INTERNATIONAL STANDARD ISO/TR 20461:2000
TECHNICAL CORRIGENDUM 1

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Determination of uncertainty for volume measurements made using the gravimetric method

TECHNICAL CORRIGENDUM 1

Détermination de l'incertitude de mesure pour les mesurages volumétriques effectués au moyen de la méthode gravimétrique

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/TR 20461:2000 was prepared by Technical Committee ISO/TC 48, *Laboratory equipment*, Subcommittee SC 6, *Laboratory and volumetric ware*.

Page 2, Clause 2, Equation (4)

Below Equation (4), replace the values of constants a_2 and a_4 with the following:

a_2 is equal to $-8{,}523\,829 \times 10^{-3}$ °C^{-2} kg/m^3;

a_4 is equal to $-3{,}821\,216 \times 10^{-7}$ °C^{-4} kg/m^3.

Page 3, Clause 2, Equation (5)

Above Equation (5), add the following Note:

NOTE The density of water can also be calculated using the density formula given in Reference [10].

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Page 5, Clause 4, Equation (19)

In Equation (19), replace "10^{-8}" with "-10^{-8}" to give the following:

$$c_{t_\mathrm{d}} = \frac{\partial F}{\partial t_\mathrm{d}} \approx -10^{-8}\left(\frac{\mathrm{kg}}{\mathrm{m}^3}\mathrm{K}\right)^{-1} \times m \qquad (19)$$

Page 6, Clause 4, Equation (25)

In Equation (25), replace "K" with "hPa" to give the following:

$$c_{p_\mathrm{a}} = \frac{\partial F}{\partial p_\mathrm{a}} \approx 1{,}2 \times 10^{-9}\left(\frac{\mathrm{kg}}{\mathrm{m}^3}\mathrm{hPa}\right)^{-1} \times m \qquad (25)$$

Page 6, Clause 5

In the first and second paragraphs, replace "ISO 8655-6:—" with "ISO 8655-6:2002".

Page 10, Bibliography

Replace References [1] and [2] with the following:

[1] ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

[2] ISO 8655-6:2002, *Piston-operated volumetric apparatus — Part 6: Gravimetric methods for the determination of measurement error*

Add the following reference:

[10] TANAKA, M., GIRARD, G., DAVIS, R., PEUTO, A., BIGNELL, N. Recommended table for the density of water between 0 °C and 40 °C based on recent experimental reports**.** *Metrologia*, **38**(4), 2001, pp. 301-309

Delete the reference to Footnote 1) and the footnote "To be published."

Renumber the reference to Footnote 2) and the footnote itself to Footnote 1).