

# *Course material*

## **General or classical texts on philosophy and sociology of science**

What is History and Philosophy of Science? [from the web page of History & Philosophy of Science (HPS), Faculty of Arts & Social Sciences, University of New South Wales, 2003, [http://hps.arts.unsw.edu.au/hps\\_content/about\\_us/what\\_hps\\_about.htm](http://hps.arts.unsw.edu.au/hps_content/about_us/what_hps_about.htm)]

*Anonymous* p.1

Geological reasoning: Geology as an interpretive and historical science. [*GSA Bulletin* 107 (8): 960-968, August 1995]

*Robert Frodeman* p. 4

The normative structure of science [(1942), in: R. K. Merton: *The Sociology of Science. Theoretical and empirical investigations.* (introduced and edited by Norman W. Storer), The University of Chicago Press, Chicago and London, 1973]

*Robert K. Merton* p. 13

## **The role of Experiment**

The creation of phenomena. [chapter 13 in: Hacking: *Representing and Intervening.* Cambridge University Press, 1983]

*Ian Hacking* p. 20

Edible knowledge: the chemical transfer of memory. [chapter 1 in *The Golem: What you should know about science.* Cambridge: Cambridge University Press, 1998]

*Harry Collins & Trevor Pinch* p. 27

## **Scientific Dishonesty**

Report on the rules governing research ethics. [Danish Research Agency, May 2003, Copenhagen, May 2003; [http://forsk.dk/portal/page/pr04/FIST/FORSIDE/UDVALGENE\\_VIDENSKABELIG\\_UREDELIGHED/PUBLIKATIONER](http://forsk.dk/portal/page/pr04/FIST/FORSIDE/UDVALGENE_VIDENSKABELIG_UREDELIGHED/PUBLIKATIONER)]

*Mogens N. Pedersen et al.* p. 38

Executive order on the Danish Committees on scientific dishonesty [Executive Order No. 668 of 28 June 2005, The Danish Ministry of Science, Technology and Innovation; at [http://forsk.dk/portal/page/pr04/FIST/FORSIDE/UDVALGENE\\_VIDENSKABELIG\\_UREDELIGHED/BEKENDTGOERELSE\\_2005](http://forsk.dk/portal/page/pr04/FIST/FORSIDE/UDVALGENE_VIDENSKABELIG_UREDELIGHED/BEKENDTGOERELSE_2005)]

*Ministry of Science, Technology and Innovation* p. 59

## **Instrumentalization of Science**

The advent of post-academic science. [section 4.4. in: Ziman: *Real Science. What it is and what it means.* Cambridge: Cambridge University Press, 2000]

*John Ziman* p. 65

'Mode 2' in context: The contract researcher, the university and the knowledge society. [chapter 1 in: Merle Jacob & Thomas Hellström (eds): *The future of knowledge production in academia.* Open University Press, 2000.]

*Merle Jacob* p. 74

## **Social Responsibility of Scientists**

Leaving the bomb project [*Bulletin of Atomic Scientists*, August 1985, p. 16-19]

*Joseph Rotblat* p. 83

Why must scientists become more ethically sensitive than they used to be? [*Science* 282, 4 December 1998]

*John Ziman* p. 87

Ethics and military research. On the moral responsibility of scientists. [p.352-364 in: Bernhelm Boos-Bavnbek & Jens Høyrup (eds.): *Mathematics and War*. Basel: Birkhäuser 2003]

*Jesper Ryberg* p. 89

Scientific advice and the balance over uncertainty – moral issues in scientific advice giving to the public within the field of nutrition. [draft]

*Anna Paldam Folker & Peter Sandøe* p. 96

What's new in scientific advice to politics? [chapter 1 in: Sabine Maasen & Peter Weingart (eds.): *Democratization of Expertise? Exploring novel forms of scientific advice in political decision-making*. Dordrecht, Springer, 2005]

*Sabine Maasen & Peter Weingart* p. 116

## **Risk & Uncertainty**

Chapter 1: Introduction. [p. 11-16 in: Poul Harremoës, David Gee, Malcolm MacGarvin, Andy Stirling, Jane Keys, Brian Wynne, Sofia Guedes Vaz (eds.): *Late lessons from early warnings: the precautionary principle 1896-2000*. Environmental issue report No 22 (published Jan. 10, 2002) [http://reports.eea.europa.eu/environmental\\_issue\\_report\\_2001\\_22/en](http://reports.eea.europa.eu/environmental_issue_report_2001_22/en) ]

*Poul Harremoës et al.* p. 127

Chapter 7: Halocarbons, the ozone layer and the precautionary principle. [p. 77-83 in: Poul Harremoës, et al., op.cit. ]

*Joe Farman* p. 133

Chapter 16: Twelve late lessons. [p. 168-191 in: Poul Harremoës, et al., op.cit.]

*Poul Harremoës et al.* p. 141