



DFM

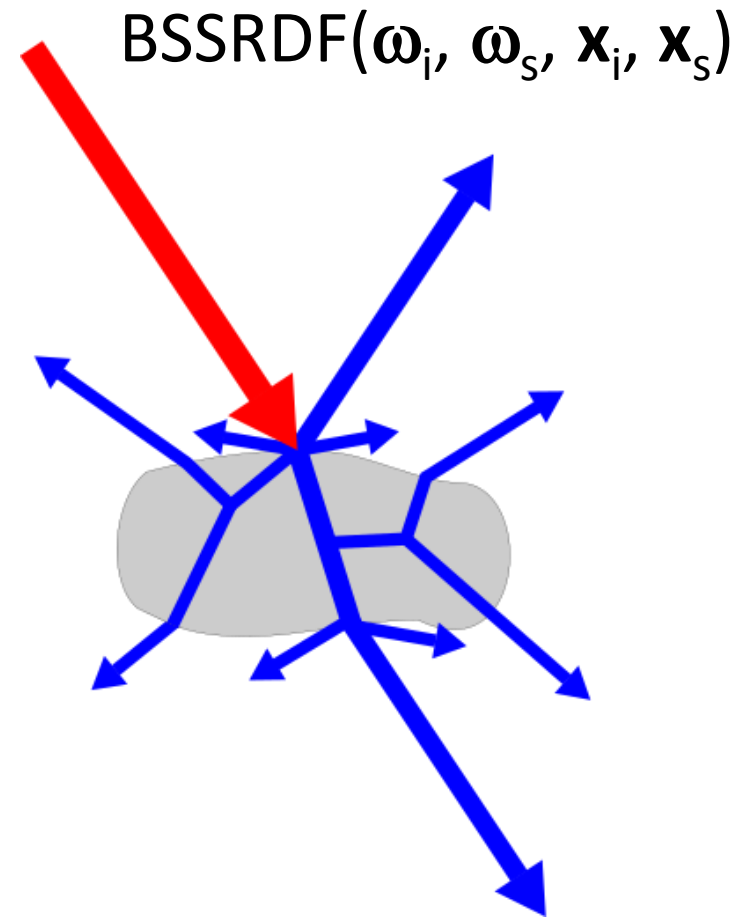
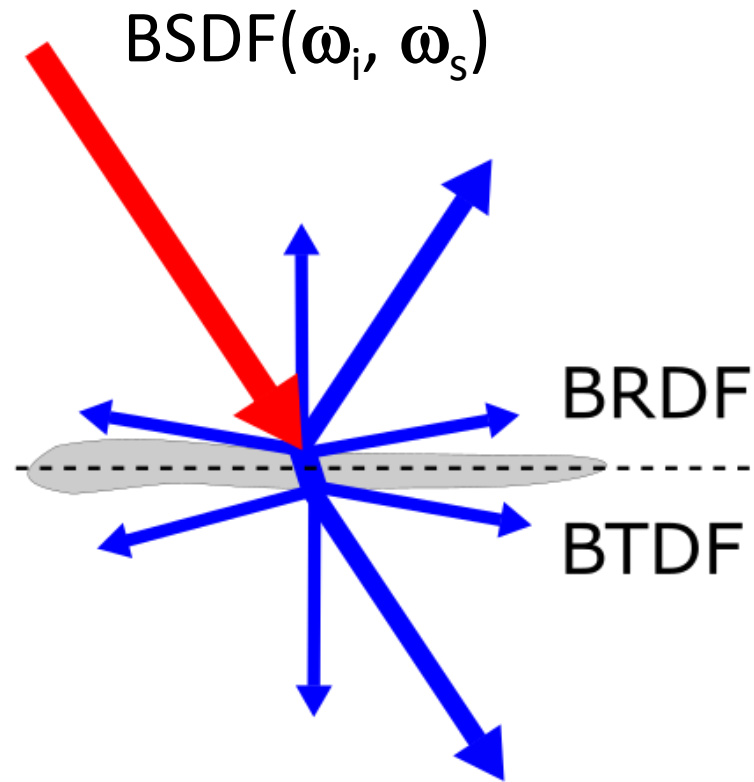
Danish National Metrology Institute

Measurements of Collective scattering distribution functions

Søren Alkærsig Jensen
saj@dfm.dk

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Collective scattering distribution functions



Collective scattering distribution functions

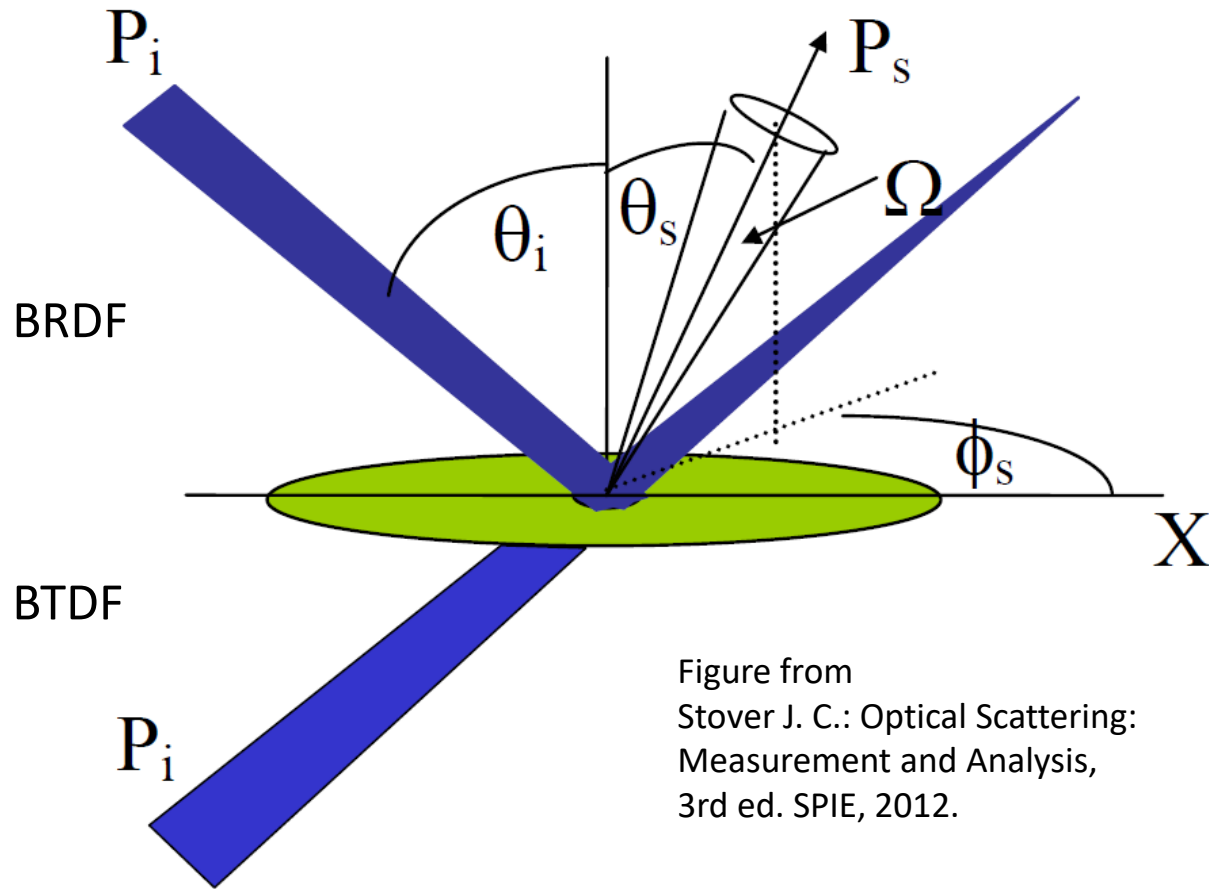
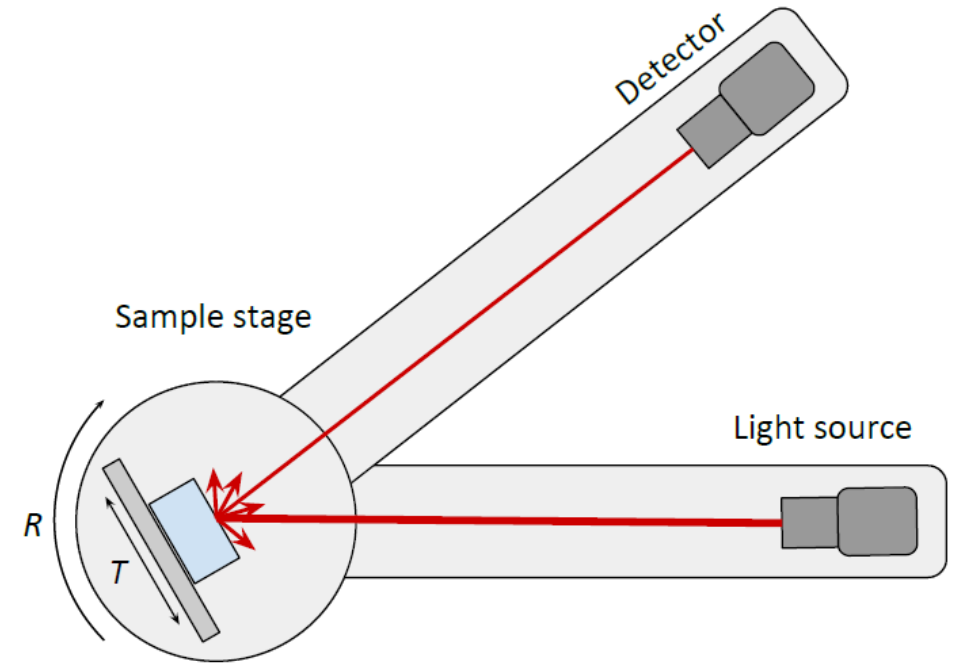


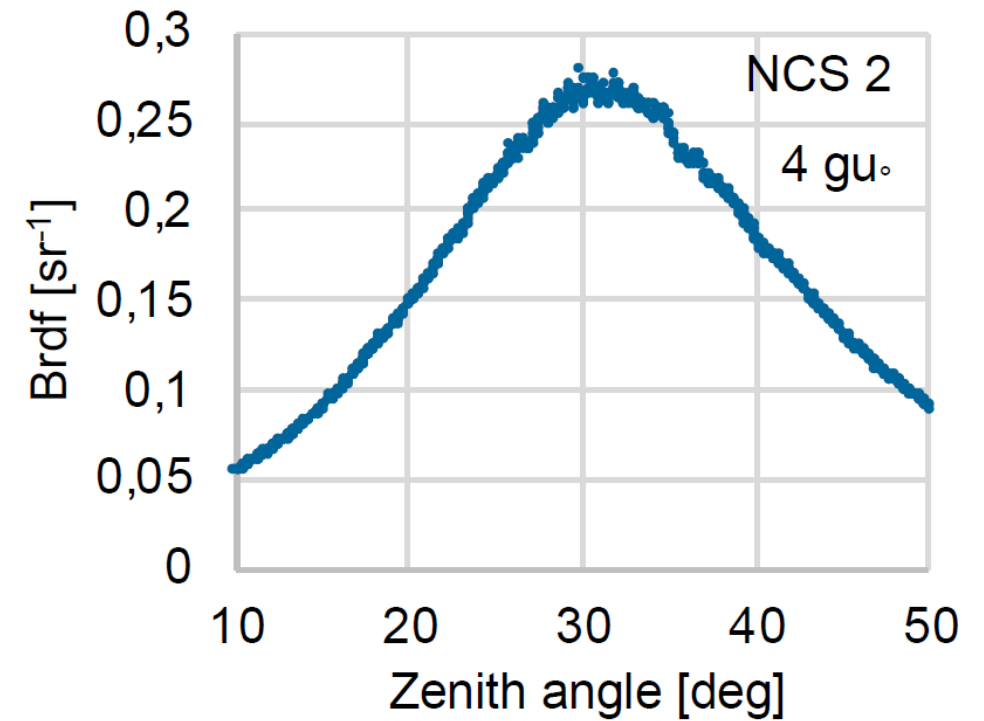
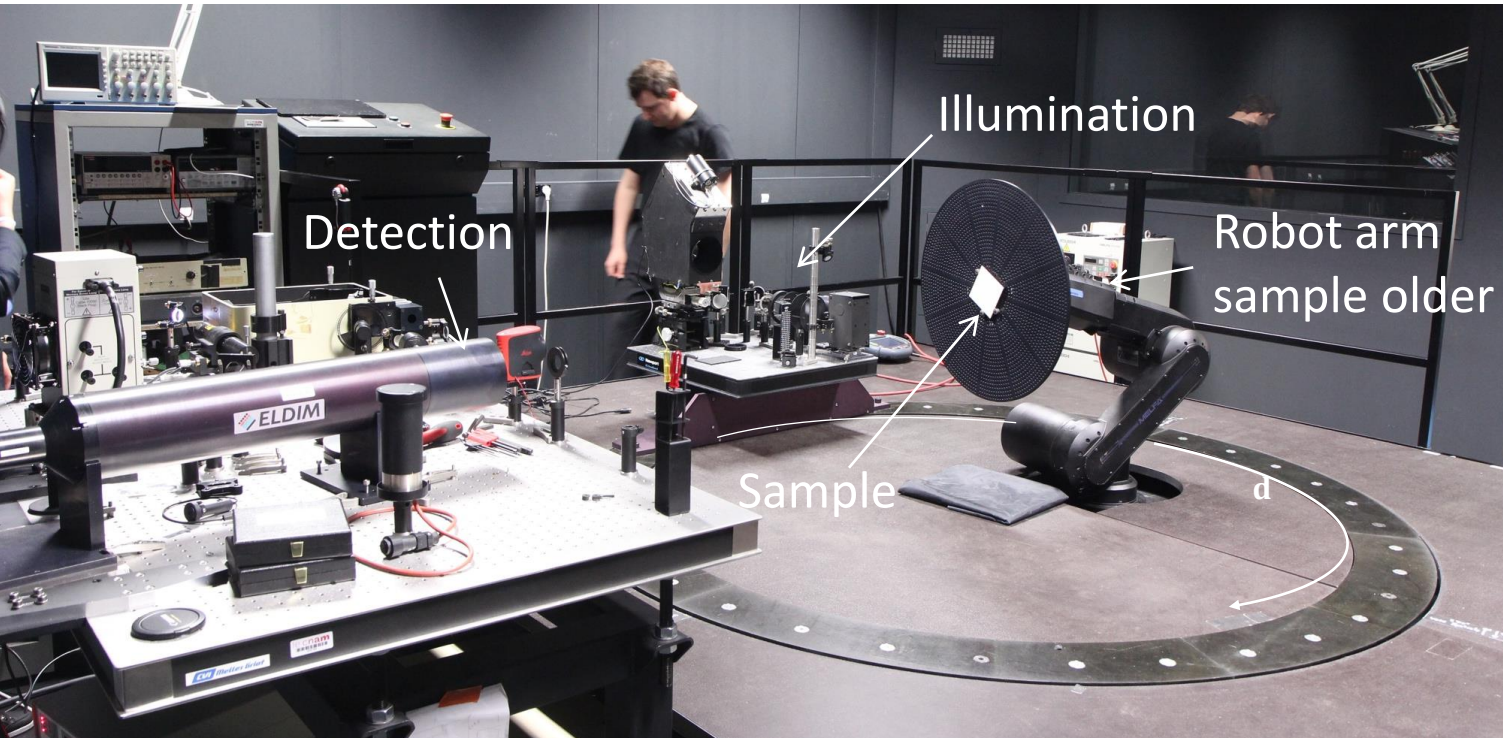
Figure from
Stover J. C.: Optical Scattering:
Measurement and Analysis,
3rd ed. SPIE, 2012.



$$BSDF = \frac{\text{radiance}}{\text{irradiance}} \approx \frac{P_s / \Omega}{P_i \cos \theta_s}$$

P_s - scattered flux
 Ω - solid collection angle
 P_i - incident flux
 θ_s - scattering angle

BRDF Measurements

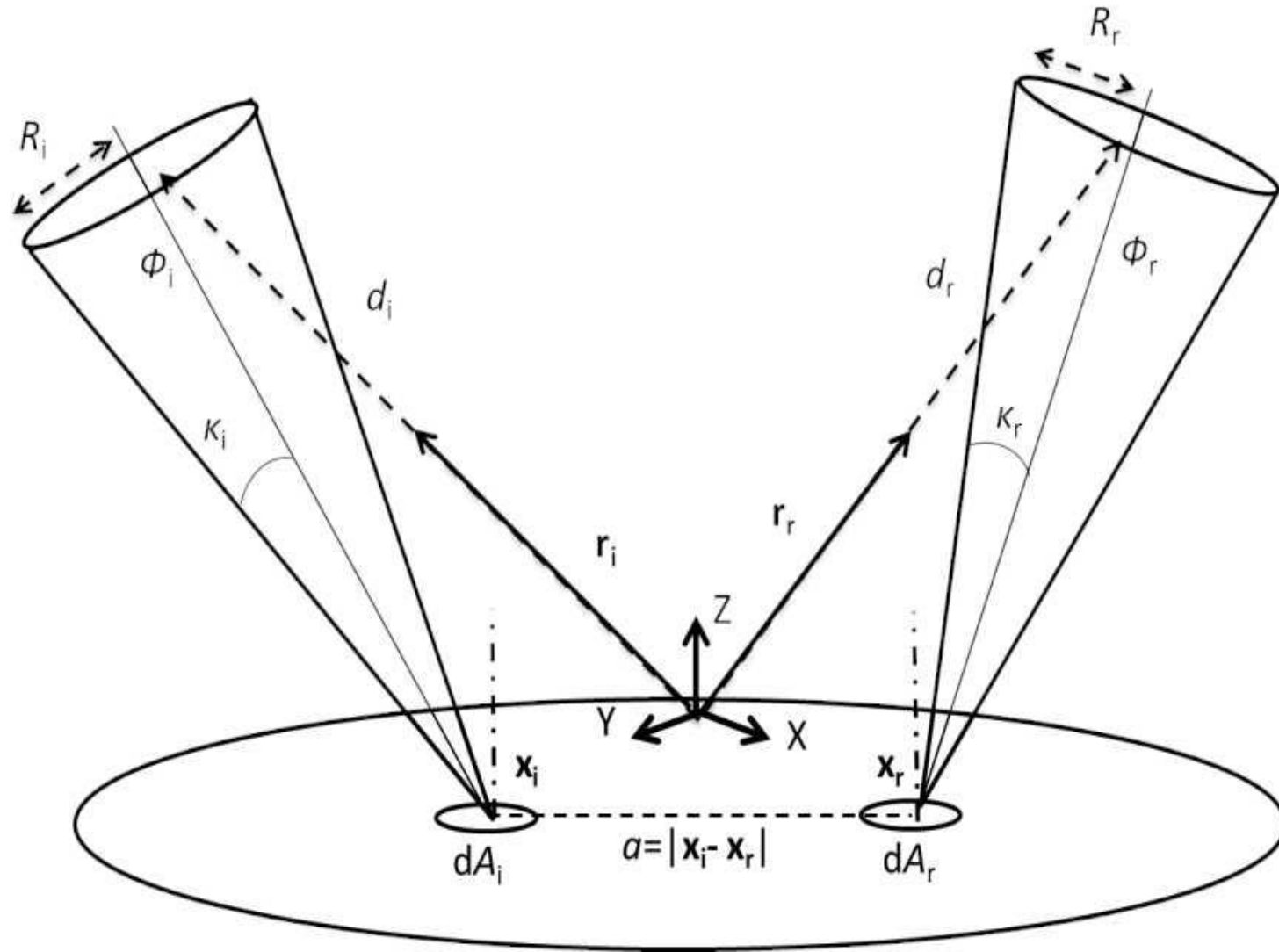


A. Rabal, G. Ged, G. Obein, 2019, *Proceedings of the 29th Quadriennial Session of CIE, CIE x046:2019, OP88*

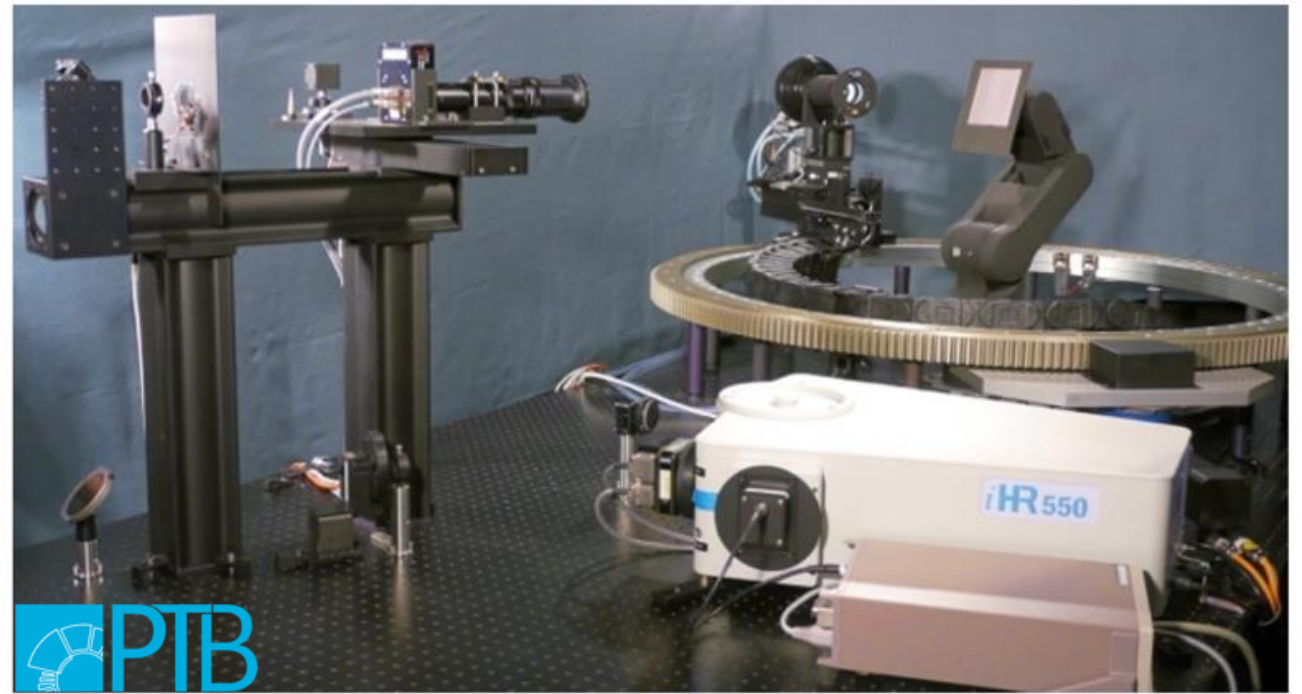
BRDF Measurements



BSSRDF($\omega_i, \omega_s, \mathbf{x}_i, \mathbf{x}_s$) Measurements

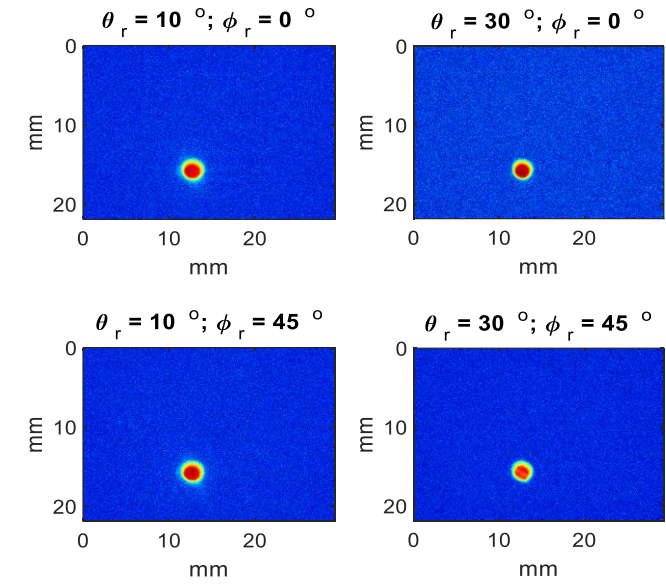
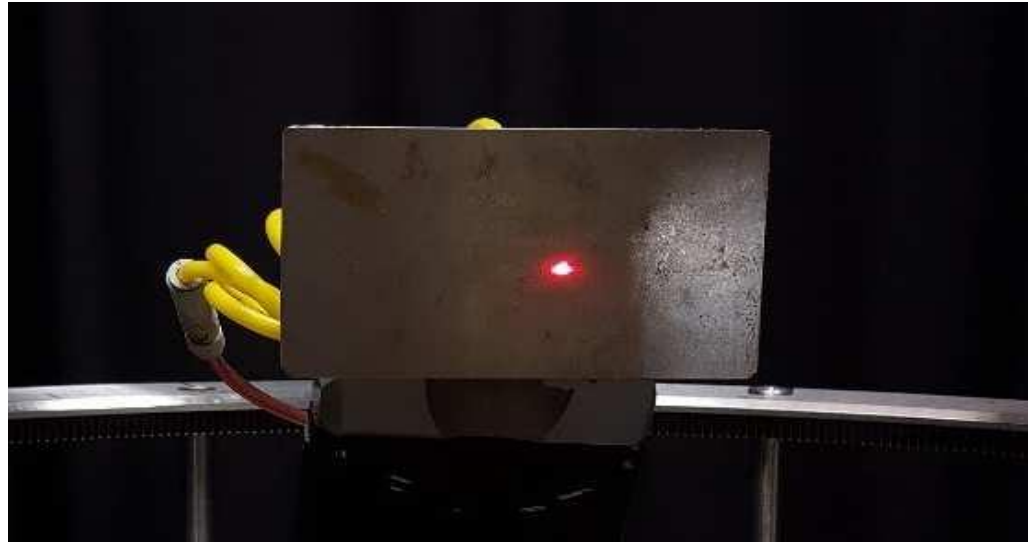


Goniospectrophotometer equipped with imaging based detection for BSSRDF measurements

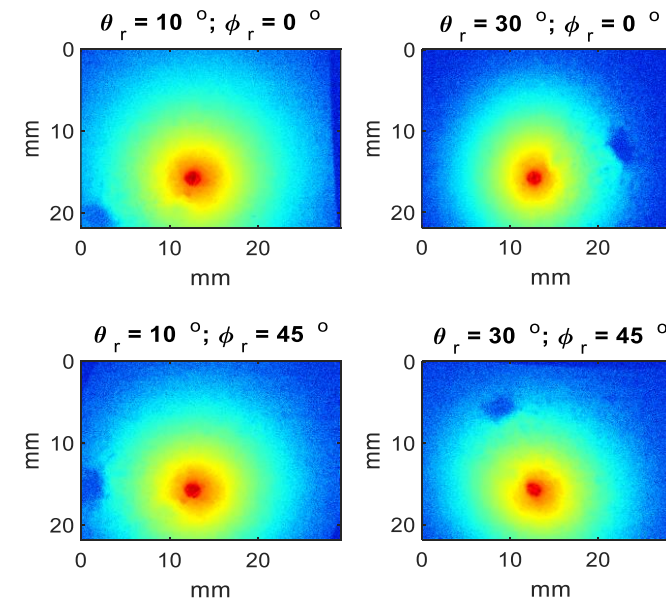
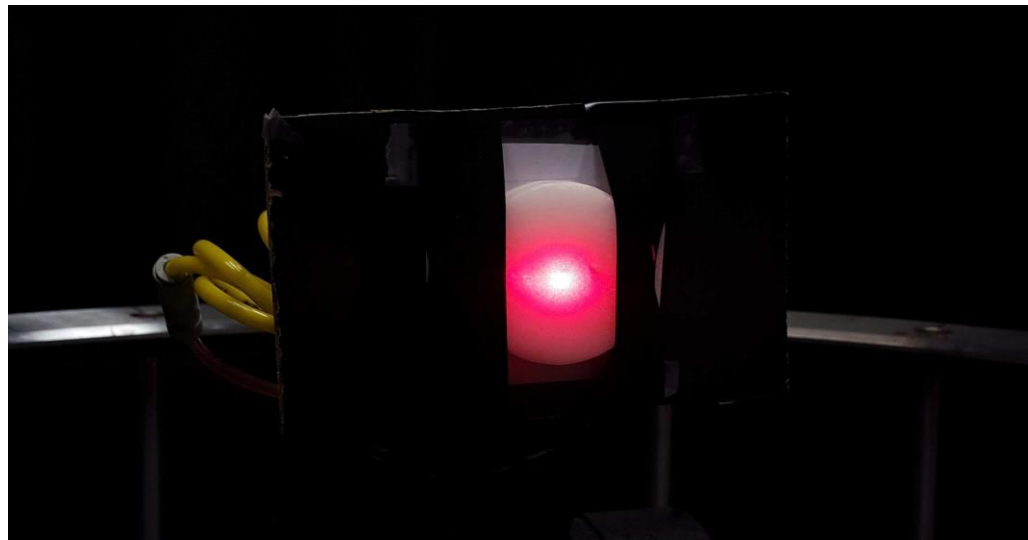


BSSRDF Measurements

Aluminium



Wax



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EMPIR



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