

# Structural features of the Seymchan meteorite substance after compressing by spherically converging shock waves

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Structural changes in the Seymchan meteoritic substance after the experiments on loading with spherically converging shock waves have been studied by optical and electron microscopy. It was noted that shock pressure and temperature increases from the outer part to the center of the loaded balls. In one experiment with shock-wave loading, it was possible to obtain varieties of textures with different degrees of shock and thermal metamorphism. These results prove that the shock wave loading experiment can be successfully applied in modeling space shocks and can be used to experimentally model processes at the small bodies of the solar system. The cooling rates of the melted zone of the shocked octahedral sample was estimated for the crystallization range.