

## **Discharging Batteries With Ash**

### Abstract

The present disclosure provides a method of discharging a battery comprising contacting the battery with ash, ash suspension, or ash leachate, wherein the ash, ash suspension, or ash leachate comprises at least one ion selected from the group consisting of chloride, sulphate, sulphide, hydroxide, carbonate, and phosphate. The present disclosure also provides a method of reducing at least one ion content in ash comprising contacting a battery with ash, ash suspension or ash leachate, wherein the ion is selected from the group consisting of chloride, sulphate, sulphide, hydroxide, carbonate, and phosphate. The present disclosure further provides a system for discharging a battery and/or reducing ion content in ash, comprising: a reactor chamber; a perforated battery container disposed within the reactor chamber, wherein the perforated battery container is configured to contain a battery; a motor connected to the perforated battery container, wherein the motor is configured to move the perforated battery container; an ash inlet connected to the reactor chamber, wherein the ash inlet is configured to feed ash into the reactor chamber; and a water inlet connected to the reactor chamber, wherein the water inlet is configured to feed water into the reactor chamber.

[No suitable figure]