

Correction: Liu, C.H.; Lacidogna, G. Analytical Solutions and Case Studies on Stress-Dependent Corrosion in Pressurized Spherical Vessels. Metals 2023, 13, 1918

*Original*

Correction: Liu, C.H.; Lacidogna, G. Analytical Solutions and Case Studies on Stress-Dependent Corrosion in Pressurized Spherical Vessels. Metals 2023, 13, 1918 / Liu, C.H., Lacidogna, G.. - In: METALS. - ISSN 2075-4701. - STAMPA. - 15:12(2025). [10.3390/met15121343]

*Availability:*

This version is available at: 11583/3006268 since: 2026-01-03T12:38:08Z

*Publisher:*

Multidisciplinary Digital Publishing Institute (MDPI)

*Published*

DOI:10.3390/met15121343

*Terms of use:*

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

*Publisher copyright*

(Article begins on next page)

Correction

# Correction: Liu, C.H.; Lacidogna, G. Analytical Solutions and Case Studies on Stress-Dependent Corrosion in Pressurized Spherical Vessels. *Metals* 2023, 13, 1918

Cheng Huijuan Liu<sup>1</sup> and Giuseppe Lacidogna<sup>2,\*</sup> 

<sup>1</sup> Department of Mathematics, Aberystwyth University, Aberystwyth SY23 3BZ, UK; hul19@aber.ac.uk

<sup>2</sup> Department of Structural, Geotechnical and Building Engineering, Politecnico di Torino, 10129 Turin, Italy

\* Correspondence: giuseppe.lacidogna@polito.it

There was an error in the original publication [1]. A typing error occurred when copying equations. The correct form of  $\bar{m}$  is  $\bar{m} = (m_i - m_o) \frac{2\Delta p r_c}{m}$ , whereas it was incorrectly written as  $\bar{m} = (m_i - m_o)$ . Consequently, other equations derived later in the text have been corrected.

In Section 2.1.2, for solving  $\sigma(t)$ , paragraph 4 has been corrected as follows:

“Here,  $\tilde{a} = a_i + a_o - m_o \Delta p / 2$ ,  $m = m_i + m_o$ ,  $\bar{a} = a_i - a_o + m_o \Delta p / 2$ ,  $\bar{m} = (m_i - m_o) \frac{2\Delta p r_c}{m}$ ,  $\delta = (p_i + 3p_o) / 4$ , and  $\Delta p = p_i - p_o$ .”

In Section 3.1, Promotion of the Boundary Stress,  $\sigma$ , paragraph 1, a line below Equations (14a) and (14b) has been corrected as follows:

“where  $\tilde{a} = a_i + a_o - m_o \Delta p / 2 + (m_i - m_o) \frac{2\Delta p r_c}{m} (m_i + m_o) / 2 / r_c$ ”

In Section 3.2, Improvement of the Vessel Thickness,  $h$ , paragraph 2, the equation for the  $d$  value has been corrected as follows:

$$d = [h_o(p_i - p_o)(m_i - m_o) \frac{2\Delta p r_c}{m} + 2r_{co}(p_i - p_o)(m_i + m_o)]$$

In Section 3.3, Presentation of the Vessel Mid-Surface Radius,  $r_c$ , in Time, paragraph 1, a line below Equations (16a) and (16b) has been corrected as follows:

“where  $A = (-a_o + a_i - m_o \frac{3p_i + p_o}{4} - m_i \frac{p_i + 3p_o}{4}) / 2 - \frac{1}{4}(p_i - p_o)(m_i - m_o) \frac{2\Delta p r_c}{m} \frac{b_1 + c / r_{co}}{e}$ , and  $B = -\frac{1}{4}(p_i - p_o)(m_i - m_o) \frac{2\Delta p r_c}{m} \frac{d}{e}$ .”

The authors state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.



Received: 8 October 2025

Accepted: 14 November 2025

Published: 8 December 2025

**Citation:** Liu, C.H.; Lacidogna, G. Correction: Liu, C.H.; Lacidogna, G. Analytical Solutions and Case Studies on Stress-Dependent Corrosion in Pressurized Spherical Vessels. *Metals* 2023, 13, 1918. *Metals* 2025, 15, 1343. <https://doi.org/10.3390/met15121343>

**Copyright:** © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## Reference

1. Liu, C.H.; Lacidogna, G. Analytical Solutions and Case Studies on Stress-Dependent Corrosion in Pressurized Spherical Vessels. *Metals* 2023, 13, 1918. [\[CrossRef\]](#)

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.