

Fig. 2. Schematic of the experimental setup (closed system) aluminum beam (1) (control object); actuators (2); sensors (3); piezoelectric stack actuator (4); fixed base (5); laser vibrometer (6), controller (7).

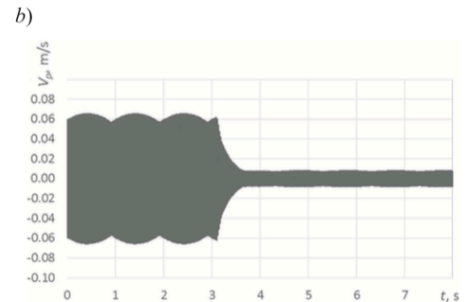
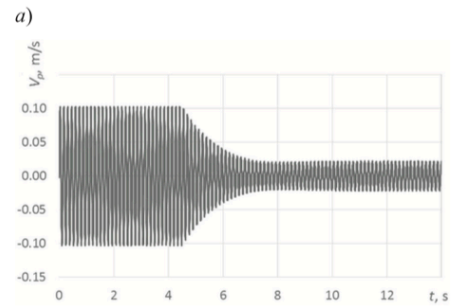


Fig. 5. Oscillograms of the velocity V_p of the vibrations of the upper end of the beam, corresponding to resonant modes with the first (a) and the second (b) natural frequencies. The moments when the control system was switched on can be seen in the figure.

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The two right-most images above are from: Alexander K. Belyaev, Vladimir A. Polyanskiy, Nina A. Smirnova and Aleksandr V. Fedotov, "Identification procedure in the modal control of a distributed elastic system", St. Petersburg Polytechnical University Journal: Physics and Mathematics, Vol. 3. pp 135-143, 2017

See:

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<https://scholar.google.ru/citations?user=clQGwm0AAAAJ&hl=en>

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Selected Publications:

Book:

V.P. Matveenko, M. Krommer, A.K. Belyaev and H. Irschik (editors), Dynamics and Control of Advanced Structures and Machines, Springer, (2019)

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