## **R-HPDC** in South Africa

CURLE Ulyate A.a, MÖLLER Heinrichb and GOVENDER Gonasagrenc

Council for Scientific and Industrial Research, Materials Science and Manufacturing, Pretoria, South Africa

## **Abstract**

The history of semi-solid metal forming and in particular rheo-high pressure die casting at the Council for Scientific and Industrial Research in South Africa is discussed. Processing flexibility is demonstrated on the Al-Si-Mg, Al-Mg-Si, Al-Cu-Mg and Al-Zn-Mg-Cu casting and wrought alloy systems as well as on high purity aluminium, unmodified Al-Si binary eutectic, metal matrix composites and magnesium alloys. Material properties are highlighted.

<sup>&</sup>lt;sup>a</sup> ucurle@csir.co.za, <sup>b</sup> hmoller@csir.co.za, <sup>c</sup> sgovender@csir.co.za