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Karen Scrivener

From Wikipedia, the free encyclopedia

Karen Louise Scrivener is a material chemist known for her pioneering works in cementitious materials. She is the head of Laboratory of Construction Materials at **Ecole Polytechnique Fédérale de Lausanne**^[1] and served as the **Editor-in Chief** of the Cement and Concrete Research journal for 15 years.

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Early life and education [edit]

In 1980, she graduated from the **Cambridge University** in **Material Sciences**. She earned her **PhD** in **Materials Science** from the **Imperial College London** in 1983 on the development of microstructure during the hydration of **Portland cement**^[2] under the supervision of Professor P. L. Pratt.

Career [edit]

Scrivener worked at the Imperial College of London in the Department of Materials science until 1995 as a post-doctoral research assistant, Warren research fellow of the Royal Society and lecturer. In 1995 she decided to leave academia ^[3] and joined the Central Research Laboratory of **Lafarge** near Lyon in France where she was a Senior Scientist and then Head of **Calcium Aluminates** Department. Since 2001 she has been a Full Professor and head of the Laboratory of Construction Materials in the Institute of Materials Science and Engineering at EPFL, **Ecole Polytechnique Fédérale de Lausanne**, Switzerland.

In 2005, she became the editor in chief of the peer-reviewed journal Cement and Concrete Research, and has since become a member of its Honorary Editorial Board.^[4] Karen Scrivener was elected Fellow of the Royal Academy of Engineering in 2014.^[5]

Scrivener plays an active role in promoting **sustainable cements**,^{[1][6]} in the form of blended **cements**.^{[7][8]} She co-authored with Vanderley M. John and Ellis M. Gartner with the support of the UNEP-SBCI (The **United Nations Environment Programme** - Sustainable Building and Climate Initiative),^[9] a reference report summarizing the main conclusions on the most viable low-CO₂, eco-efficient cement-based materials for the future of construction.^[10]

In 2004, she founded **Nanocem**,^[11] a consortium of 23 academic and 10 industrial partners interested in fundamental research of **cement** and **concrete**^[12] and still serves as the principal coordinator.^[13] In collaboration with the Universidad Las Villas of Santa Clara, **IIT Delhi**, the Swiss Development and Cooperation and many international cement producers, she developed the LC3 project (**Limestone Calcined Clay Cement**)^[14] to produce a new type of low cost and low carbon cement^{[15][16]}

Honours and awards [edit]

- 1991: Leslie Holiday prize of the Institute of Materials^[17]
- 2007: Klaus Dyckerhoff Prize (2007) for outstanding lifetime contribution to the field of cement and concrete research^[18]
- 2010: Doctor Honoris Causa, Czech Technical University^[17]
- 2010: "Concrete Ambassador" of UK Concrete Society^[19]
- 2010: Kroll Medal and Prize of UK Institute of Materials, Minerals and Mining^[20]
- 2011: Della Roy Lecture award, American Ceramic Society^[21]
- 2014: Fellow of the **Royal Academy of Engineering** (UK)^[5]
- 2017: Honorary Fellow of the Institute of Concrete Technology^[22]

References [edit]

- ↑ **a** **b** "Swiss researchers chart path to zero-emission cement". By Frédéric Simon | *EURACTIV.com*, Oct. 31, 2018
- ↑ Scrivener, Karen (1982). *The development of microstructure during the hydration of Portland cement*. London: University of London.
- ↑ Golus, Carrie (1995). "Materials Researcher Leaves Imperial College for France". *Staff Newspaper of Imperial College of Science*. Issue 11.
- ↑ *Cement and Concrete Research*.
- ↑ **a** **b** "Karen Scrivener elected Fellow of the Royal Academy of Engineering | EPFL".
- ↑ Wray, Peter (July 2012). "Straight talk with Karen Scrivener on cements, CO2 and sustainable development" (PDF). *American Ceramic Society Bulletin*.
- ↑ Scrivener, Karen (2014). "Options for the future of cement" (PDF). *The Indian Concrete Journal*. **88**: 11–21.
- ↑ Lothenbach, Barbara; Scrivener, Karen; Hooton, R.D. (2011). "Supplementary cementitious materials". *Cement and Concrete Research*. **41** (12): 1244–1256. doi:10.1016/j.cemconres.2010.12.001.
- ↑ "The United Nations Environment Programme - Sustainable Building and Climate Initiative".
- ↑ "Eco-efficient cements: Potential economically viable solutions for a low-CO2 cement-based materials industry" (PDF).
- ↑ info@lafargeholcim-foundation.org, LafargeHolcim Foundation for Sustainable Construction. "Karen Scrivener | LafargeHolcim Foundation for Sustainable Construction". *LafargeHolcim Foundation website*. Retrieved 2019-02-27.
- ↑ "CORDIS | European Commission". *cordis.europa.eu*. Retrieved 2019-02-27.
- ↑ "Nanocem - Contact us". *www.nanocem.org*.
- ↑ Scrivener, Karen; Martirena, Fernando; Bishnoi, Shashank; Maity, Soumen (2018). "Calcined clay limestone cements (LC3)". *Cement and Concrete Research*. **114**: 49–56. doi:10.1016/j.cemconres.2017.08.017.
- ↑ Desikan, Shubashree (2017-09-09). "IIT Madras: New eco-friendly cement being tested for use in industry". *The Hindu*. ISSN 0971-751X. Retrieved 2019-02-27.
- ↑ Hicks, Jennifer. "Green Cement To Help Reduce Carbon Emissions". *Forbes*. Retrieved 2019-02-27.
- ↑ **a** **b** "The 14th International Congress on the Chemisty of Cement: Karen".^[*dead link*]
- ↑ "Prof. Karen Scrivener has been awarded the Dyckerhoff-Prize" (PDF).
- ↑ "The Concrete Society Concrete Ambassador 2010, Professor Karen Scrivener" (PDF).
- ↑ "Award Winners 2010 | IOM3". *www.iom3.org*.
- ↑ "Della Roy Lecturers" (PDF).
- ↑ Collins, Michael. "ICT Member List". *ict.concrete.org.uk*.

External links [edit]

- "Nanocem View - Prof. Karen Scrivener". 11 May 2015.
- "Rocare - Roman Cement for architectural restoration to new high standards". *www.rocare.eu*.
- "Interview with Dr. Karen Scrivener (EPFL)".
- "Professor Karen Scrivener - Concrete 2017 Keynote Presentation".
- Website of the Laboratory of Construction Materials (LMC) at EPFL.

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