

Characterization of Refractory Microstructures

Lecture 1 – 2/2/23 processing microstructure relationships

Lecture 2 – 2/7/23 sintering and grain growth

Lecture 3 – 2/9/23 property microstructure relationships

Lecture 4 – 2/14/23 sample preparation

Lecture 5 – 2/16/23 optical microscopy

Lecture 6 – 2/21/23 scanning electron microscopy

Lecture 7 – 2/23/23 scanning electron microscopy

Lecture 8 – 2/28/23 scanning electron microscopy

Lecture 9 – 3/2/23 x-ray diffraction

Lecture 10 – 3/7/23 x-ray diffraction

Lecture 11 – 3/9/23 x-ray diffraction

Lecture 12 – 3/14/23 alumina-silica refractories

Lecture 13 – 3/16/23 basic refractories

Lecture 14 – 3/21/23 zirconia and azs refractories

Lecture 15 – 3/23/23 non-oxide refractories

Lecture 16 – 3/28/23 composite refractories

Lecture 17 – 3/30/23 castable refractories