Erratum: "Implications of hydrophobic interactions and consequent apparent slip phenomenon on the entrance region transport of liquids through microchannels" [Phys. Fluids 20, 043602 (2008)]

Cite as: Phys. Fluids **23**, 109901 (2011); https://doi.org/10.1063/1.3650912 Submitted: 30 May 2011 • Accepted: 13 July 2011 • Published Online: 14 October 2011

Suman Chakraborty and Kumar Dinkar Anand





ARTICLES YOU MAY BE INTERESTED IN

Implications of hydrophobic interactions and consequent apparent slip phenomenon on the entrance region transport of liquids through microchannels

Physics of Fluids 20, 043602 (2008); https://doi.org/10.1063/1.2904988

Curvature-induced secondary microflow motion in steady electro-osmotic transport with hydrodynamic slippage effect

Physics of Fluids 23, 102004 (2011); https://doi.org/10.1063/1.3650911

Erratum: "Controlled microbubble generation on a compact disk" [Appl. Phys. Lett. 97, 234103 (2010)]

Applied Physics Letters 98, 119903 (2011); https://doi.org/10.1063/1.3567414



Physics of Fluids

Special Topic: Paint and Coating Physics

Submit Today!



Erratum: "Implications of hydrophobic interactions and consequent apparent slip phenomenon on the entrance region transport of liquids through microchannels" [Phys. Fluids 20, 043602 (2008)]

Suman Chakrabortya) and Kumar Dinkar Anand

Department of Mechanical Engineering, Indian Institute of Technology Kharagpur, Kharagpur 721302, India

(Received 30 May 2011; accepted 13 July 2011; published online 14 October 2011)

[doi:10.1063/1.3650912]

The purpose of this erratum is to re-represent the abovementioned article¹ in an extended collaborative mode. The revised authorship should read as:

Suman Chakraborty, ¹ Zhipeng Duan, ² Y. S. Muzychka, ³ and Kumar Dinkar Anand ¹

¹Department of Mechanical Engineering, Indian Institute of Technology Kharagpur, Kharagpur 721302, India

²Department of Mechanical and Mechatronics Engineering, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada

³Faculty of Engineering and Applied Science, Memorial University of Newfoundland, St. John's, Newfoundland A1B 3X5, Canada

In the context of some recent private communications, the corresponding author (S. Chakraborty) has learnt from his co-author K. D. Anand that Anand received valuable insights, which were indispensable for the mathematical analysis on liquid microflows presented in this paper, from some derivations on gas flows as formulated by Zhipeng Duan and Y. S. Muzychka, and as available to Anand through an unpublished private communication. This information was not available to the corresponding author earlier.

Accordingly, the corresponding author felt it appropriate to re-represent the work in an extended joint authorship mode, with Zhipeng Duan and Y. S. Muzychka as additional coauthors. The corresponding author gratefully acknowledges Zhipeng Duan and Y. S. Muzychka for expressing their acceptance and willingness to this proposition of representing this work in a collaborative mode. He also acknowledges Y. S. Muzychka for providing information on additional references. Based on that valuable input, the authors would like to cite the following additional references^{2–5} on microchannel gas flows, in the context of the mathematical analysis outlined in this work.

a) Author to whom correspondence should be addressed. Electronic mail: suman@mech.iitkgp.ernet.in.

¹S. Chakraborty and K. D. Anand, "Implications of hydrophobic interactions and consequent apparent slip phenomenon on the entrance region transport of liquids through microchannels," Phys. Fluids **20**, 043602 (2008).

²Z. P. Duan and Y. S. Muzychka, "Models for gaseous slip flow in non-circular micro-channels," in *Proceedings of the ASME/JSME Joint Thermal Engineering and Summer Heat Transfer Conference*, July 8–12, Vancouver, British Columbia, Canada (2007), ASME, ISBN: 0-7918-4275-4.

³Z. P. Duan, "Flow of gases in microchannels," Ph.D. thesis (Memorial University of Newfoundland, Canada, 2007).

⁴Z. P. Duan and Y. S. Muzychka, "Slip flow in non-circular micro-channels," Microfluid. Nanofluid. **3**, 473 (2007).

⁵Z. P. Duan and Y. S. Muzychka, "Slip flow in the hydrodynamic entrance region of non-circular microchannels," J. Fluids Eng. 132, 011201 (2010).