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[ASME Journal of Vibration and Acoustics](#)

**Special Issue on Bio-inspired Systems**

Throughout evolution, natural systems have developed many unique solutions to achieve functionalities beyond those of man-made systems. For decades, the natural world has served as an inspiration for countless inventions and innovations. Some examples are as follows.

In the area of sensors and actuators, many animals have developed unique bio-acoustic systems that allow them to have remarkable sound production and hearing capabilities. In the area of materials and structures, animals have developed high-performance materials (e.g., seashells, bone, and teeth) and structures with vibration isolation/suppression capability (e.g., woodpecker, legs and limbs of animals). In the area of locomotion, bats and insects have developed delicate flight control systems to facilitate their positioning and maneuver.

This Special Issue of the [ASME Journal of Vibration and Acoustics](#) will highlight original research and high-quality review articles on bio-inspired systems, with a special focus on vibrations, dynamics, acoustics, and sensing/actuation. Reports on experimental, computational, or multi-disciplinary research are welcome.

**Topic Areas**

- Modeling of dynamical and acoustical structures in biological systems
- Bio-inspired acoustic and vibrational sensors and actuators
- Bio-inspired materials and structures for vibration control and isolation
- Vibration and acoustics-based energy harvesting inspired by biological materials and structures
- Bio-inspired robotics

**Publication Target Dates**

Deadline for Submission:	<b>June 1, 2018</b>
Target Date for all Articles to Finish Review:	<b>December 1, 2018</b>
Target Publication Date:	<b>April Issue, 2019</b>

**Submission Instructions**

To submit a manuscript for consideration for the Special Issue, please visit the [journal website](#) and choose the link Submit Papers. Select the *Journal of Vibration and Acoustics* and then choose the Special Issue option for “*Bio-Inspired Systems*”.

Early submissions are strongly encouraged. Papers submitted by June 1, 2018 will be reviewed in time for inclusion in the Special Issue. Papers received after that date may still be considered for the Special Issue, if time and space permit. Papers that are not ready for production in time for inclusion in the Special Issue may be considered for a regular issue of the journal.

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