ERRATUM: ACTIVELY ROTATING GRANULAR PARTICLES MANUFACTURED BY RAPID PROTOTYPING

ERRATUM: PARTÍCULAS GRANULARES QUE ROTAN ACTIVAMENTE FABRICADAS MEDIANTE PROTOTIPADO RÁPIDO

C. Scholz† and T. Pöschel

Institute for Multiscale Simulation, Nägelsbachstraße 49b, FAU Erlangen-Nürnberg, 91052 Erlangen, Germany
† corresponding author

Recibido 31/5/2017; Aceptado 5/4/2017

In [1] the rotational frequency of a single Vibrot was incorrectly plotted as a function of the excitation amplitude A. Instead the figure shows the data in dependence of the dimensionless acceleration $\Gamma = A(2\pi f_D)^2/g$, where g is the gravitational acceleration. Only in the case of $f_D = 50\,\mathrm{Hz}$ $A = 1.3\,\mathrm{mm}$ corresponds to $\Gamma = 1.3\,\mathrm{g}$ and vice versa. The corresponding paragraph of the original manuscript must then be replaced by the following: "Figure 4 shows $\overline{\omega}$ vs. f_D for two different values of the dimensionless acceleration $\Gamma = A(2\pi f_D)^2/g$. For a low Γ the particle performs slow rotation where f_D depends non-monotonously on the frequency characterized by a minimum at $f_D = 50\,\mathrm{Hz}$. For large Γ, we observe slow rotation at low frequency and tumbling motion for $f_D \geq 30\,\mathrm{Hz}$, where the rotational velocity decreases with increasing f_D."

The corrected version of the plot is shown in Fig. 4.

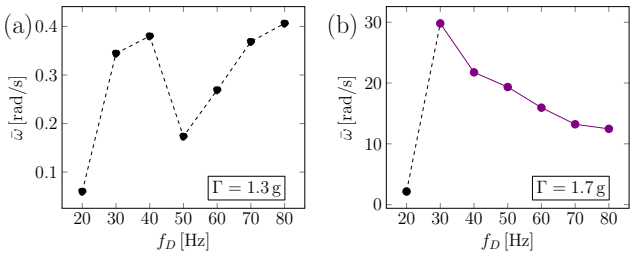

Figure 4. Mean rotational velocity $\overline{\omega}$ of a Vibrot as a function of the excitation frequency f_D for (a) $\Gamma = 1.3\,\mathrm{g}$ and (b) $\Gamma = 1.7\,\mathrm{g}$. Error bars are on the order of the marker size.

REFERENCES

[1] C. Scholtz and T. Pöschel, Rev. Cubana Fís., 33, 37 (2016).