

# Innovation Inspired by Nature Series

Adelaide, 18 – 19 May 2006



*The 1997 book, Biomimicry, describes a science that studies nature's best ideas and then imitates these designs and processes to provide innovative and sustainable solutions for industry and research development. Author and international expert, Janine Benyus, is focusing on working with industry and governments across the globe to implement her ideas.*

*Janine Benyus is a life sciences writer and author of six books, including her latest-- Biomimicry: Innovation Inspired by Nature. She is a renowned expert leading a global shift in design innovation in which sustainable solutions are developed by mimicking nature's designs and processes. In 2006 she brings her expertise in Biomimicry to Adelaide.*

**NATURE AS  
MODEL**

**NATURE AS  
MEASURE**

**NATURE AS  
MENTOR**

**Biomimicry: seeking sustainable solutions by  
emulating Nature's living examples**

**Thursday 18<sup>th</sup> May – UniSA City East Campus  
Mutual Community Theatre (H2-02), Basil Hetzel Building – off Frome Road  
6.15pm for 6.30pm start**

**A free public lecture supported by  
The Bob Hawke Prime Ministerial Centre at UniSA**

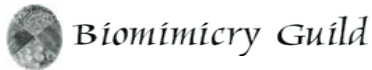
Nature can offer many answers to our human-made environmental problems. Come and learn about biomimicry from a world expert – a new and inspiring field that is already re-shaping our world.

**Bookings:**

via the Hawke Centre web site:

[www.hawkecentre.unisa.edu.au](http://www.hawkecentre.unisa.edu.au) or RSVP line **08 8302 0215**

Presented by:



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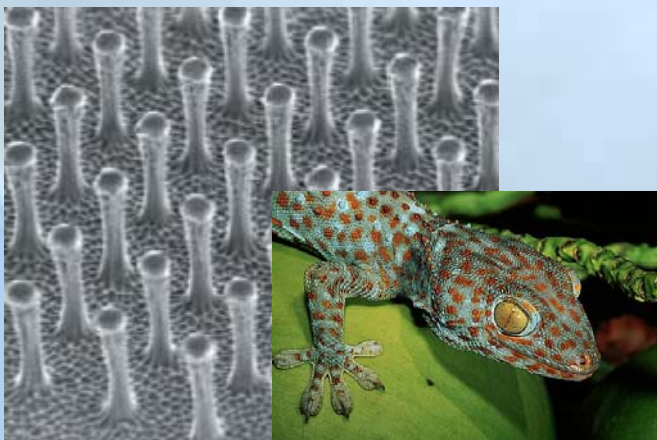
## Biomimicry: an ardent desire to protect the genius that surrounds us!

Biomimicry (from bios, meaning life, and mimesis, meaning to imitate) is a new science that studies nature's best ideas and then imitates these designs and processes to solve human problems. The conscious emulation of life's genius is a survival strategy for the human race, a path to a sustainable future. Biological knowledge is doubling every five years, growing like a pointillist painting toward a recognisable whole. For the first time in history, we have the instruments-the scopes and satellites-to feel the shiver of a neuron in thought or watch in colour as a star is born. When we combine this intensified gaze with the sheer amount of scientific knowledge coming into focus, we suddenly have the capacity to mimic nature like never before. *"Doing it nature's way" has the potential to change the way we grow food, make materials, harness energy, heal ourselves, store information, and conduct business.*

### Some real-world examples of Biomimicry applied:

#### Replaceable Floors

Leading international carpet company Interface, Inc. have developed carpet fabrics that mimic forest floors – each durable Terratex carpet tile is 100% compostable, and the random surface design pattern allows for easy replacement through the Company's world-renowned product take-back service. The fabric is considered so environmentally healthy that you can literally eat it!



#### Super-grip Gecko Tape

Scientists at The University of Manchester have developed a new adhesive, 'gecko tape', comprising billions of tiny plastic fibres, less than a micrometer in diameter, which are similar to natural hairs covering the soles of geckos which help it to climb surfaces, including glass ceilings. With no toxic chemicals, a one centimetre square of tape could support a weight of one kilogram.

#### Building designs from Termite Mounds

The Eastgate Building in Harare, Zimbabwe, can provide air-conditionless, climate-controlled comfort in extreme temperature conditions by using a passive ventilation system modelled on that used by termite mounds. The building costs US\$3.5 million less to build and offers rent fees 20% lower than the average, and on the hottest days provides indoor comfort at 3-4 degrees Celsius lower than outdoor temperatures.

