

Movie Captions

- *Movie_{1C}YL + WAKE_{TRA}d1p12mm.avi*

Illustration of the wake pattern and of the cylinder behaviour in a TRA regime with $d = 1.12\text{mm}$, $Ar \simeq 47$, $Re \simeq 49$, $Ca \sim 2.6$, and $L/d \simeq 35$. Wake is depicted by instantaneous iso-surfaces of the λ_2 criterion ($\lambda_2 d^2/U^2 = -0.0004$) colored by iso-contours of the x-vorticity ($\omega_x d/U \in [-0.1, 0.1]$; blue to red).

- *Movie_{2C}YL + WAKE_{TRA}d1p9mm.avi*

Illustration of the wake pattern and of the cylinder behaviour in a TRA regime with $d = 1.9\text{mm}$, $Ar \simeq 103$, $Re \simeq 124$, $Ca \mathcal{O}(10^{-2})$, and $L/d \simeq 10$. Wake is depicted by instantaneous iso-surfaces of the λ_2 criterion ($\lambda_2 d^2/U^2 = -0.005$) colored by iso-contours of the x-vorticity ($\omega_x d/U \in [-0.15, 0.15]$; blue to red).

- *Movie_{3C}YL + WAKE_{AZI}d2p55mm.avi*

Illustration of the wake pattern and of the cylinder behaviour for an AZI regime with $d = 2.55\text{mm}$, $Ar \simeq 161$, $Re \simeq 217$, $Ca \mathcal{O}(10^{-4})$, and $L/d \simeq 20$. Wake is depicted by instantaneous iso-surfaces of the λ_2 criterion ($\lambda_2 d^2/U^2 = -0.01$) colored by iso-contours of the x-vorticity ($\omega_x d/U \in [-0.2, 0.2]$; blue to red.)

- *Movie_{4C}YLM1d1p09mm.avi*

Bending oscillations of the cylinder during its fall for M₁ regime.

- *Movie_{5C}YL + WAKE_M1d1p09mm.mp4*

Illustration of the wake pattern and of the cylinder behaviour for a M₁ regime with $d = 1.09\text{mm}$, $Ar \simeq 45$, $Re \simeq 42$, $Ca \simeq 36$, and $L/d \simeq 68$. Wake is depicted by instantaneous iso-surfaces of the λ_2 criterion ($\lambda_2 d^2/U^2 = -0.0004$) colored by iso-contours of the x-vorticity ($\omega_x d/U \in [-0.1, 0.1]$; blue to red).

- *Movie_{6C}YL + WAKE_M2d1p02mm.mp4*

Illustration of the wake pattern and of the cylinder behaviour for a M₂ regime with $d = 1.02\text{mm}$, $Ar \simeq 40$, $Re \simeq 37$, $Ca \simeq 210$, and $L/d \simeq 107$. Wake is depicted by instantaneous iso-surfaces of the λ_2 criterion ($\lambda_2 d^2/U^2 = -0.0004$) colored by iso-contours of the x-vorticity ($\omega_x d/U \in [-0.1, 0.1]$; blue to red).