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# Design and Nature |

Comparing Design in Nature with Science and Engineering

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## **Preface**

This volume contains papers presented at the 3<sup>rd</sup> International Conference on Design and Nature, held in the New Forest, England, in 2006, and is part of the Transactions of the Wessex Institute, permanently available on-line at www.witpress.com.

Launched in 2002, this conference acts as a forum for researchers from around the world working on a variety of studies involving nature and its significance to modern scientific thought and design. The Conference provides a channel of communication between all those working in this exciting new discipline, whether they are in academia, research institutions or industry.

Many leading discoveries have been prompted by parallels between nature and human design. Today, advances in scientific knowledge coupled with powerful computers and simulation models have made comprehensive studies of nature possible.

This book includes sections dealing with: Design in nature; Shape and form in engineering and nature; Nature and architectural design; Thermodynamics in nature; Biomimetics; Natural materials in engineering; Mechanics in nature; Bioengineering; Bionics; Solutions from nature; Evolutionary optimisation; Complexity and Sustainability studies.

The Editor is grateful to the members of the International Scientific Advisory Committee and other colleagues for helping to select the papers published in this book and to all contributors for the quality of their work.

The Editor
The New Forest, UK, 2006

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