

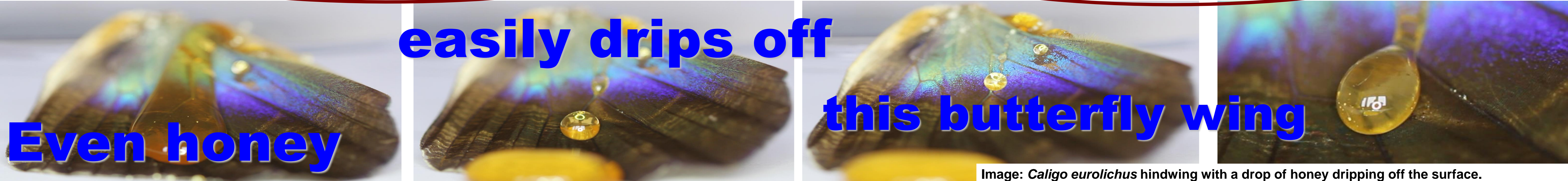
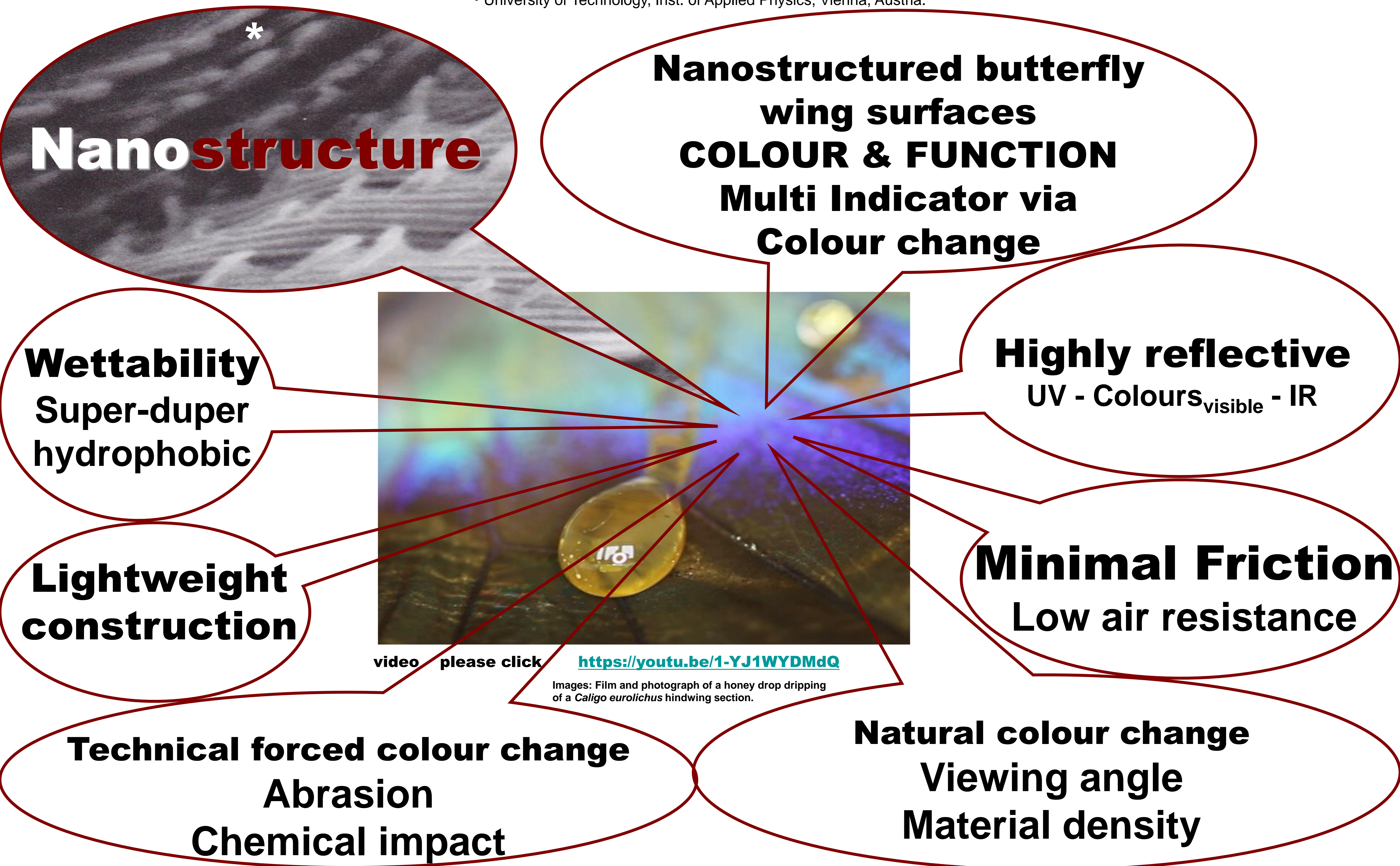
S. Zobl^{1,2},

W. Salvenmoser², T. Schwerte², I.C. Gebeshuber³, M. Schreiner¹

www.2art1.com
2art1@gmx.net

¹University of Innsbruck, Institute of Zoology, Innsbruck, Austria. ²Academy of Fine Arts, Institute for Fine Arts, Vienna, Austria.

³ University of Technology, Inst. of Applied Physics, Vienna, Austria.



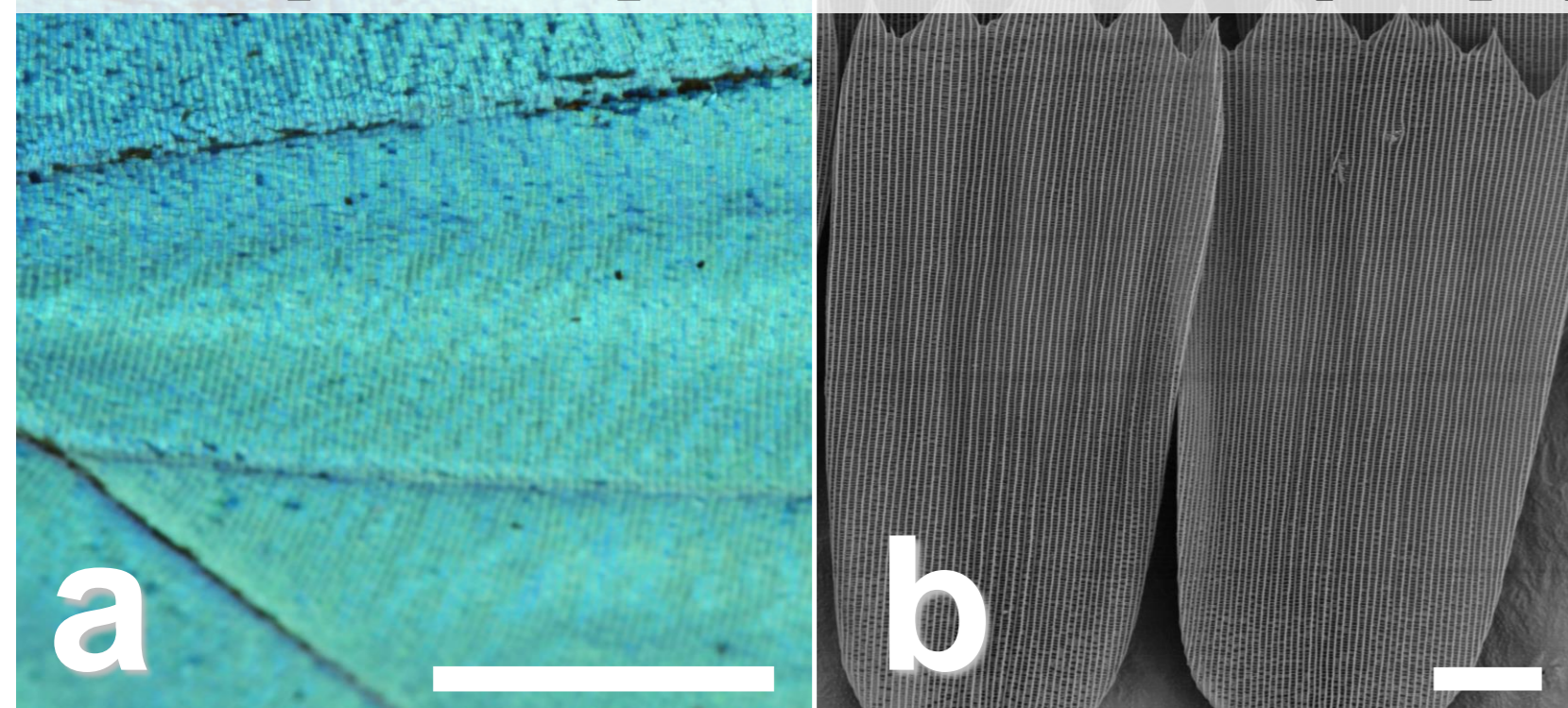
Study the function of organic surfaces by their imprints

Why imprints?

- isolation of the nanostructured surface from the biotemplate
- e.g. materials with different refractive index, friction studies, reflection;
- to obtain new biological insights and new functional information of their surfaces

1 hour replication technique to obtain a nanostructured butterfly scale imprint
 Zobl et al 2016, *Bioinspir. Biomim.* **11**, 016006, <http://tinyurl.com/z53pba5>

Morpho peleides (Mp) wing piece



easily replicated

Imprint *Mp* wing piece

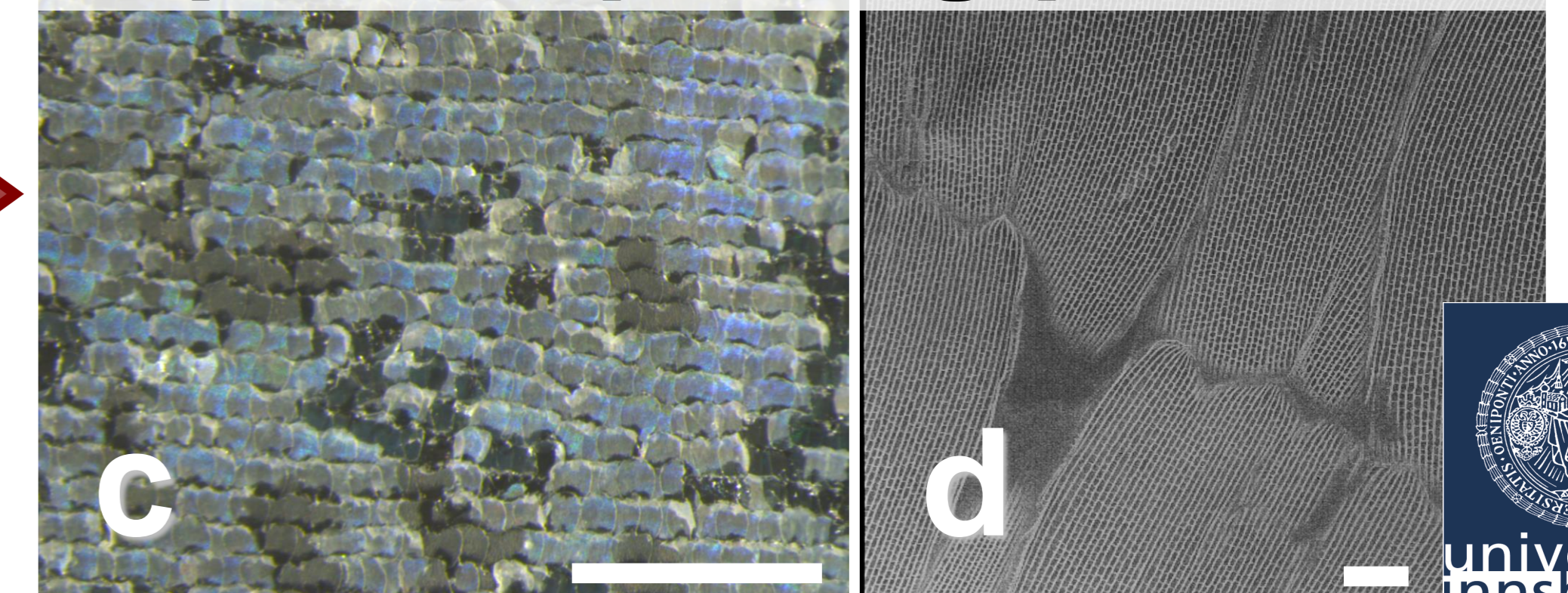


Image (a) - (d): (a) Photograph, (b) Pfaller C., 2015, Medical University of Innsbruck, (b) and (d) SEM images of two *Morpho peleides* scales and scale imprints, (c) Light microscopic image of a *Morpho peleides* wing imprint in reflectance, Scale bar (a) 0.5 cm (b), (c) 100 μ m (d) 20 μ m.