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COVER ILLUSTRATION Combining liposomes with magnetic nanoparticles into so-called magnetoliposomes is an exciting methodology to create stimuli-responsive vesicles for medical applications. These may range from conventional hyperthermia treatment to targeted drug delivery. Regarding this approach, the magnetic nanoparticles are either encapsulated within the liposome lumen or embedded in between the lipid bilayer, depending on the intended application. In this development, the architectural and structural properties of these hybrids are paramount to characterize in order to optimize the vehicles for clinical settings. Moreover, these investigations may provide insight into the properties of lipid membranes and their overall interactions with nanoparticles in general. The cover image shows an artistic rendering of a magnetoliposome showing a vertical cross section of the liposome with the corresponding cryo TEM micrograph below. For more information on this topic please read the review on *Magnetoliposomes: Opportunities and Challenges* by Christophe A. Monnier, David Burnand, Barbara Rothen-Rutishauser, Marco Lattuada and Alke Petri-Fink on pages 201-215 of this issue. Copyright holder of the image: Alke Petri-Fink, Adolphe Merkle Institute, University of Fribourg, Chemin des Verdiers 4, 1700 Fribourg, Switzerland, E-mail: alke.fink@unifr.ch



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