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Research activities regarding cryogenic pulsating heat pipes (PHPs) are quickly spri nging up around the world. The strong interest is motivated in part by the exciting p otential of PHPs for many cryogenic applications where effective heat transfer over l arge distances is required. In this regard the PHP supplies a complimentary functio nality to regenerative cryocoolers that produce localized cooling at their cold tip. Thi s report provides an update on recent experimental and modeling activities with cryo genic PHPs, demonstrating effective thermal conductivity values exceeding 50,000 W/m-
K, and transferring heat over distances on the order of a meter. In addition, the repo rt highlights the unique features associated with cryogenic PHPs, such as temperatu re dependent fill ratios, system pressures exceeding multiple bars, and operation up to and beyond the critical point. Preliminary investigations into the ability of a PHP t o spread heat from one region to another are also reported.