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This “nano-heart” is made of many zinc-oxide nano-petals ranging from 50nm to about 300nm. These nano-structures, which have high surface to volume ratio, are grown to enable more photosynthetic proteins to be attached to the ZnO nano-structures. It is hoped they will increase the performance of solar cells.

Image courtesy of Swee Ching Tan, Nanoscience Centre, University of Cambridge

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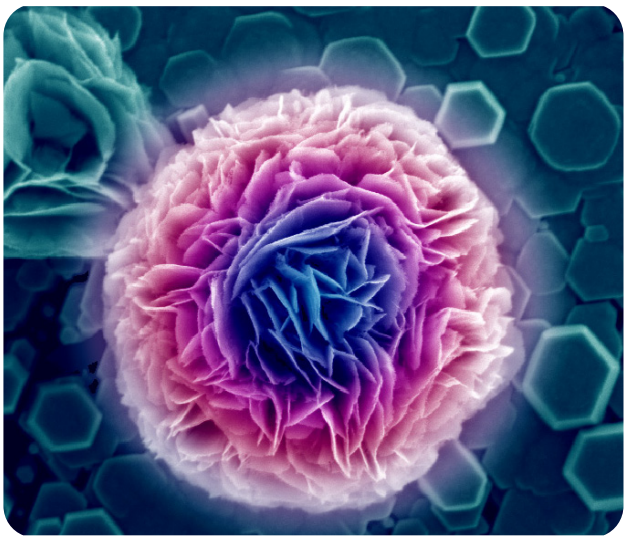

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This “nano-flower” is made of many zinc-oxide nano-petals ranging from 50nm to about 300nm. These nano-structures, which have high surface to volume ratio, are grown to enable more photosynthetic proteins to be attached to the ZnO nano-structures. It is hoped they will increase the performance of solar cells.

Image courtesy of Swee Ching Tan, Nanoscience Centre, University of Cambridge

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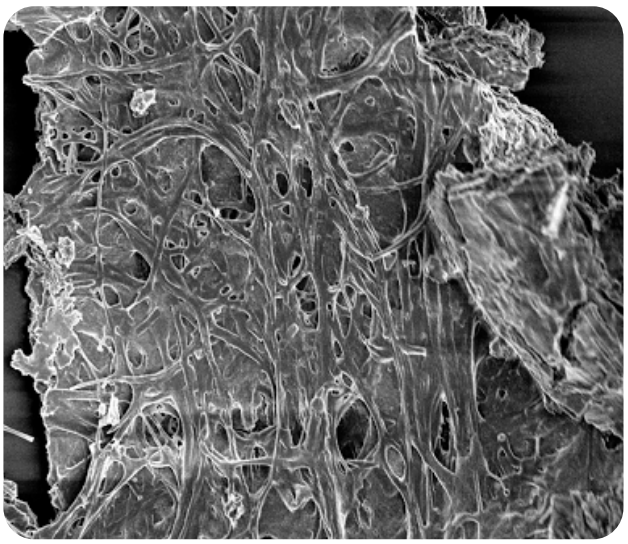

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An SEM picture of cross-linked nano fibres consisting of individual protein nanofibres synthetically grown from chicken egg white. This could be used is to produce a very strong biomaterial based from renewable resources. Instead of using synthetic plastics which are produced from petroleum, we could use materials from chicken eggs.

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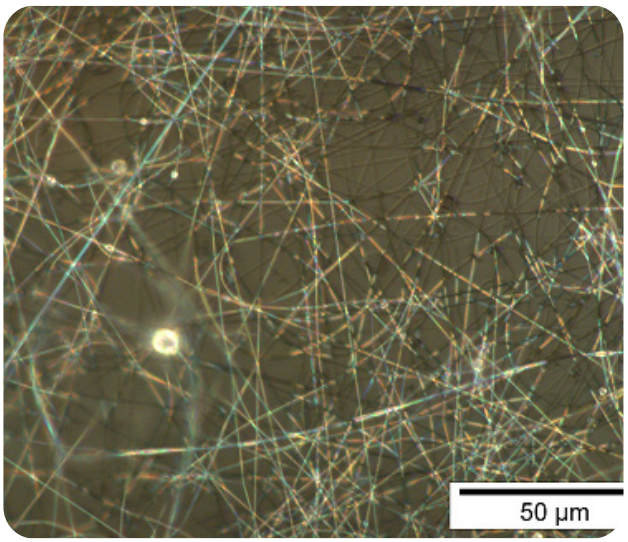

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The optical microscope image shows gelatin electrospun bionano fibres.

The rationale for performing this experiment is to produce macrospic materials from individual nanofibres. The nanofibres could be woven into meshes, like a piece of paper.

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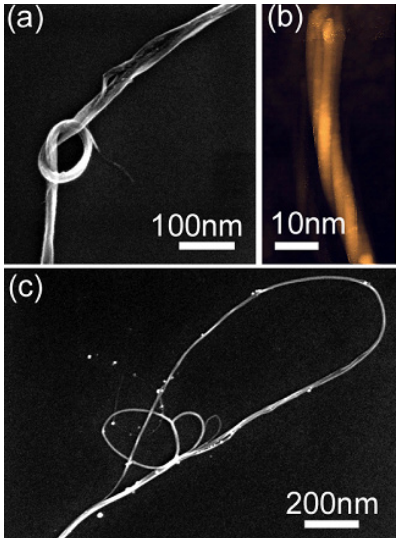

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Single walled carbon nanotube bundles filled with ionic crystals.

Strong, lightweight and flexible composite materials.

James Bendall
Nanoscience Centre
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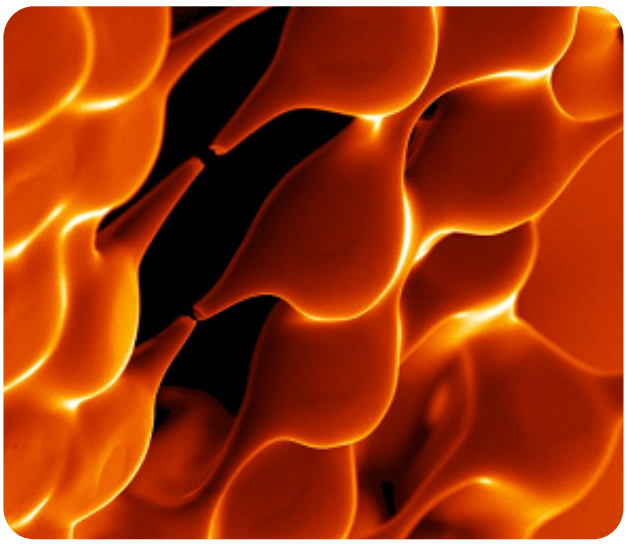

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A Scanning Electron Microscope image of regular repeating features which are small enough for biological cells to see and interact with.

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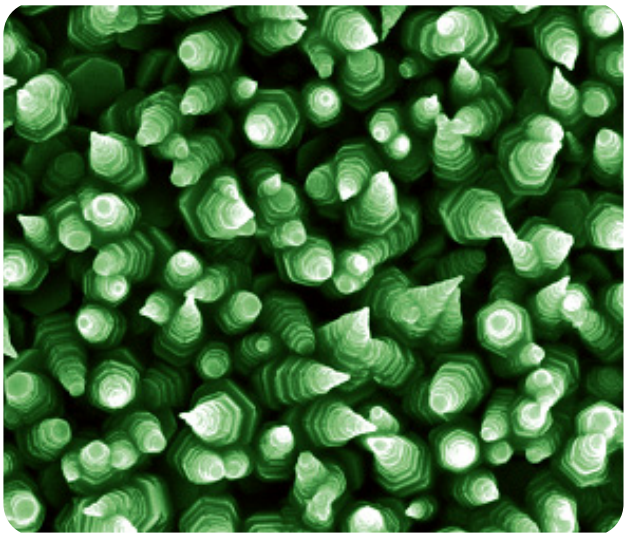

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A forest of layered Zinc Oxide nanostructures.

James Bendall
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A tip-enhanced Raman. A smart probe which sets out to investigate the properties of materials at the nanoscale which should enable the detection of the smallest signals from molecular bonds.

Yun Thai Li
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