# The Public Image of Chemistry

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## BIOGRAPHICAL NOTES ON THE CONTRIBUTORS

**Philip Ball** is a freelance writer and a consultant editor for *Nature*, where he previously worked as an editor for physical sciences. He writes regularly in the scientific and popular media, and his ten books on scientific subjects include *The Self-Made Tapestry: Pattern Formation in Nature*, *$H_2O$: A Biography of Water*, *The Devil's Doctor: Paracelsus and the World of Renaissance Magic and Science*, and *Critical Mass: How One Thing Leads To Another*, which won the 2005 Aventis Prize for Science Books. He was awarded the 2006 James T. Grady – James H. Stack award by the American Chemical Society for interpreting chemistry for the public. Philip studied chemistry at Oxford and holds a doctorate in physics from the University of Bristol.

**Bernadette Bensaude-Vincent** is Professor of History and Philosophy of Science at Université Paris X. Her research interests focus on the history and philosophy of chemistry and on the history of the science and the public issue. Her current research is on ethical and philosophical issues of nanotechnologies. She is a member of the Académie des technologies and of the Comité d'éthique du CNRS. Her book publications include *Lavoisier, mémoires d'une revolution* (1993), *A History of Chemistry* (together with Isabelle Stengers, 1996), *Eloge du mixte Matériaux nouveaux et philosophie ancienne* (1998), *La science et l'opinion. Histoire d'un divorce* (2003), *Se libérer de la matière? Fantasmes autour des nouvelles technologies* (2004), and *Faut-il avoir peur de la chimie?* (2005).

**Marika Blondel-Mégrelis** graduated in engineering at the Ecole Supérieure de Chimie Industrielle de Lyon and received her PhD in engineering from the Université Nancy. She studied philosophy in Nancy, Lyon, and Paris and received her PhD in philosophy from the Université de Lyon. She was research director of the Centre National de la Recherche Scientifique on Philosophy, Epistemology, and History of Science in Paris. After her retirement in 2006, she continues her research activity in the history of chemistry. Her research interests include the history of organic chemistry during the nineteenth century (Laurent and Gerhardt), organic chemistry applied to agriculture (Liebig and Sprengel), the chemical pioneers of agro-ecology (Boussingault, Liebig, and Winogradski), theoretical chemistry in France (Barriol, Daudel, the Pullmans), French organic chemistry (Grignard), the history of catalysis in France, and the history of the

*Société Française de Chimie*, which commemorates its 150th anniversary in 2007.

**Andrew Ede** is an historian of science and technology whose focus is the development of chemistry and chemical industries in North America. He graduated from the Institute for the History and Philosophy of Science and Technology at the University of Toronto. He is the author, along with Lesley Cormack, of *A History of Science in Society*. His current research is on chemists working for the US Chemical Warfare Service during World War I.

**Roslynn Haynes** is Adjunct Associate-Professor of English at the University of New South Wales, a Fellow of the Australian Academy of the Humanities and recipient of an Australian Bicentenary medal for cultural and communications studies. She is particularly interested in interfaces between disciplines, including science, literature, and art. She has published books on the writings of H.G Wells, on the scientist as a figure in literature and film (*From Faust to Strangelove*, 1994), on the history of Australian astronomy (*Explorers of the Southern Sky*, 1996), and on landscapes as perceived and constructed by writers, artists and photographers (*Seeking the Centre: The Australian Desert in Literature, Art and Film*, 1998; *Tasmanian Visions: Landscapes in Writing, Art and Photography*, 2006). Her current research projects include a cultural history of Antarctica and depiction of science and scientists in art.

**Ernst Homburg** is Professor of History of Science and Technology at Maastricht University. After writing a dissertation on the rise of the German chemical profession, 1790-1850, he became one of the editors of two book series on the History of Technology in the Netherlands in the nineteenth resp. the twentieth centuries. His research focuses on the history of industrial R&D in relation to academic science. He is book reviews editor of *Ambix*, and chairman of the Working Party on History of Chemistry of EuCheMS. His most recent books are on the history of the fertilizer industry: *Groeien door kunstmest: DSM Agro 1929-2004* (Hilversum: Verloren 2004) and on Dutch chemistry after 1945: E. Homburg and L. Palm (eds.), *De geschiedenis van de scheikunde in Nederland 3: De ontwikkeling van de chemie van 1945 tot het begin van de jaren tachtig* (Delft: Delft University Press 2004).

**David Marcus Knight** has taught History of Science in Durham University Philosophy Department since 1964: he is now Professor emeritus. He has edited the *British Journal for the History of Science* (1981-8), and been President of the British Society for the History of Science (1994-6). In 2003 he received the Edelstein Award of the American Chemical Society, and in 2007 was Wheeler Lecturer at the Royal Society of Chemistry. His interests have been in the his-

tory of chemistry as part of the wider history of science, including natural history; and in the relations of science and religion. He has published *Ideas in Chemistry: a History of the Science* (London: Athlone, 1992), *Humphry Davy: Science and Power* (2nd ed., Cambridge: Cambridge University Press, 1998), *Science and Spirituality: the Volatile Connection* (London: Routledge, 2004), and *Public Understanding of Science: a History of Communicating Scientific Ideas* (London: Routledge, 2006).

**Marcel C. LaFollette** is an independent historian in Washington, D.C., whose work examines the history of science communication. Her books include *Stealing into Print: Fraud, Plagiarism, and Misconduct in Scientific Publishing* (University of California Press, 1992) and *Making Science Our Own: Public Images of Science, 1910-1955* (University of Chicago Press, 1990). She is the former editor of the journals *Science, Technology, & Human Values* (1977-1987) and *Science Communication* (1991-1998). Dr. LaFollette has also served on the faculties of Harvard University, Massachusetts Institute of Technology, George Washington University, and Johns Hopkins University, but now focuses full-time on research and writing. Her history of science popularization via radio will appear with University of Chicago Press in 2008, and she is currently writing *The Friends of Scopes*, a book about the interactions of a group of journalists and scientists at the 1925 anti-evolution trial.

**Pierre Laszlo**, a French science writer and Professor of Chemistry emeritus at the University of Liège (Belgium) as well as the École polytechnique (Palaiseau, France) is especially known for his extensive publications in nuclear magnetic resonance methodologies and catalysis of organic reactions by modified clays. As a science writer, he has authored a dozen books to communicate chemical science to the general public, for which he received in 1999 the Maurice Pérouse Prize from the Fondation de France and in 2004 the Paul Doistau-Emile Blutet Prize from the French Academy of Sciences. His latest published books are *Copal, et autres gemmes* (Le Pommier, Paris, 2007), *Communicating Science. A Practical Guide* (Springer, Heidelberg, 2006), *Le Phénix et la salamandre* (Le Pommier, Paris, 2004), *NO*, a pedagogic wordplay written jointly with Carl Djerassi (Deutscher Theaterverlag, Weinheim, 2003). The book *Citrus: A History* is ready for publication in the fall of 2007, with the University of Chicago Press.

**Peter J. T. Morris**, Head of Research for the National Museum of Science Industry, London and Editor of *Ambix*, has written on many aspects of modern chemistry. He has published books on the history of synthetic rubber and polymers, modern chemical instrumentation and the work of Robert Burns Woodward. He has also published popular articles about the history of chemistry in

several journals, notably *Chemistry and Industry* and *Education in Chemistry*. Morris curated the "Chemistry of Everyday Life" gallery at the Science Museum in 1999. He was also the consultant editor for the NMSI website ingenious.org.uk which was launched in 2004. He was awarded the Edelstein Award for the history of chemistry in 2006. Morris is currently working on the development of the electron capture detector and a book about the development of synthetic rubber at IG Farben based on his dissertation at Oxford University.

**Joachim Schummer** is Heisenberg Fellow at the University of Darmstadt. He graduated both in chemistry and philosophy and received his Ph.D. (1994) and Habilitation (2002) in philosophy from the University of Karlsruhe. He has held teaching and research positions at the Universities of Karlsruhe, South Carolina, Darmstadt, Sofia, and the Australian National University. His research interests focus on the history, philosophy, sociology, and ethics of science and technology, with emphasis on chemistry and, since 2002, on nanotechnology. His recent book publications include *Discovering the Nanoscale* (2004, 2005), *Nanotechnology Challenges* (2006), and *Nanotechnologien im Kontext* (2006). He is the founding editor of *Hyle: International Journal for Philosophy of Chemistry* (since 1995) and serves on various international committees, including the UNESCO expert group on Nanotechnology and Ethics.

**Tami I. Spector** is Professor of Organic Chemistry at the University of San Francisco with a deep interest in aesthetics and chemistry. She has published and presented work on The Molecular Aesthetics of Disease, John Dalton and The Aesthetics of Molecular Representation, and The Visual Image of Chemistry. She has (with Joachim Schummer) co-curated a virtual exhibit, "Chemistry in Art" (www.hyle.org/art/cia/) and co-edited two issues of *HYLE: International Journal for Philosophy of Chemistry* on "Aesthetics and Visualization in Chemistry". She also serves on the board of *Leonardo: International Society for the Arts, Sciences, and Technology* where she chairs the Scientists Working Group. She is currently co-editing (with Tom Rockwell) an on-going special section of the journal *Leonardo* on "Nanotechnology, Nanoscale Science and Art".

**Peter Weingart** holds a chair in Sociology of Science and Science Policy Studies at the University of Bielefeld and is Director of the Institute for Science and Technology Studies (IWT). His main research interests are currently the analysis of scientific advice to policy making, the relation between science and the media as well as science communication. He has published widely, *e.g*. with S. Maasen: *Metaphors and the Dynamics of Knowledge*, London/New York: Routledge, 2000; with C. Muhl and P. Pansegrau: "Of Power Maniacs and Unethical Geniuses: Science and Scientists in Fiction Film", *Public Understanding of Science*, 12 (2003), 279-87.