications for planet formation¹ BHUWAN GHIMIRE, The University of Utah and Westminster College MO, ANALÍA G. DALL'ASÉN, JORDAN M. GERTON, INESE I. IVANS, BENJAMIN C. BROMLEY, The University of Utah — Planet formation involves the coagulation of micron-scale dust into centimeter-meter scale objects. Explanation is sought of the adhesion property of the dust aggregates ultimately leading to the formation of structures like planetesimals. Confocal raman microscopy has been used to investigate carbon structures on the NWA 3118 meteorite. It is a carbonaceous type CV3 meteorite composed of micrometer scaled structures like chondrules and inclusions embedded in the matrix material. Raman mapping of meteorite samples with a laser of excitation wavelength 488nm was pursued, with a focus on the interfaces between chondrules and the matrix. Raman spectra of olivines and graphitic structures with corresponding optical and raman images of the spotted structures in the NWA 3118 are reviewed.

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