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COVER ILLUSTRATION Particle foams and open cell sponges play nowadays an important role in academia and industrial research. The fabrication of new high performance foams is one of the challenges. Until now it is impossible to visualise the quality of particle foams and the quantification is only possible with expensive analytical methods like scanning electron microscopy (SEM). In this work we demonstrate a simple method for the visualisation of void size and defects inside particle foams on the basis of expanded polystyrene (EPS). The concept was transferred to porous materials which work as templates for the formation of ultralight poly(*para*-xylylene) (PPX) foams with stunning properties.

For more information on this topic please read the article on “Ultralight sponges of poly(*para*-xylylene) by template assisted chemical vapour deposition” by Tobias Moss, Ilka E. Paulus, Daniel Raps, Volker Altstädt, Andreas Greiner on pages 255–261 of this issue. Copyright holders of the image are the authors of this article.



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