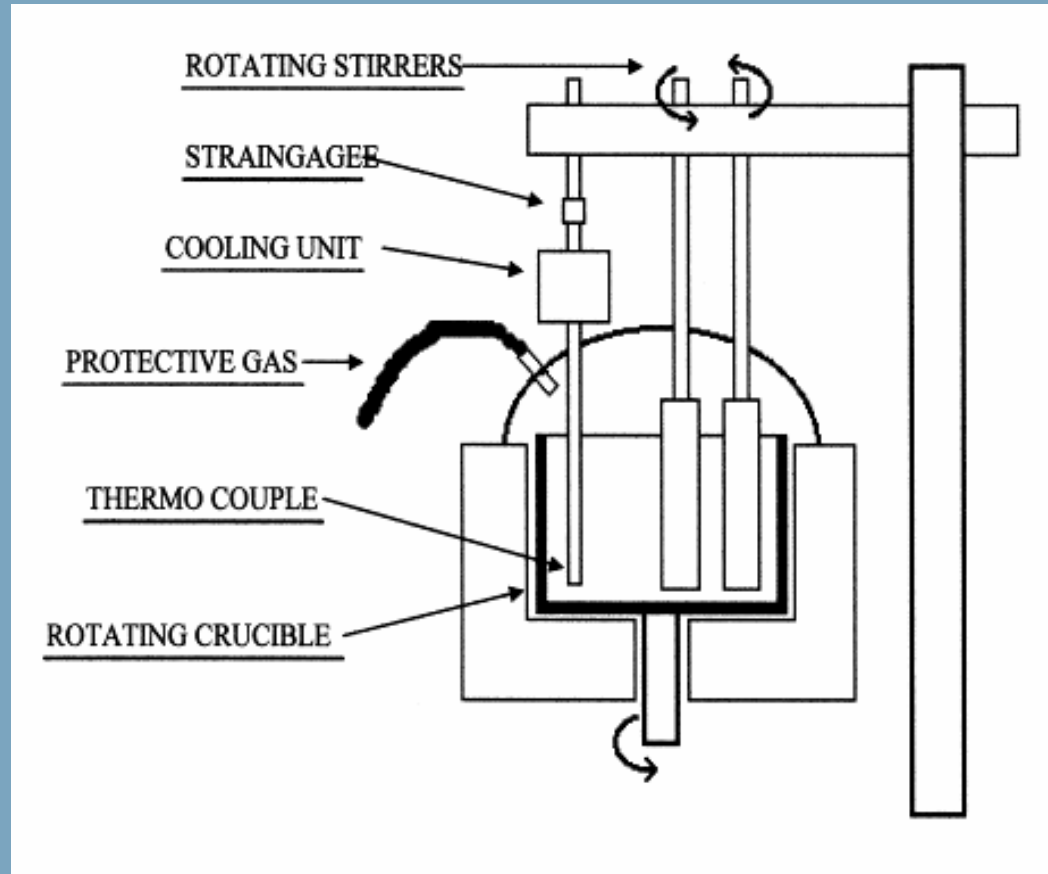


PRIZMA

Engineering

EMMC- extrusion of magnesium matrix reinforced
with SiC micro-particles

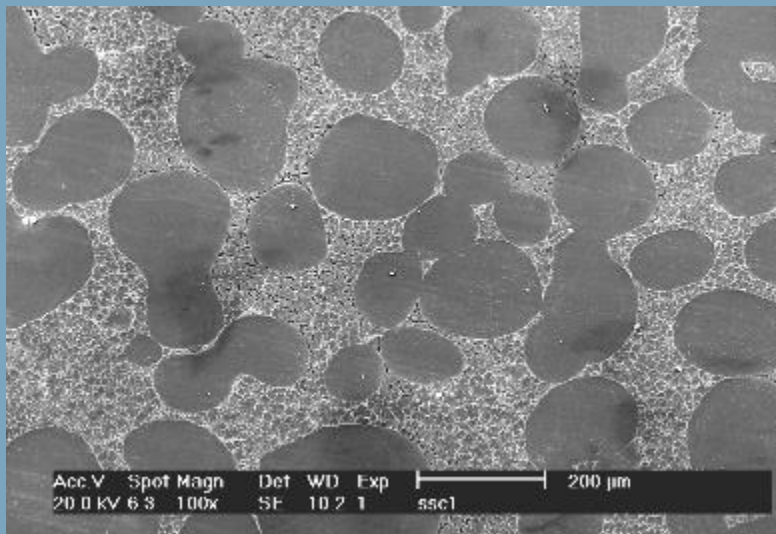
EMMC- extrusion of magnesium matrix reinforced with SiC micro-particles



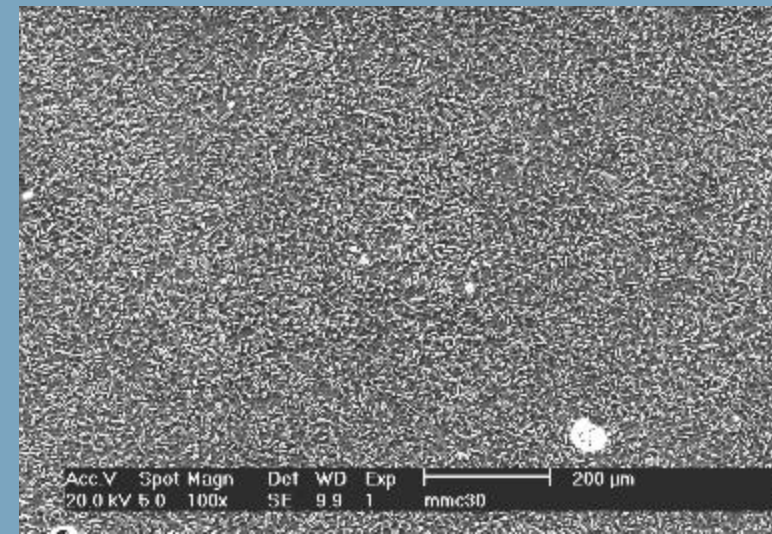
EMMC- extrusion of magnesium matrix reinforced with SiC micro-particles

Magnesium Metal Matrix Micro-Composites

Microstructure of AZ91 semi-solid casting



without SiC particles



30% (wt.) SiC particle (~20μm)

EMMC- extrusion of magnesium matrix reinforced with SiC micro-particles

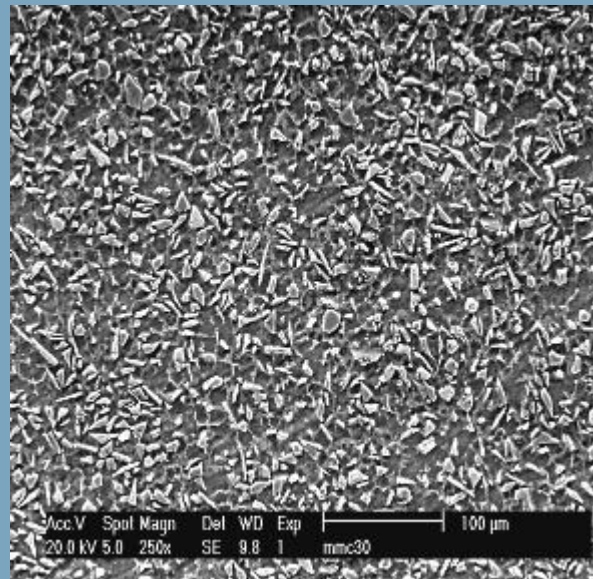
Magnesium Metal Matrix Micro-Composites

SEM micrographs of :

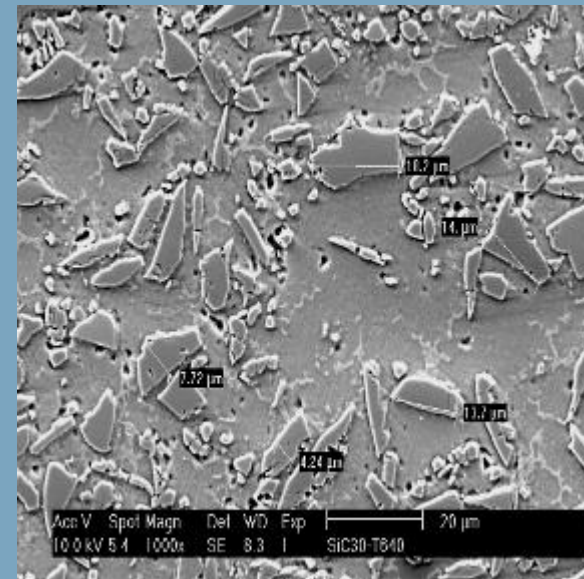
(a) AZ91 specimen with 30% of SiC particles cast at 580°C;

(b) AM50 specimen with 30% of SiC particles cast at 614°C.

a



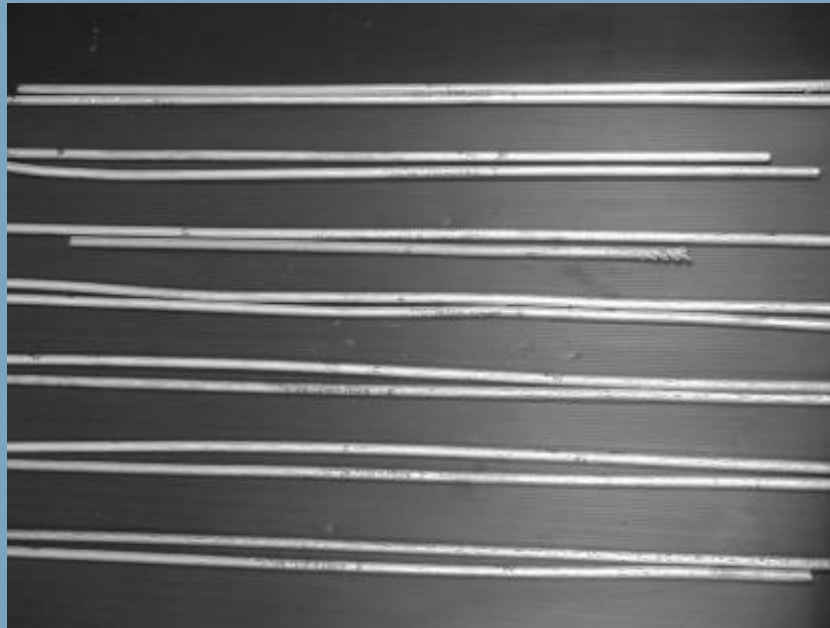
b



EMMC- extrusion of magnesium matrix reinforced with SiC micro-particles

Magnesium Metal Matrix Micro-Composites

Extrusion and deformation Processes



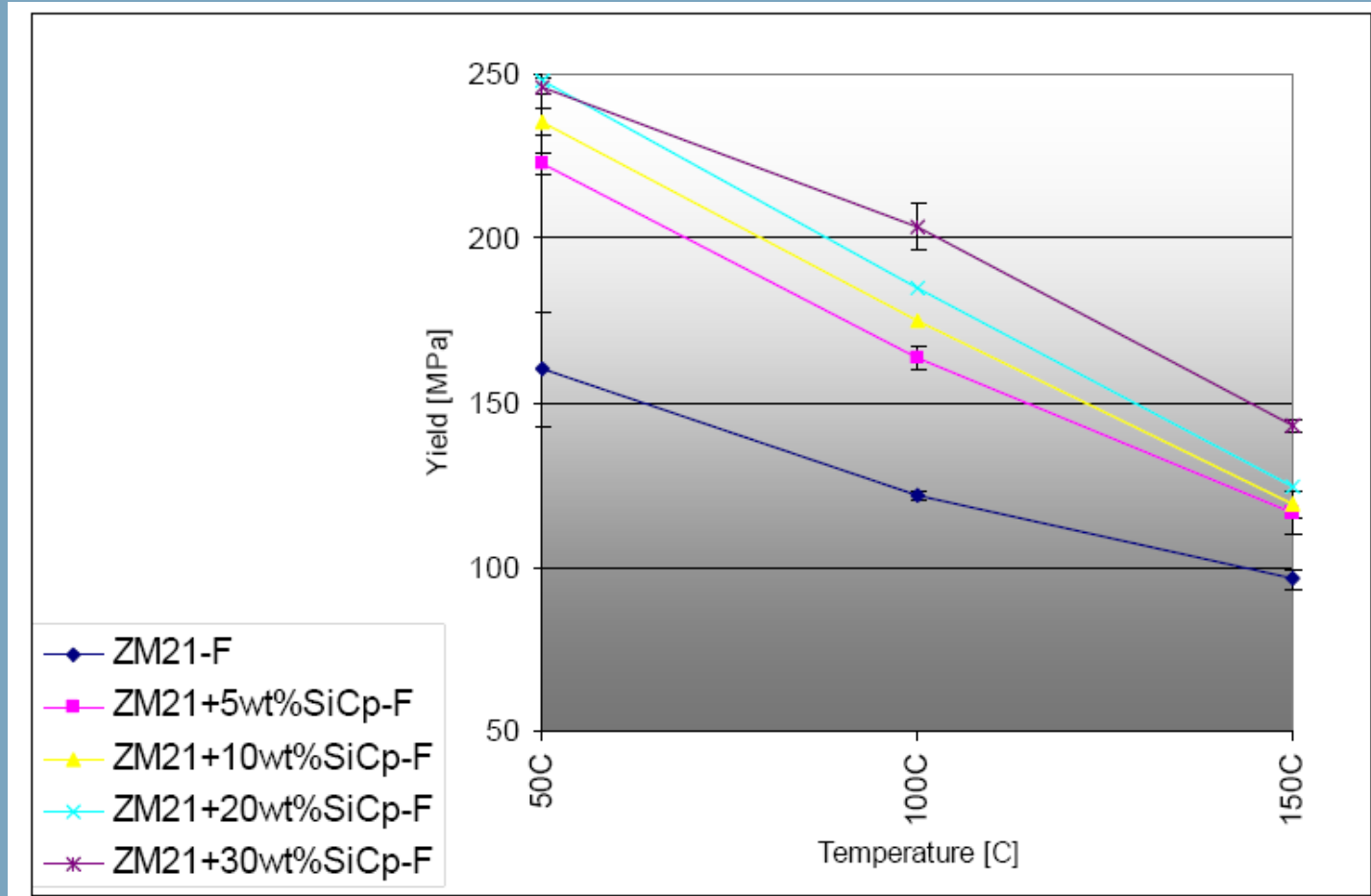
Rods made of magnesium AZ31 alloy reinforced with 5%-30% SiC particles.



Cast AZ31 cylinders reinforced with 5%-30% SiC particles as raw material for extrusion.

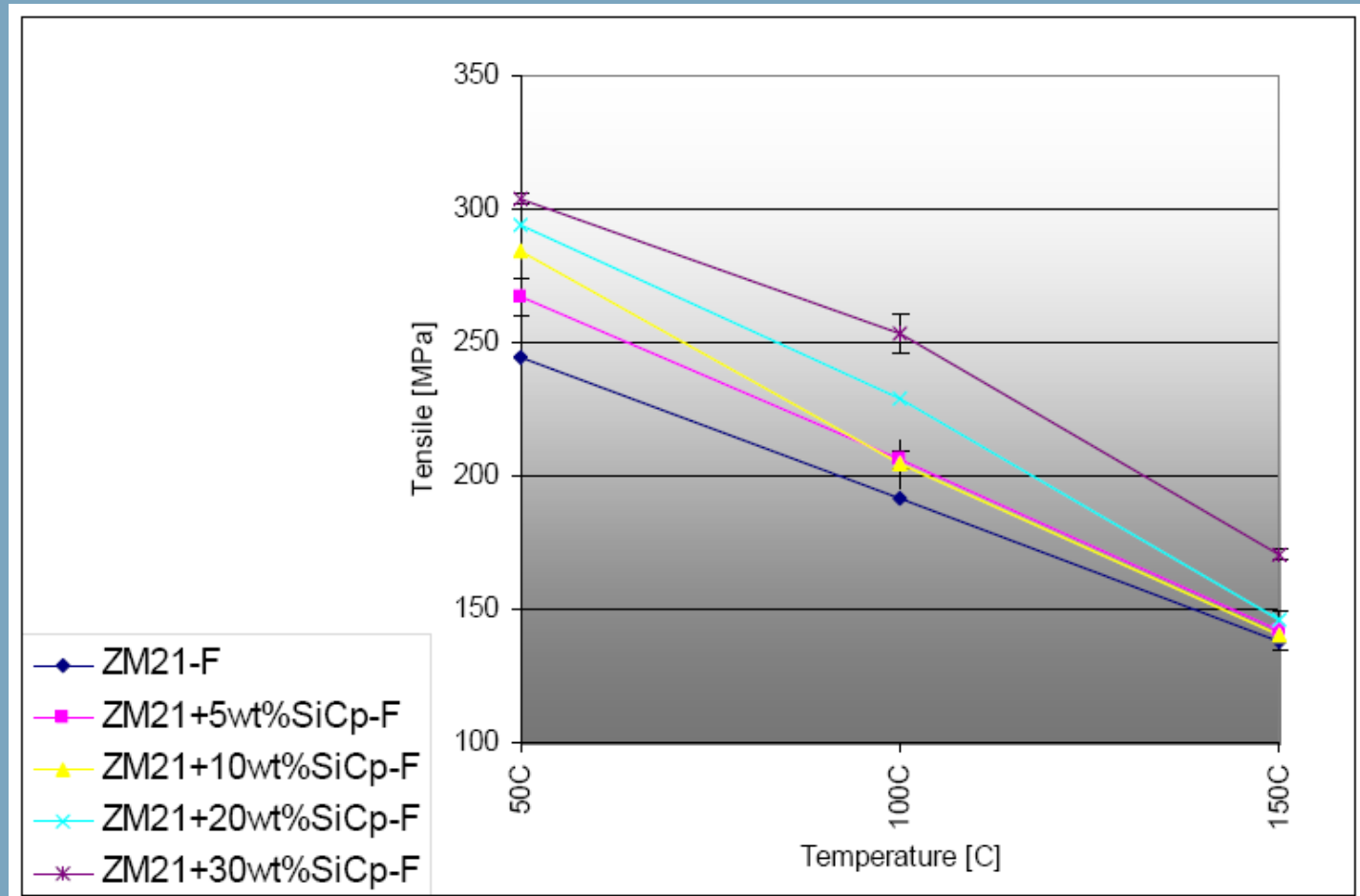
EMMC- extrusion of magnesium matrix reinforced with SiC micro-particles

Extrusion of ZM21 alloy reinforced by SiC particles



EMMC- extrusion of magnesium matrix reinforced with SiC micro-particles

Extrusion of ZM21 alloy reinforced by SiC particles



Development of high-performance light materials

Extrusion of ZM21 alloy reinforced by SiC particles

