





A. Cooper

The author presented on this page has published more than 10 articles in Angewandte Chemie in the last 10 years, most recently: "Triazine-Based, Graphitic Carbon Nitride: A Two-Dimensional Semiconductor": G. Algara-Siller et al. Angew. Chem. 2014, 126, 7580-7585; Angew. Chem. Int. Ed. 2014, 53, 7450-7455.

## Angewandte

The work of A. I. Cooper has been featured on the cover of Angewandte Chemie: "On-Off Porosity Switching in a Molecular Organic Solid": J. T. A. Jones et al., Angew. Chem. 2011, 123, 775-779; Angew. Chem. Int. Ed. 2011, 50, 749-753.

## Andrew I. Cooper

Date of birth: May 15, 1970

Awards:

Position: Professor of Chemistry and Director, Centre for Materials Discovery, University of Liverpool

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www.liv.ac.uk/chemistry/res/coopergroup/ Homepage: **Education**: 1991 BSc, University of Nottingham

1994 PhD supervised by Martyn Poliakoff, University of Nottingham

1995-1997 1851 Fellow with Joseph DeSimone, University of North Carolina at Chapel Hill 1997-1999 Ramsay Memorial Fellow with Andrew B. Holmes, University of Cambridge 2002 RSC Macro Group Young Researchers Award; 2005 RSC Industrially Sponsored Award in

Environmentally Friendly Polymers; 2007 RSC McBain Medal; 2009 Royal Society Wolfson Research Merit Award; RSC Corday-Morgan Prize; 2010 RSC Macro Group Medal; 2014 RSC

Tilden Prize

Polymers, porous materials, supramolecular chemistry, separations, high-throughput methods, **Current research** 

computational chemistry, crystallography, organic chemistry interests:

**Hobbies:** Reading, cooking, mountain biking

## My favorite scientific principle is ... thermodynamics. You can't beat it.

My favorite quote is ... "It is not even wrong!" (attr. Wolfgang Pauli).

Chemistry is fun because ... if you're lucky, you get to understand something about the universe, even if it's a small thing, which nobody knew before. There are few careers where this is a major goal.

The secret of being a successful scientist ... depends on what one calls success. Most scientists that I admire are quite focused, but there is also pressure, partly from funders, to demonstrate dazzling, interdisciplinary breadth. A "childlike sense of wonder" can be good, but it often coincides with childlike administrative capabilities. Good mentoring is needed but underacknowledged.

My first experiment was ... dissecting a rat in a Biology class when I was 11 or 12. My lab partner hid a kidney (one of the rat's, that is) in the future Head Girl's pencil case. He didn't become a successful scientist with dazzling, interdisciplinary breadth.

My favorite painting is ... I have Ship of Fools by Hieronymus Bosch. My wife hates it.

f I could be any age I would be ... eight. In fact, I achieved this for a year.

My favorite drink is ... entirely mood- and occasion-dependent. But the quality of the company is more important than the drink.

My favorite band is ... Nick Cave and the Bad Seeds.

f I could be described as an animal ... my grandmother used to call me a "cheeky monkey".

## My 5 top papers:

- 1. "Conjugated Microporous Poly(aryleneethynylene) Networks": J. X. Jiang, F. Su, A. Trewin, C. D. Wood, N. L. Campbell, H. Niu, C. Dickinson, A. Y. Ganin, M. J. Rosseinsky, Y. Z. Khimyak, A. I. Cooper, Angew. Chem. 2007, 119, 8728-8732; Angew. Chem. Int. Ed. **2007**, 46, 8574 – 8578. (Turned out to be a versatile
- 2. "Porous organic cages": T. Tozawa et al., Nature Mater. 2009, 8, 973-978. (Surface areas in molecular crystals have since risen to staggering values.)
- 3. "Triply interlocked covalent organic cages": T. Hasell, X. F. Wu, J. T. A. Jones, J. Bacsa, A. Steiner, T. Mitra, A. Trewin, D. J. Adams, A. I. Cooper, Nature Chem. **2010**, 2, 750-755. (These structures show just how complex and unpredictable self-assembly can be.)
- 4. "Modular and predictable assembly of porous organic molecular crystals": J. T. A. Jones, T. Hasell, X.-F. Wu, J. Bacsa, K. E. Jelfs, M. Schmidtmann, S. Y. Chong, D. J. Adams, A. Trewin, F. Schiffman, F. Cora, B. Slater, A. Steiner, G. M. Day, A. I. Cooper, Nature 2011, 474, 367-371. (Demonstrates the use of crystal structure prediction for functional organic materials.)
- "Nanoporous Organic Polymer/Cage Composite Membranes": A. F. Bushell, P. M. Budd, M. P. Attfield, J. T. A. Jones, T. Hasell, A. I. Cooper, P. Bernardo, F. Bazzarelli, G. Clarizia, J. C. Jansen, Angew. Chem. **2013**, 125, 1291 – 1294; Angew. Chem. Int. Ed. **2013**, 52, 1253-1256. (Solution processing of molecular materials into organic-organic membrane composites could have wide applications in the future.)

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