

About this Journal

KONA Powder and Particle Journal is a refereed scientific journal that publishes articles in the field of powder and particle science and technology annually since 1983. This journal is distributed free of charge to the members of scientific communities and universities and research libraries throughout the world by the Hosokawa Powder Technology Foundation (www.kona.or.jp) established by Mr. Masuo Hosokawa in 1991.

The Chinese character “粉” in the cover is pronounced as “KONA” in Japanese, and means "Powder", which was hand-written by Mr. Eiichi Hosokawa, the founder of the Hosokawa Micron Corporation (www.hosokawamicon.co.jp/en/global.html).

About the Cover

The fast increasing demand for lithium-ion and future types of lithium batteries requires the further development of an economically and, at the same time, ecologically sustainable supply and production circle. Starting with the processing of the primary raw materials and especially secondary, recycled materials, over the extraction of the valuable materials, their refinement to battery grade intermediates, the (re)synthesis of active and passive materials to the production of the cell components like electrodes and finally the battery cells and systems. Sustainability can only be achieved if the end-of-life battery systems are used as secondary material source for the production of new battery cells, through which the recycling of the materials and the re-synthesis or re-conditioning of the active materials becomes mandatory. By this milling, dispersing, classification and sorting processes get a central role within the circular processing of lithium-ion batteries and next battery generations. Review on this topic is discussed on pp. 50–73.



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