

Biobased Material – Bridging the Valley of Death

Mikael Lindström, RISE, Research Institutes of Sweden

We are living in an era of climate awareness and our habits and consumption need to change. Changing from petroleum based to bio-based material is one of the ways to go, but there are many obstacles on the way from idea to market introductionⁱⁱⁱ. To develop biobased drop-in solutions that are already accepted and certified will not change our awareness. New materials must be tested and certified before market acceptance and they might also need new business models in order to change the consumer behaviour.ⁱⁱⁱ ^{iv}How can we speed up this procedure? AT RISE we have developed a Bio-material Scale-up Centre, **BISC**, to allow research, testing and techno-economic evaluations in pilot-scale. There is also a new function “**Concept Design**” focusing on how to demonstrate research results during the different TRL-levels^v. Some examples on collaborations between scientist, designers and companies will be presented and discussed.

ⁱ Lindberg, s., Harzén, A_S., Wodke, T., Lindström, M. HIERARCHIC DESIGN AND MATERIAL IDENTITY, *Conference proceedings Composites week @ Leuvenand texcomp11*, 16-20 september 2013.

https://www.researchgate.net/publication/301593204_HIERARCHIC_DESIGN_AND_MATERIAL_IDENTITY

ⁱⁱ Roos, A., Lindström, M., Heuts, L., Hylander, B., Lind, E., Nielsen, C. Innovation diffusion of new wood-based materials – reducing the “time to market”. *Scandinavian Journal of Forest Research* 29(4) July 2014

DOI: [10.1080/02827581.2014.931454](https://doi.org/10.1080/02827581.2014.931454)

ⁱⁱⁱ Lindström, M, Razavi, F, Nobell, N. The superhero and the DJ: Science meets design, *Journal of Professional Communication* 3(2):125-136, 2014

^{iv} Granberg, H., Béland, MC., Lindberg, S., Berthold, F, Vomhoff, H., Wickholm, K., Lindström, M. It's a Bird! It's a Plane! It's a Super Multimaterial!, *Conference proceedings Papercon 2015*.

^v https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf