

# Erratum: “Angular truncation errors in integrating nephelometry” [Rev. Sci. Instrum. 74, 3492 (2003)]

Cite as: Rev. Sci. Instrum. 90, 019901 (2019); <https://doi.org/10.1063/1.5085240>

Submitted: 11 December 2018 . Accepted: 14 December 2018 . Published Online: 07 January 2019

Hans Moosmüller, and W. Patrick Arnott



View Online



Export Citation



CrossMark

## ARTICLES YOU MAY BE INTERESTED IN

[Erratum: “An enhanced Bouc-Wen model for characterizing rate-dependent hysteresis of piezoelectric actuators” \[Rev. Sci. Instrum. 89\(11\), 115002 \(2018\)\]](#)

Review of Scientific Instruments 90, 019902 (2019); <https://doi.org/10.1063/1.5087005>

[Exploring a new ammeter traceability route for ionisation chamber measurements](#)

Review of Scientific Instruments 90, 014705 (2019); <https://doi.org/10.1063/1.5052717>

[Imaging of material defects with a radio-frequency atomic magnetometer](#)

Review of Scientific Instruments 90, 013103 (2019); <https://doi.org/10.1063/1.5053959>

**MCL**  
MAD CITY LABS INC.

AFM & NSOM      Nanopositioning Systems      Micropositioning      Single Molecule Microscopes

# Erratum: “Angular truncation errors in integrating nephelometry” [Rev. Sci. Instrum. 74, 3492 (2003)]

Cite as: Rev. Sci. Instrum. 90, 019901 (2019); doi: 10.1063/1.5085240

Submitted: 11 December 2018 • Accepted: 14 December 2018 •

Published Online: 7 January 2019



View Online



Export Citation



CrossMark

Hans Moosmüller<sup>a)</sup> and W. Patrick Arnott<sup>b)</sup>

## AFFILIATIONS

Desert Research Institute, University of Nevada System, 2215 Raggio Parkway, Reno, Nevada 89512, USA

<sup>a)</sup>hansm@dri.edu

<sup>b)</sup>Present address: Department of Physics, University of Nevada-Reno, Reno, Nevada 89557, USA.

Published under license by AIP Publishing. <https://doi.org/10.1063/1.5085240>

In the original paper,<sup>1</sup> there was a typographical error in Eq. (15a). Specifically, the leftmost rounded bracket in Eq. (15a) would always equal one (1) because the sign in front of “ $u_R$ ” in the denominator of this bracket was incorrectly written as “ $-$ ” instead of the correct “ $+$ .” Equation (15a), giving the geometric optics approximation for the phase function  $p_R$  for scattering due to external reflection from homogenous spheres, should correctly read as

$$p_R = \frac{C_{Sca}}{2\pi C_{Sca,R}} \frac{1}{8\pi} \left\{ \left( \frac{[\sin(\theta/2) - u_R]^2 + v_R^2}{[\sin(\theta/2) + u_R]^2 + v_R^2} \right) + \left( \frac{[(n^2 - k^2)\sin(\theta/2) - u_R]^2 + [2nk\sin(\theta/2) - v_R]^2}{[(n^2 - k^2)\sin(\theta/2) + u_R]^2 + [2nk\sin(\theta/2) + v_R]^2} \right) \right\}. \quad (1)$$

The typographical error in this publication<sup>1</sup> did not affect any calculations or results in this and in follow-on publications<sup>2,3</sup> and has already been corrected in the most recent use of a version of this equation.<sup>3</sup> In other words, the correct form of the equation was used in all calculations, but it was incorrectly printed in the original article.

## REFERENCES

<sup>1</sup>H. Moosmüller and W. P. Arnott, *Rev. Sci. Instrum.* **74**, 3492 (2003).

<sup>2</sup>H. Moosmüller and C. M. Sorensen, *J. Quant. Spectrosc. Radiat. Transfer* **204**, 250 (2018).

<sup>3</sup>C. M. Sorensen, J. B. Maughan, and H. Moosmüller, “Spherical particle absorption over a broad range of imaginary refractive index,” *J. Quant. Spectrosc. Radiat. Transfer* (submitted).