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Advanced Materials for Aluminium-ion Battery

Guest Editor:

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Deadline for manuscript
submissions:

closed (31 October 2020)

Message from the Guest Editor

Dear Colleagues,

Aluminium-ion (Al-ion) batteries offer great potential as next generation battery chemistry. Based on the trivalent nature of the Al^{3+} ion transferring three times the charge of Li^+ , Al-ion cells offer many strong features and Advantages.

However, achieving commercial application of these cells is still a number of years away as the material and electrochemical challenges of this new technology require to be better understood and characterised.

This Special Issue will focus on the material challenges faced by this new cell chemistry, including high rate electrodes, aqueous and ionic liquid based electrolytes, separators and understanding of aluminium ion intercalation, surface and interface layer effects. Articles discussing investigations and developments of cell materials, half and full cell/battery tests, and scalability and synthesis routes for material scale-up are welcome for this feature.

It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications and reviews are welcome.

Prof. Dr. Andrew Cruden
Guest Editor



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Special Issue



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Message from the Editor-in-Chief

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