

## 日本機械学会北海道支部 バイオメカニクス懇話会 第 37 回講演会

(主催:日本機械学会バイオエンジニアリング部門「計測と力学-生体への応用-」研究会、共催:バイオメカニクス懇話会、日本機械学会北海道支部)

主査 大橋 俊朗

下記の要領にて第37回講演会を共催いたします.本講演会は日本機械学会バイオエンジニアリング部門第63回「計測と力学-生体への応用-」研究会の主催とともに,本懇話会および日本機械学会北海道支部特別講演会の共催といたします.皆様のご参加をお待ちしております.

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日 時:2019年12月24日(火),14:45~15:45

場 所:北海道大学大学院工学研究院·工学部 大会議室 A1-17 室

講 演:

14:45~15:45

From Biology to Technology J

Dr. Aimee Sakes

Assistant Professor, Delft University of Technology, Netherlands

Nature offers a wide-range of solutions to challenges we currently face in technology. Lessons from nature can be translated into innovations in the fields of products, organisational forms and processes. When using nature as inspiration we learn from a system that has developed resilience, adaptability and efficiency over centuries. This is also called bio-inspired design. Nature constantly seeks new equilibria and actively responds to change. Biomimicry involves knowledge development of natural functions, models, systems and strategies and the translation of this knowledge into practical applications to drive innovation. Rather than focusing on the separate links, it is important that the entire chain is visualised during the process. This integrated approach rests on the fact that everything is connected and balanced in nature. In this talk I will discuss several interesting mechanisms and principles that animals use. I will then go into how to translate these principles into man-made prototypes. I will give examples of devices we have developed in our group.

世話人・問い合わせ先:

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