

Thesis Change Report

If your thesis is found acceptable with revisions/modifications required, please list the changes made after the examination below. Upon completion of these changes, designated members of your Thesis Examination Board will indicate that all changes have been satisfactorily completed by approving the thesis within Scholarship@Western.)

Page(s)	Description of Change
Chapter 1&2	<p>Added more descriptions about ureilite primitive characteristics such as FeO-MgO ratio indicating compositional heterogeneity and brief discussion about oxygen isotopes.</p> <p>Added a brief introduction of olivine crystal structure.</p> <p>Added loaners of samples in this study in Chapter 2.</p>
Chapter 3	<p>Added extra section about how to decide the numbers of peaks in the empirical model.</p> <p>Added descriptions about how Matlab measures FWHM after peak fitting.</p> <p>Added brief discussion about how the method is related to real life case at the scale of crystal lattice planes.</p> <p>Axial labels are added in the figure descriptions.</p> <p>Removed some unnecessary part to make the flow smoother and more understandable.</p> <p>Added more description about boxplots in this chapter for showing no systematic increasing of measurements regarding to increasing of 2-theta angles of lattice planes.</p> <p>Fixed math function labels.</p> <p>Fixed grammatic errors.</p>
Chapter 4	<p>Fixed decimal (accuracy) of measurement result, (e.g, from two decimals to one decimal)</p> <p>Added a section about originating of samples in this study on ureilite parent body or bodies, e.g., relative location on UPB and the relationship of planetary melting differentiation and shock.</p> <p>Fixed metamorphic texture of triple junction texture from erroneous igneous texture.</p> <p>Fixed dark phase to more specific terms: metal, metal alloys, sulfides as major inclusion phases in pigeonite and some as interstitial grains and fine-grained~2 micrometer Fe-Ni metallic blebs forming reduction rims. Carbonaceous phases such as graphite appeared interstitially.</p> <p>Added more descriptions about top 25% plot to indicating it is to represent most damaged crystal lattice planes after shock.</p>

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	Fixed grammatic errors.
Additional Document	Main codes have been organized in electronic documents as additional documents. It will be uploaded individually.