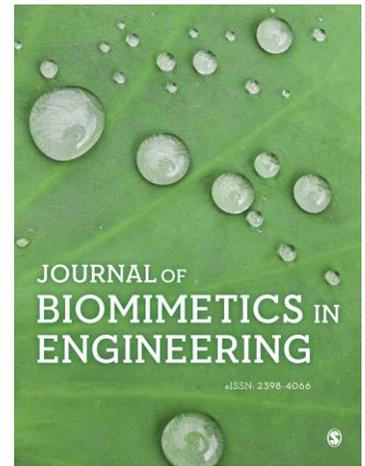


Call for Papers

Journal of Biomimetics in Engineering

Special Collection on Ethical, Normative, and Epistemological Considerations of Biomimetics

The application of biomimetics as an innovation method has grown exponentially in recent decades in a number of disciplines including design, architecture, material science, and engineering. These disciplines are predominantly technically-driven and solutions-focused, emphasizing the translation of biological models into innovative outcomes. These innovations are occurring in a wide array of settings ranging from corporate R&D departments to academic research labs to inventors garages. And although biomimetic innovation is found across a diversity of disciplines, it is often unified by the “biomimetic promise” – the belief that innovations based on natural strategies are inherently more efficient, effective, or sustainable. This is epitomized by discourses of sustainable development that include bio-inspired strategies as part of a larger set of development solutions. However, several authors have highlighted that users of biomimetics frequently adhere to a naturalistic fallacy that because something is “natural”, it is necessarily “good”. To complicate this phenomenon, our understanding and interpretation of biological systems shapes and is concurrently shaped by the dominant socio-economic discourses of any particular era. Technology and innovation are not politically and socially neutral phenomena and biomimetic innovation is no exception.



This Special Collection aims to explore the underlying ethical, normative, and epistemological issues that practitioners, scholars, and educators confront in their application of biomimetics for sustainability-oriented innovation.

Authors are invited to submit papers that contribute to fulfilling the following aims of the Special Collection:

- To explore the variations amongst interdisciplinary perspectives of sustainability related to biomimetics.
- To create a collection of perspectives and case studies highlighting the challenges and opportunities of normativity (i.e., adherence to specific social norms) in the application of biomimetics.
- To identify epistemological issues (i.e., the ways of knowing) and ethical considerations in transdisciplinary research guided by analogical and metaphorical translation of biological strategies.
- To extend empirical evidence that biomimetics has a role to play in the on-going development of the international sustainable development discourse.
- To evoke an interdisciplinary conversation regarding the incorporation of ecologically and socially motivated practices into the development of biomimetic innovations.
- To motivate researchers, specifically those in technically-motivated disciplines, to explore the ethical and normative implications of their innovation work in an open and inclusive dialogue.

Manuscripts submitted to this Special Collection will be peer-reviewed before publication.

To be considered for inclusion in the Special Collection, please submit your manuscript by **15th September 2017**.

For more information about the *Journal of Biomimetics in Engineering* please visit our website: bit.ly/sage-biomimetics

Guest Editor

Taryn Mead, *Marie Curie Early Career Research Fellow, University of Exeter, United Kingdom*, T1m206@exeter.ac.uk

Co-Guest Editors

Dr Vincent Blok, *Wageningen University, Netherlands*, vincent.blok@wur.nl

Dr Henry Dicks, *Université Jean Moulin Lyon 3, France*, henry.dicks@univ-lyon3.fr