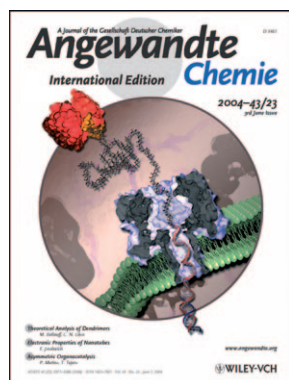




H. Bayley

The author presented on this page has recently published his **10th article** since 2000 in *Angewandte Chemie*: “Multiple Base-Recognition Sites in a Biological Nanopore: Two Heads are Better than One”: D. Stoddart, G. Maglia, E. Mikhailova, A. J. Heron, H. Bayley, *Angew. Chem.* **2010**, 122, 566–569; *Angew. Chem. Int. Ed.* **2010**, 49, 556–559.



H. Bayley has been featured on the cover of *Angewandte Chemie*: “Single DNA Rotaxanes of a Transmembrane Pore Protein”: J. Sánchez-Quesada, A. Saghatelian, S. Cheley, H. Bayley, M. R. Ghadiri, *Angew. Chem.* **2004**, 116, 3125–3129; *Angew. Chem. Int. Ed.* **2004**, 43, 3063–3067.

## Hagan Bayley

<b>Date of birth:</b>	February 13, 1951
<b>Position:</b>	Professor of Chemical Biology, University of Oxford (UK)
<b>Education:</b>	1970–1974 BA in Chemistry, University of Oxford 1974–1979 PhD with Jeremy Knowles, Harvard University (USA) 1979–1981 Postdoc with Gobind Khorana, MIT (USA)
<b>Professional associations:</b>	Fellow of the Royal Society of Chemistry, Fellow of the American Association for the Advancement of Science
<b>Awards:</b>	2009 RSC Chemistry World Entrepreneur of the Year
<b>Current research interests:</b>	The engineering of membrane channels and pores by molecular genetics and targeted chemical modification. Recently, the development of engineered pores for stochastic sensing, techniques for the rapid screening of membrane proteins, the study of covalent chemistry at the single-molecule level in protein nanoreactors, and approaches to ultrarapid DNA sequencing have become major interests. In 2005, Gordon Sanghera, Spike Willcocks, and I founded Oxford Nanopore Technologies to exploit the potential of stochastic sensing technology

### When I wake up I ... drink coffee.

**If I could be anyone for a day, I would be ...** Lewis Carroll. He worked just down the road from here. But, only for a day.

**The most significant scientific advance of the last 100 years has been ...** the human genome sequence through a wonderful amalgamation of biology, chemistry, engineering, computer hardware and software, and management skills. Plus some adroit politics.

**The biggest problem that scientists face is ...** the tacit assumption that we both create and solve all the problems of the world.

**If I could have dinner with three famous scientists from history, they would be ...** da Vinci, Franklin, and Goethe. The conversation wouldn't be restricted to science!

**The three things I would take to a desert island would be ...** coffee, Finnigans Wake, and Guinness.

**I chose chemistry as a career because ...** for me, it is an apt mix of experiment and theory; I wasn't clever enough to be a mathematician.

**If I could go back in time and do any experiment, it would be ...** a surgical procedure such as the first live kidney transplant (between twins) in 1954 by the Peter Bent Brigham team. Joseph Murray's description of the kidney beginning to pass urine is breathtaking.

**The part of my job which I enjoy the most is ...** looking at new data.

**My favorite author (science) is ...** James D. Watson.

**My top three films of all time are...** Just three! Let's stick with '40s and '50s Hitchcock: “Vertigo”, “Rear Window”, and “Rope”.

**The biggest challenge facing chemists is ...** making sense of the post-genome information deluge, notably the chemistry and biology of complex systems (metabolism, signal transduction, gene expression, etc.).

### My 5 top papers:

1. “Droplet Networks with Incorporated Protein Diodes Show Collective Properties”: G. Maglia, A. J. Heron, W. L. Hwang, M. A. Holden, E. Mikhailova, Q. Li, S. Cheley, H. Bayley, *Nat. Nanotechnol.* **2009**, 4, 437–440.
2. “Single-Molecule Covalent Chemistry with Spatially Separated Reactants”: T. Luchian, S.-H. Shin, H. Bayley *Angew. Chem.* **2003**, 115, 3896–3901; *Angew. Chem. Int. Ed.* **2003**, 42, 3766–3771.
3. “Stochastic Sensing of Organic Analytes by a Pore-Forming Protein Containing a Molecular Adapter”: L.-Q. Gu, O. Braha, S. Conlan, S. Cheley, H. Bayley, *Nature* **1999**, 398, 686–690.
4. “Refolding of an Integral Membrane Protein. Denaturation, Renaturation, and Reconstitution of Intact Bacteriorhodopsin and Two Proteolytic Fragments”: K.-S. Huang, H. Bayley, M.-J. Liao, E. London, H. G. Khorana, *J. Biol. Chem.* **1981**, 256, 3802–3809.
5. “Selective Labeling of the Hydrophobic Segments of Intrinsic Membrane Proteins with a Lipophilic Photogenerated Carbene”: D. W. Goldman, J. S. Pober, J. White, H. Bayley, *Nature* **1979**, 280, 841–843.

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