SCATTERING

INCOMING RADIO WAVE

PARTICLE

BACKWARD SCATTERING $= f\left(\text{DIELECTRIC SCATTERER'S PROPERTY}, \lambda_{\text{RADIO WAVE}}, \tau_{\text{SCATTERER}}\right)$

THE MIE THEORY RELATES BACKSCATTERING CROSSEC. σ AS THE EQUIVALENT AREA OF AN ISOTROPIC SCATTERER RETURN TO A RECEIVER THE POWER AMOUNT ACTUALLY RECEIVED.

THE COMPLEX INDEX OF REFRACTION, m:

$$m = n - ik$$

n: REFRACTIVE INDEX

k: ABSORPTION COEF.