

# Supporting Information

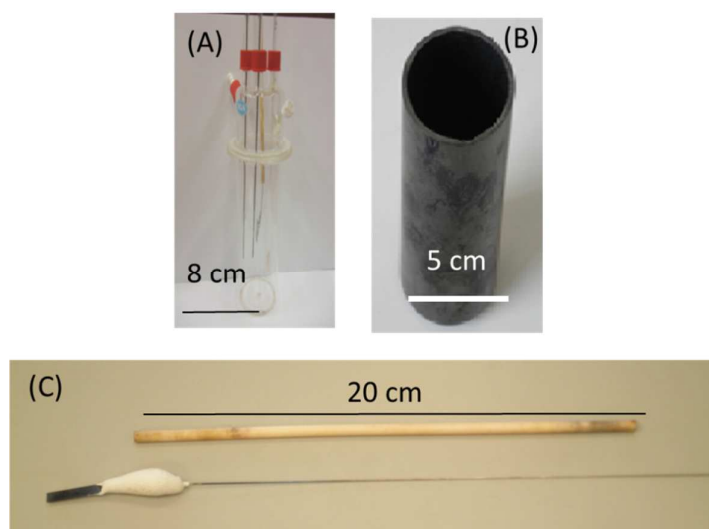
## **Enhanced electroanalysis in lithium potassium eutectic (LKE) using microfabricated square microelectrodes.**

Damion K Corrigan<sup>1</sup>, Ewen Blair<sup>2</sup>, Jonathan G. Terry<sup>2</sup>, Anthony J. Walton<sup>2</sup> and Andrew R. Mount<sup>1</sup>.

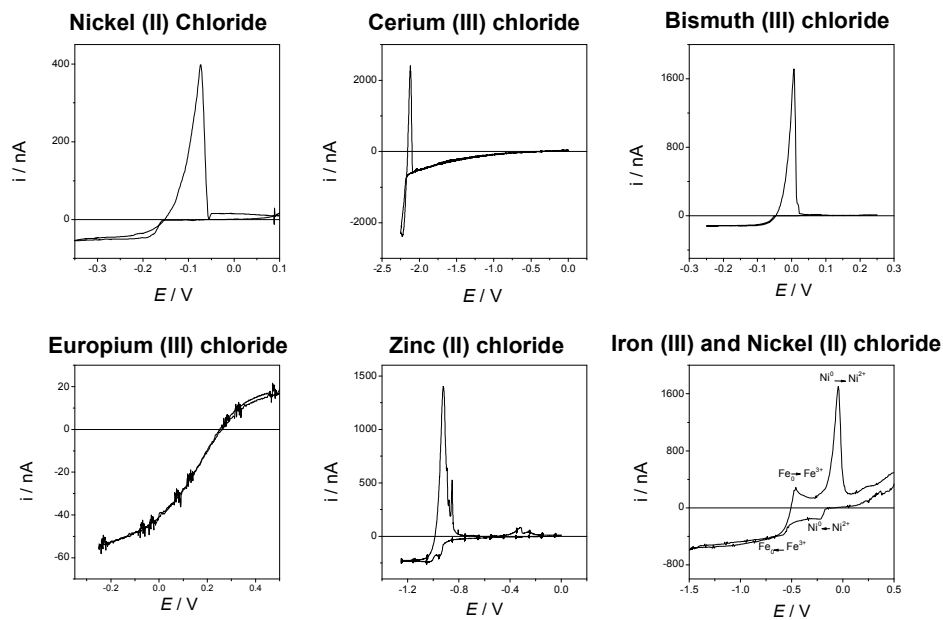
<sup>1</sup> School of Chemistry, The University of Edinburgh, Joseph Black Building, The King's Buildings, West Mains Road, Edinburgh, EH9 3JJ, Scotland (UK)

<sup>2</sup> Institute for Integrated Micro and Nano Systems, School of Engineering, The University of Edinburgh, The King's Buildings, West Mains Road, Edinburgh EH9 3JF, Scotland (UK)

Corresponding author – Prof A R Mount. Email - a.mount@ed.ac.uk Tel – 0131 650 4747



**Figure S1. Images of the high temperature setup. (A) Quartz cell and electrodes. (B) Vitreous carbon crucible. (C) Connected microelectrode and ceramic tube.**



**Figure S2.** Typical cyclic voltammograms recorded at 723 K at a sweep rate of 100 mVs<sup>-1</sup> for nickel (II) chloride, cerium (III) chloride, bismuth (III) chloride, europium (III) chloride, zinc (II) chloride and iron (III) and nickel (II) chloride in LKE.