

# TECHNOLOGY ASSESSMENT

The Key Citations series was developed to provide a starting point for persons new to the various fields of impact assessment. The references provided are an indicative overview of the field and establish what might be regarded as the core literature. They include a selection of currently available textbooks published by commercial publishers, a selection of journal articles from the last 10 or so years, and key official documents. Some historically significant articles are also included. The means of determining key citations generally include consulting Scopus and Google Scholar and expert practitioners in the field. IAIA members contributing to this series acknowledge possible personal and regional bias and much difficulty in selecting only a few from among many excellent references in their fields.

## TEXTBOOKS AND JOURNAL ARTICLES

- Bimber, B. 1996. *The Politics of Expertise in Congress: The Rise and Fall of the Office of Technology Assessment*. Albany: State University of New York Press.
- Blair, P. 2013. *Congress's Own Think Tank: Learning from the Legacy of the Office of Technology Assessment (1972–1995)*. New York: Palgrave-Macmillan.
- Braun, E. 1998. *Technology Assessment in Context*. London: Routledge.
- Coates, V.T. et al. 2001. On the Future of Technological Forecasting. *Technological Forecasting & Social Change* 67(1): 1-17.
- Cruz-Castro, L. & Sanz-Menéndez, L. 2005. Politics and Institutions: European Parliamentary Technology Assessment. *Technological Forecasting & Social Change* 72(4): 429-448.
- Decker, M. & Ladikas, M. (eds) 2004. *Bridges between Science, Society and Policy: Technology Assessment Methods and Impacts*. Berlin: Springer.
- Durant, J. 1999. Participatory Technology Assessment and the Democratic Model of the Public Understanding of Science. *Science & Public Policy* 26(5): 313-319.
- Einsiedel, E. & Goldenberg, L. 2004. Dwarfing the Social? Nanotechnology Lessons from the Biotechnology Front. *Bulletin of Science, Technology & Society* 24(1): 28-33.
- Ely, A., Van Zwanenberg, P., Stirling, A. 2014. Broadening Out and Opening Up Technology Assessment: Approaches to Enhance International Development, Co-Ordination and Democratisation. *Research Policy* 43(3): 505-518.
- Fisher, E. 2005. Lessons Learned from the Ethical, Legal and Social Implications Program (ELSI). *Technology in Society* 27(3): 321-328.
- Franks, D. & Cohen, T. 2012. Social Licence in Design: Constructive Technology Assessment Within a Mineral Research and Development Institution. *Technological Forecasting & Social Change* 79(7): 1229-1240.
- Genus, A. 2006. Rethinking Constructive Technology Assessment as Democratic, Reflective Discourse. *Technological Forecasting & Social Change* 73(1): 13-26.
- Genus, A. & Coles, A. 2005. On Constructive Technology Assessment and Limitations on Public Participation in Technology Assessment. *Technology Analysis & Strategic Management* 17(4): 433-443.
- Grin, J. & van de Graaf, H. (1996) Technology Assessment as Learning. *Science, Technology & Human Values* 21(1): 73-99.
- Grunwald, A. 2006. Converging Technologies: Visions, Increased Contingencies of the *Conditio Humana*, and Search for Orientation. *Futures* 39(4): 380-392.
- Guston, D. 2004. Forget Politicizing Science: Let's Democratize Science! *Issues in Science & Technology* 21(1): 25-28.
- Guston, D. & Sarewitz, D. 2002. Real-Time Technology Assessment. *Technology in Society* 24(1): 93-109.
- Hennen, L. 1999. Participatory Technology Assessment: A Response to Modernity? *Science & Public Policy* 26(5): 303-312.
- Joss, S. & Bellucci, S. (eds) 2002. *Participatory Technology Assessment: European Perspectives*. London: Centre for the Study of Democracy.
- Marris, C., Joly, P. & Rip, A. 2008. Interactive Technology Assessment in the Real World. *Science, Technology & Human Values* 33(1): 77-100.



## TECHNOLOGY ASSESSMENT KEY CITATIONS

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- Palm, E. & Hansson, S. 2006. The Case for Ethical Technology Assessment. *Technological Forecasting & Social Change* 73(5): 543-558.
- Porter, A.L. et al. 2004. Technology Futures Analysis: Toward Integration of the Field and New Methods. *Technological Forecasting & Social Change* 71(3): 287-303.
- Porter, A.L. et al. 1980. *A Guidebook for Technology Assessment and Impact Analysis*. New York: North Holland.
- Reuzel, R. et al. 2001. Interactive Technology Assessment and Wide Reflective Equilibrium. *Journal of Medicine & Philosophy* 26(3): 245-261.
- Rip, A., Misa, T.J. & Schot, J. (eds) 1995. *Managing Technology in Society: The Approach of Constructive Technology Assessment*. London: Pinter.
- Roper, A.T. et al. 2011. *Forecasting and Management of Technology* (2nd edn). New York: Wiley.
- Russell, A.W., Vanclay, F. & Aslin, H. 2010. Technology Assessment in Social Context: The Case for a New Framework for Assessing and Shaping Technological Developments. *Impact Assessment & Project Appraisal* 28(2): 109-116.
- Schot, J. 2001. Towards New Forms of Participatory Technology Development. *Technology Analysis & Strategic Management* 13(1): 39-52
- Schot, J. & Rip, A. 1996. The Past and Future of Constructive Technology Assessment. *Technological Forecasting & Social Change* 54(2/3): 251-268.
- Skorupinski, B. 2002. Putting Precaution to Debate: About the Precautionary Principle and Participatory Technology Assessment. *Journal of Agricultural & Environmental Ethics* 15(1): 87-102.
- Smits, R. & Leyten, J. 1988. Key Issues in the Institutionalisation of Technology Assessment. *Futures* 20(1): 19-36.
- Sørensen, K. & Williams, R. (eds) 2002. *Shaping Technology, Guiding Policy: Concepts, Spaces and Tools*. Cheltenham: Edward Elgar.
- Technology Futures Analysis Methods Working Group. 2004. Technology Futures Analysis: Toward Integration of the Field and New Methods. *Technological Forecasting and Social Change* 71(1): 287-303.
- Tran, T. & Daim, T. 2008. A Taxonomic Review of Methods and Tools Applied in Technology Assessment. *Technological Forecasting & Social Change* 75(9): 1396-1405.
- Vanclay, F., Russell, A.W. & Kimber, J. 2013. Enhancing Innovation in Agriculture at the Policy Level: The Potential Contribution of Technology Assessment. *Land Use Policy* 31: 406-411.
- van den Ende, J., Mulder, K., Knot, M., Moors, E. & Vergragt, P. 1998. Traditional and Modern Technology Assessment: Toward a Toolkit. *Technological Forecasting & Social Change* 58(1): 5-21.
- van Eijndhoven, J. 1997. Technology Assessment: Product or Process? *Technological Forecasting & Social Change* 54(2): 269-286.
- Verbeek, P. 2006. Materializing Morality: Design Ethics and Technological Mediation. *Science, Technology & Human Values* 31(3): 361-380.
- Vig, N. & Paschen, H. (eds) 2000. *Parliaments and Technology: The Development of Technology Assessment in Europe*. Albany, NY: State University of New York Press.
- Williams, R. & Edge, D. 1996. The Social Shaping of Technology. *Research Policy* 25(6): 865-899.

## HISTORY

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