

# Dyckerhoff Prize

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## **Prof. Karen Scrivener has been awarded the Dyckerhoff-Prize**

For the first time the Klaus-Dyckerhoff-Prize has been awarded for outstanding achievements in the field of material research. The prize was given to Prof. Karen Scrivener on April 24th 2007 who is head of the Construction Laboratory at the École Polytechnique Fédérale de Lausanne. The Jury emphasizes Prof. Scrivener's fundamental work, which has significantly contributed to the understanding of the performance of concrete. In recent years Karen Scrivener has dedicated her work to the examination of the microstructure of concrete and has added to the understanding of the secrets of the nanostructures in hardened cement. These structures are only detectable with the most modern chemical and physical measuring techniques. They are responsible for the dense structure of concrete and its long lifetime which can be even longer than 100 years. Against this background cements can be developed according to the distinct performance of concrete. Recent examples are high performance concretes which are groundbreaking in terms of resource saving construction and ambitious architecture.

The Jury also underlines in its judgement the achievements of Prof. Scrivener to build up the European platform NANOCEM. 37 research institutions are cooperating in this network and Karen Scrivener has successfully brought together industry and universities. In this context she has raised funds of remarkable size from the European Commission for young research fellows.

The Dyckerhoff-Prize goes back to the initiative of the benefactors, Dr. Klaus Dyckerhoff and his wife Dr. Edith Dyckerhoff. Through the prize, which comprises 30,000 Euro, they want to give creative impulses to encourage manufacturing and usage technologies for cement-based construction. Both sponsors emphasize, that building today and in the future is measured by how it contributes to sustainable development in terms of social, economic and ecological goals. A liveable home and workplace in a sound environment requires economic and ecological efficiency through intelligent use of the available material and energy resources. This is where the prize comes in, which is given every second year to individuals but also working groups for exceptional individual work or long-term achievement in the field of building materials research.

Prof. Scrivener started her scientific career with a Bachelor of Arts at Clare College Cambridge in Natural Science at the age of 21, followed by a Master of Arts at the University of Pennsylvania in Material Science at the age of 22. Her Philosophy Doctor at Imperial College London at the age of 26 based on her Ph.D. thesis about the development of microstructure during the hydration of Portland cement which was awarded with the Armstrong Medal and

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Prize. After her Ph.D. Dr. Scrivener worked as a Warren Research Fellow of the Royal Society at Imperial College and later as Head of a R & D group and lecturer in the Department of Materials of the same college. For six years from 1995 to 2001 she worked as Senior Scientist and Head of Calcium Aluminate Department at the Central Research Laboratory of Lafarge in Lyon. In 2001 she was appointed as Professor and Director of the Laboratory of Construction Materials at the Ecole Polytechnique Fédérale de Lausanne.

More details: [www.klaus-dyckerhoff-preis.de](http://www.klaus-dyckerhoff-preis.de)

Photographs (download): <http://Dyckerhoff-Prize.zip>