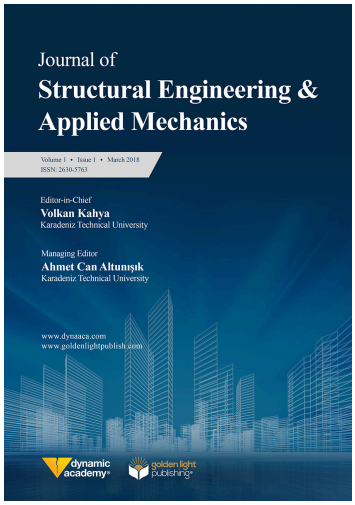


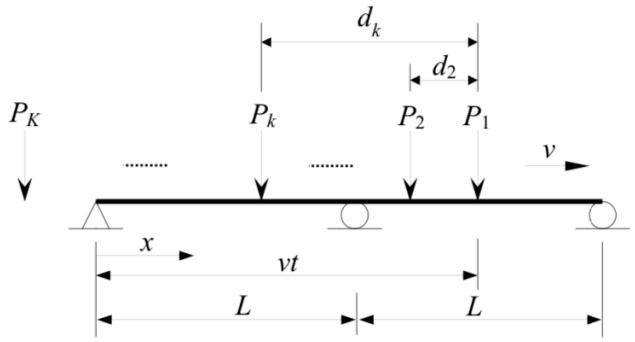


**Figure 1.** A two-span continuous beam subjected to a series of moving loads

# Professor Volkan Kahya

**The right-most image is from:** Volkan Kahya, Onur Araz and Muhittin Turan, "Resonant vibrations of two-span railway bridges under high-speed trains", Journal of Engineering and Natural Sciences, Sigma 33, pp 188-199, 2015

See:
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## Autobiographical Statement:

My research interest cover numerical and analytical modelling of structures made of laminated composites and FGMs, vibration control in structures using passive control devices, and damage detection and health monitoring in structures using intelligent computation.

## Selected Publications:

Kahya V. Dynamic analysis of laminated composite beams under moving loads using finite element method. Nucl Eng Des 2012;243:41–8.
Volkan Kahya, "Dynamic analysis of pre-stressed elastic beams under moving mass using different beam models", Challenge Journal of Structural Mechanics, Vol. 1, No. 3, pp 106-116, 2015
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V. Kahya and O. Araz, "Series multiple tuned mass dampers for vibration control of high-speed railway bridges", in Insights and Innovations in Structural Engineering, Mechanics and Computation, Zingoni (Editor), 2016
Ahmet Can Altunisik, Fatih Yesevi Okur and Volkan Kahya, "Structural identification of a cantilever beam with multiple cracks: Modeling and validation", International Journal of Mechanical Sciences, Vol. 130, pp 74-89, 2017
Volkan Kahya and Muhittin Turan, "Finite element model for vibration and buckling of functionally graded beams based on the first-order shear deformation theory", Composites Part B: Engineering, Vol. 109, pp 108-115, January 2017
Volkan Kahya and Muhittin Turan, "Vibration and stability analysis of functionally graded sandwich beams by a multi-layer finite element", Composites Part B Engineering, Vol. 146, pp 198-212, August 2018

Volkan Kahya, Sebahat Karaca, Fatih Yesevi Okur, Ahmet Can Altunışık, Mustafa Aslan, “Free vibrations of laminated composite beams with multiple edge cracks: Numerical model and experimental validation”, International Journal of Mechanical Science, Vol. 159, pp 30-42, August 2019
Volkan Kahya, Sebahat Karaca and Thuc P. Vo, Shear-deformable finite element for free vibrations of laminated composite beams with arbitrary lay-up, Steel and Composite Structures, Vol. 33, No. 4, November 25 2019, pp 473-487