

Curriculum Vitae Roger M. Cooke

[Awards](#)

[Externally Supported Research Projects](#)

[Books](#)

[Peer Reviewed Contract Research Reports](#)

[Refereed International Journals](#)

[Refereed Proceedings of International Conferences and Book Contributions](#)

[Links and Blogs](#)

[Workshops, Software Systems, Course Books, Reports](#)



Personal

Born February 9, 1946, Cincinnati, Ohio

Nationality U.S.A./The Netherlands

Address Delft University of Technology, Faculty of Electrical Engineering, Mathematics and Computer Science,
Mekelweg 4, 2628 CD, Delft, The Netherlands.

Resources for the Future, 1616 P st NW, Washington DC.

Married 2 children (1973, 1975)

Email cooke@rff.org

Education

B.A. Yale University 1968,

Ph.D. Yale University 1974 (Philosophy and Mathematics).

Academic honors

Phi Beta Kappa, Highest Honors in Philosophy, Magna Cum Laude (Yale University)

Employment

Teaching assistant Yale University 1972-73 (Dept. of Philosophy)

Assistant Professor, Yale University: 1974 (Dept. of Philosophy)

Assistant Professor, University of Amsterdam 1975 -79 (Dept. of Philosophy)

Assistant Professor, Delft University of Technology, 1979-87 (Dept. of Philosophy)

Associate Professor, Delft University of Technology, 1987-93 (Dept. of Mathematics).

Professor Applied Decision Theory, 1993 – 2011 (Dept. of Mathematics).

Professor University of Strathclyde 2013-2015 (Dept Management Science)

Chauncey Starr Senior Fellow for Risk Analysis, Resources for the Future, 2005 -

Current areas of specialization:

Statistical Decision Theory including:

- Risk Analysis
- Subjective Probability / Expert Judgment
- Uncertainty Analysis
- Decision Theory

Areas of Teaching competence

- Operations Research
- Game Theory
- Probability/Statistics

PhD Dissertations Supervised

- Jan. M. van Noordwijk Optimal Maintenance Decisions for Hydraulic Structures Delft, 1996.
- Jan G. Norstrom Value of Information Based Design of Control Software, Delft, 2000.
- Dorota Kurowicka Techniques in Representing High Dimensional Distributions, Delft 2001.
- Bernd Kraan Probabilistic Inversion in Uncertainty Analysis Delft, 2002.
- Cornel Bunea Mathematical Models for Reliability data Delft, 2003.
- Radboud Tebbens Dynamic Risk Models for Infectious Diseases 2005.
- Daniel Lewandowski, Copulae for High Dimensional Distributions, 2003-2007.
- Anca Hanea Algorithms for Distribution –Free Bayesian Belief Nets 2004-2008.
- Oswaldo Morales, Applying continuous Bayesian Belief Nets 2004-2008.

- Pratrycja Jesionik, Bayesian Belief Nets for food Safety, 2006-2010.
- Rabin Neslo, Paired Comparisons and Probabilistic Inversion 2006-2010.

Editor/Referee/Professional activities

Referee

- Physics Letters A
- IMA Journal of Mathematics , Applied in Business and Industry.
- Reliability, Engineering and System Safety Operations Research
- European Journal of Operational Research
- Journal of the Operational Research Society
- Guest editor Delft Progress Reports, Vol. 9, nr. 2, 1984("Quantum Mechanics and Probability").
- Guest co-editor Reliability Engineering and Systems Safety, special issue on Precursor Studies, 27 (1990).
- Member Editorial Board Reliability Engineering and System Safety (1991-).
- Chairman European Technical Committee on Uncertainty Modeling. (1993-1998)
- Guest editor Reliability Engineering and System Safety; special issue, Design of Reliability Data Bases (1996). -
- Workshop Uncertainty Modeling 24-25/3/97.
- Editorial Board Risk Analysis, 1997.
- Editorial Board Reliability Engineering and Systems Safety.
- Editor European Safety and Reliability Assoc. Newsletter (1996- 2000).
- Coordinator Masters Of Science Program Risk and Environmental Modeling (1999-).
- Member National Academy of Science, Panel Scientific review of the Proposed Risk Assessment Bulletin from the Office of Budget and Management (2006)
- Member National Academy of Science, Panel on Improving Risk Analysis Approaches Used by the US EPA
- Lead Author for Risk and Uncertainty, Intergovernmental Panel for Climate Change, 5-th Assessment

Administrative Experience

- Executive Faculty Council, Department of Social Sciences, TU Delft, 1981-1983 (Faculteitsbestuur)
- Coordination committee, Dept of Mathematics and Informatics, 1988 -
- Coordinator, Conditionally financed Research Project Mapob, Department of Mathematics and Informatics TU Delft, 1987-1991.
- Committee for Research and Teaching Evaluation (wetenschapsbeoefening) Department of Mathematics and Informatics 1993. – Chairman of the section Statistics, Probability and Operations Research, 1996-1998.
- Chairman Department of Control, Risk, Optimization, Stochastics, Statistics and System Theory (CROSS), Faculty of Information Technology and Systems, 1999-2003.
- Coordinator International Masters Program Risk and Environmental Modeling, 1999-.

Awards

- Phi Beta Kappa Yale University 1968
- Magna Cum Laude Yale University 1968
- Ouevre Award for Risk Management 2005 (Society for Risk Management and Dutch Society for Risk Analysis and Reliability)
- Society for Risk Analysis award for best set of papers on a common theme, 2010 (given for the paper Conundrums with Uncertainty Factors and Comments)
- Lead Author for the Intergovernmental Panel for Climate Change 5-th Assessment chapter on Risk and Uncertainty, 2010.
- Society for Risk Analysis Best Reviewer Award, 2011
- Society for Risk Analysis Lifetime Distinguished Achievement Award 2011.
- Lead Author for Risk and Uncertainty, IPCC 5th Assessment Report

Externally Supported Research Initiator and (joint)-coordinator:

- The Accident Sequence Precursor Methodology for the Dutch Process Industries 1/1/85-1/1/86, f 94.010, Ministry of Housing Physical Planning and Milieu).
- The use of expert opinion in safety studies 1985-1989. f 621.400, Ministry of Housing, Physical Planning and Milieu.
- Contract research IWECO Ergonomic Guidelines for Automated Control Rooms, (sub-project: using expert opinion in inspecting automated control rooms 1986, f 10.200, Ministry of Social Affairs).
- Use of Expert Judgment Data; European Space Agency: (f 175.000), 1/1/89 - 1/11/89.
- Computerized Risk Assessment: European Space Agency (f. 233.700), 1/1/89 - 1/1/90.
- Integrated Software Package for Expert Opinion in Risk Analysis, Ministry for Housing, Physical Planning & Milieu (f. 36.000), 1/11/89-1/1/90.
- Software Package for expert data evaluation and fusion commission of the European communities (f. 60.000) 1990
- Uncertainty analysis of atmospheric dispersion and the deposition codes; commission of the European communities (f 82.000) 1991
- Pilot Project Uncertainty Analysis of Dispersion & Deposition models of COSYMA Code 1-6-90, 1-6-91 fl. 60.000,-.
- Upgrade computerized Risk Assessment, European Space Agency 1991 (f. 70.000).
- Enhanced reliability methods for assessing the realization of CLUSTER mission objectives: European Space Agency, (f. 14,000) 1/9/91-1/12/91,
- Data Generation and Collection: European Space Agency (f. 232,000) 11/92- 1/1/94.
- Support to application and Development of Risk Assessment 1/1/94 - 1/6/94 ESTEC fl. 58.000.
- Pilot Proj. ``Concerning Statistical analysis of maintenance performance" 1/3/94-1/6/94 fl. 12.000. Risoe, National Lab (DK).
- Further Development and Application of Risk Assessment & Integration of Safety and Reliability tasks 1/6/94 - 1/1/95 ESTEC fl. 80.000.
- Review of SKI Data Processing methodology, Swedish Nuclear Inspectorial; 1-10-94 - 1-1-95 fl. 30.000,-.
- Optimal decisions that reduce flood damage along the Meuse: an uncertainty analysis 1/4/95 - 1/11/95; fl. 100.000,-.
- Joint CEC/USNRC Uncertainty Analysis of Accident Consequence Codes.
- Idem Ph.D. project Procedures Guide for uncertainty analysis 1/1/94 - 1/1/98 fl 100.000.
- Idem Mathematical Techniques for Uncertainty analysis 1/9/92 - 31/5/94 fl. 100.000.
- Idem 1/12/93 - 1/1/95 fl. 134.000.
- GasUnie, Failure frequency for Underground Pipelines 1/1/94 - 1/6/96 fl. 150.000.
- EU Working Group Fusion 1/6/96 - 1/6/98
- Swedish Pipe failure Database Review 1/5/97 - 1/10/97 fl. 20.000,-.
- Ministry of Water: uncertainty analysis of dyk failure probabilities 1/4/97 - 21/7/97 (with HKV) fl. 86.455,-. (21/7/97 - 15/12/97 : fl. 108.695) (1/6/98 - 30/11/98 fl. 56.340)
- Nato Linkage Grant (01/01/99 - 31/01/01 fl. 22.000)
- Design of Uncertainty Modeling Software, HKV-Center fl. 50.000,-. (1/9/00 - 1/7/01)
- NOx Emissions RIVM fl. 50.000,-. (1/10/00 - 1/1/01)
- Project Risk and Uncertainty, Norwegian. Research council , Stavanger University. (1/1/01 - 01/01/02) fl. 13.000
- GasUnie: Model Validation, Pipeline Failure Rates, (01/03/01 - 01/05/01), fl 8000,-
- Siemens/KWU: Reliability data base design. (01/12/01)-(01/05/02), fl 35.000,-
- Schiphol, NLR Causal Models (01-12-01)-(01-11-02), 90,000 fl.
- RIVM Chicken Processing model, 10,000 e. 1/11/02 - 1/5/03
- Risk analysis of abandoned chemical weapons site 30,000e, 1/01/03 - 1/6/03.
- Gov. of Kuwait, Harvard Center for Risk, & MIT (Atmos. Chem) Health effects of fine particulate matter, 1-6-03 1-1-05, \$150,000.
- NWO (Dutch Council for Scientific Research) Copulae for High Dimensional Distributions Code: 600.065.130.01N18 2003 – 2008, supporting PhD Hanea and Lewandowski 400,000 (aprox)
- Worker Safety Models (WORMS) Min. of Soc. Affairs, 2003 – 2005, \$90,000.
- German Inst. for Coastal Research GKSS: Risk Modeling for Oil Spills 1-9-03 - 1-9-05, 45,000e.
- SwissNuclear "Review of Pegasos project on Seismic risk", 1-9-043 - 1-4-05; \$40,000
- Causal Models for Schipol Airport 1-1-05 1-1-08 \$483,000.00
- Economic Impact of Invasive Species in Great Lakes, EPA/Notre Dame 1-3-08 – 1-10-08, \$30,000.
- Uncertainty in Merging and Spacing NASA 1-1-08 – 1-9-08, \$130,000.
- Social cost of carbon: US Department of Energy 1-9-2010 – 1-7-2011, \$130,000.
- Measuring Risk National Science Foundation 1-6-2009 – 1-6-2011, \$280,000.

- Stochastic Food Web for Great Lakes Invasive Species NOAA, 1-1-2010 – 1-1-2014, \$150,000 (PI David Lodge, Notre Dame U)
- Value of Information of Earth Observing Systems, NASA, 1-9-12 - 1-9-2015, ~\$200,000.
- Nitrogen retention in Chesapeake Bay, EPA, U of Maryland ~, \$80,000.

Publications

Books

- Cooke, R.M., Nieboer, D. and Misiewicz, J. (2014) *Fat-Tailed distributions: Data, Diagnostics and Dependence*, Wiley, Hoboken NJ. ISBN 978-1-84821-792-8.
- Cooke, Roger M.(2009) (ed) *“Uncertainty Modeling in Dose Response: Bench Testing Environmental Toxicity* Wiley, New York, ISBN 978-479-44750-5
- Kurowicka, D. , and Cooke, Roger M. (2006) *Uncertainty Analysis and High Dimensional Dependence Modeling* Wiley, New York . ISBN-13: 978-0470863060 ISBN-10: 0470863064
- Bedford, T.J. and Cooke, Roger M. (2001) *Probabilistic Risk Analysis: Foundations and Methods*, Cambridge University Press, (393 pages) 2001; ISBN 0 521 77320 2 Hardback
- Cooke, Roger M., Mendel, M., Vrijling, H. (eds.) (1997) *Engineering Probabilistic Design and Maintenance for Flood Protection*, Kluwer Academic Publishers,.
- Cooke Roger M.,(1991) *Experts in Uncertainty; Opinion and Subjective Probability in Science*, Oxford University Press; New York Oxford, 321 pages.; ISBN 0-19-506465-8
- Cooke, Roger M. and Costantini, D. (eds.) (1990) *Statistics in Science*, Kluwer.
- Cooke, Roger M., (1983) *Belief in Science* (in Dutch, English Summary available), van Gorcum.

Peer Reviewed Contract Research Reports

- Bush, B, Jenken, T. , Lipowicz, D., Arent, D. and Cooke, Roger M. (2012) “Variance Analysis of Wind and Natural Gas Generation under Different Market Structures: Some Observations” National Renewable Energy Laboratory, NREL/TP-6A20-52790, Contract No. DE-AC36-08GO28308.
- Ale, B., Bellamy, L.J., Cooke, Roger M., Duyvis, M., Kurowicka, D. Lin, P.H., Morales, O., Roelen, A. Spouge, J. (2009) “Causal Model for Air Transport Safety, Final Report” Ministerie van Verkeer en Waterstaat, Directoraat-Generaal Luchtvaart en Maritieme Zaken, ISBN 10:90 369 1724-7; ISB N 13: 978 90 369 1724-7, The Hague, The Netherlands.
- Speijker, L.J.P., Vidal. A. Cooke, Roger M. “Safety assessment of ATC-Wake single runway departures, NLR-TP-2006-465, July 2007.
- Speijker, L.J.P., van Baren G.B.. Cooke, Roger M. “Safety assessment of I-Wake single runway arrival operation with reduced separation” NLR-TP-2006, 532, May 2007.
- Cooke, Roger M., *Environmental Transport Uncertainty Model for Abandoned Chemical Weapons Site: dispersion, deposition and groundwater*. ABS consulting, Tokyo, 2003.
- A.Roelen, R. Wever, A. Hale, L. Goossens, R. Cooke, Roger M. Lopuhaa, M. Sijmons, and P. Valk, "Causal Modeling of air safety; NLR-CR-2002, 662, National Aerospace Laboratory, 2002.
- Cooke, Roger M., C. Bunea, T. Charitos, T.A. Mazzuchi "Mathematical Review of ZEDB Two-Stage Bayesian Model" VGB-Report, 45 pages; ISSN: 1439-7498, 2002
- Cooke, R.M. Goossens, L.J.H., (2000) *Procedures guide for structured expert judgment* Project report EUR 18820EN, Nuclear science and technology, specific programme Nuclear fission safety 1994-98, Report to: European Commission. Luxembourg, Euratom. Also in *Radiation Protection Dosimetry* Vol. 90 No. 3.2000, 64 7, pp 303-311.
- Brown, J. Goossens, L.H.J. , Harper, F.T., Kraan, B., Haskin, F.E, Abbott, M.L., Cooke, Roger M., Young, M.L, Jones, J.A. Hora, S.C., Rood, A., and Randall, J., *Probabilistic accident consequence uncertainty study: Food*

- chain uncertainty assessment, NUREG/CR-6523, EUR 16771, SAND97-0335 Washington/USA, and Brussels-Luxembourg, 1997 Vol, I, II
- Goossens, L.H.J. , J. Boardman, F.T. Harper, B.C.P. Kraan, Cooke, Roger M., M.L. Young, J.A. Jones and S.C. Hora, Probabilistic Accident Consequence Uncertainty Study: Uncertainty Assessment For Deposited Material And External Doses. NUREG/CR-6526 Washington/USA, 1997.
- Goossens, L.H.J. Cooke, Roger M. Pasler-Sauer, J. Kraan, B. & Jones, J.A. (1994). Probability Accident Consequence Uncertainty Analysis, Vols. 1-3, (NUREG/ CR-6244, EUR 15855 EN) Brussels: USNRC and CEC DG XII.
- Goossens, L.H.J., Harrison, J.D. , Harper, F.T., Kraan, B., Cooke, Roger M. and Hora, S.C., Probabilistic accident consequence uncertainty study: Uncertainty assessment for internal dosimetry, NUREG/CR-6571, EUR 16773, SAND98-0119, Washington/USA, and Brussels-Luxembourg, 1998, Vol. I, II.
- Goossens, L.H.J., and Harper, F.T., (1998) "Joint EC/USNRC expert judgement driven radiological protection uncertainty analysis", Journal of Radiological Protection, Vol.18, No.4, 249-264.
- Goossens, L.H.J., Boardman, J. , Harper, F.T., Kraan, B., Cooke, Roger M., Young, M.L., Jones, J.A. and Hora, S.C., Probabilistic accident consequence uncertainty study: Uncertainty assessment for deposited material and external doses NUREG/CR-6526, EUR 16772, SAND97-2323, Washington/USA, and Brussels-Luxembourg, 1997, Vol. I, II.
- Goossens, L.J.H. , Cooke, Roger M., Kraan, B., Ehrhardt, J., Fischer, F., Hasemann, I. , Jones, J.A., Brown, J., A. Khursheed, A. Phipps; Uncertainty from the dose module EUR 18825EN European Commission. Luxembourg 2001, Euratom.
- Goossens, L.J.H. , Cooke, Roger M., Kraan, B., Ehrhardt, J., F. Fischer, Hasemann, I., Brown, J., Jones, J.A., J.G. Smith ; Nuclear science and technology. Uncertainty from the food chain module, EUR 18823EN European Commission. Luxembourg 2001, Euratom.
- Goossens, L.J.H. , Kraan, B., Cooke, Roger M., Jones, J.A., Brown, L., Ehrhardt, J., Fischer, F. , Hasemann, I.,. Methodology and processing techniques, EUR 18827EN European Commission. Luxembourg 2001, Euratom.
- Goossens, L.J.H. , Kraan, B., Cooke, Roger M., Jones, J.A., Brown, J., Ehrhardt, J., Fischer, F., Hasemann, I., Nuclear science and technology. Overall uncertainty analysis, EUR 18826EN European Commission. Luxembourg 2001, Euratom
- Goossens, L.J.H. , Kraan, B., Cooke, Roger M., Jones, J.A., Brown, J., Ehrhardt, J., Fischer, F., Hasemann, I., Uncertainty from the atmospheric dispersion and deposition module, EUR 18822EN European Commission. Luxembourg 2001, Euratom.
- Goossens, L.J.H. , Kraan, B., Cooke, Roger M., Jones, J.A., Ehrhardt, J., Fischer, F., Hasemann, I., Uncertainty from the early and late health effects module, EUR 18824EN European Commission. Luxembourg 2001, Euratom.
- Goossens, L.J.H. , Kraan, B., Cooke, Roger M., Jones, J.A., Ehrhardt, J., Nuclear science and technology. Countermeasures uncertainty assessment, EUR 18821EN European Commission. Luxembourg 2001, Euratom.
- Harper, F.T., L.H.J. Goossens, Cooke, Roger M., S.C. Hora, M.L. Young, J. Päsler-Sauer, L.A. Miller, B. Kraan, C. Lui, M.D. McKay, J.C. Helton, and J.A. Jones. Probabilistic accident consequence uncertainty study: Dispersion and deposition uncertainty assessment Prepared for U.S. Nuclear Regulatory Commission and Commission of European Communities NUREG/CR-6244, EUR 15855 EN, SAND94-1453. Washington/USA and Brussels-Luxembourg, November 1994, published January 1995. Volume I: Main report, Volume II: Appendices A and B, Volume III: Appendices C, D, E, F, G, H.
- F.E. Haskin, L.H.J. Goossens, F.T. Harper, B.C.P. Kraan and Cooke, Roger M., Probabilistic Accident Consequence Uncertainty Study: Early Health Effects Uncertainty Assessment. Prepared for U.S. Nuclear Regulatory Commission and Commission of European Communities, NUREG/CR-6545 EUR 16775 SAND97-2689 Washinton/USA, and Brussels-Luxembourg, 1997, published 1997, Vol. 1. Main Report Vol. 2. Appendices.
- Cooke, R.M, and van Noortwijk, Jan (1999) Bijlagen bij het expertmeningenrapport van de onzekerheidsanalyse op de inundatiekans. Rapport ONIN-1-99007, Projectnummer: WB 1083, 1999
- Martijn Frijters, Roger Cooke, Karen Slijkhuis, Jan van Noortwijk, Rapport ONIN-1-99006, Expertmeningen onzekerheidsanalyse. Kwalitatief en kwantitatief verslag, Projectnummer: WB 1083, 1999
- Cooke, Roger M., Van Noortwijk J.M., "Uncertainty Analysis of Inundation Probabilities, Phase 1, TU-Delft Report 37-97, ISSN 0922-5641, Delft 1997.
- J. Brown, L.H.J. Goossens, B.C.P. Kraan, Cooke, Roger M., J.A. Jones, J. Randall, F.T. Harper, F.E. Haskin, M.L. Abbott, M.L. Young, S.C. Hora and A. Rood, Probabilistic Accident Consequence Uncertainty Analysis, NUREG/CR-6523 EUR 16771, Vol. 1. Main Report June 1997. Vol. 2 Appendices.
- L.H.J. Goossens, Cooke, Roger M. and B.C.P. Kraan, Evaluation of weighting schemes for expert judgement studies Final report prepared under contract Grant No. Sub 94-FIS;040 for the Commission of European Communities, Directorate-General for Science, Research and Development, XII-F-6. Delft University of Technology, Delft/NL, December 1996, 75 p.

- Cooke, Roger M., Jager, E., Methods for assessing the failure frequency of underground gas pipelines with historical data and structured expert judgment, Report 96-75. Dept. of Mathematics, Delft University of Technology, 1996.
- Van Noortwijk J.M., Kok M. and Cooke R.M., Optimal decisions that reduce flood damage along the Meuse: an uncertainty analysis, publication no. 491, Delft Hydraulics, November 1995
- Cooke R.M., Review of SKI data processing methodology, The design of reliability data bases: generic issues Phase 1, SKI report 95:2
- Cooke R.M., Dorrepaal J. and Bedford T., Review of SKI data processing methodology, Mathematical Review Phase II, SKI report 95:2.
- Harper F.T., Hora S.C., Young M.L., Miller L.A., Lui C.H., McKay M.D., Helton J.C., Goossens L.H.J., Cooke R.M., P"asler-Sauer J., Kraan B., Jones J.A., Probability Accident Consequence Uncertainty Analysis, NUREG/CR-6244 EUR 15855EN SAND94-1453 Vol 1. Main Report January 1995. Vol 2. Appendices A.1 Expert Rationales, Unprocessed Deposition Data and A.2 Expert Rationales, Unprocessed Dispersion Data and B Short Biographies of Dispersion and Deposition Experts. Vol 3. Appendix C: Principles for Probability Assessment, Expert Identification and Selection. Appendix D: Equal and Performance Based Weighting methods for Combining Expert Judgments Appendix E: Inverse Modeling Methods Appendix F: Case Structures Appendix G: Summary of MACCS and COSYMA Consequence Codes Appendix H: Non-Gaussian Information Survey.
- Cooke, Roger M.; Goossens, L.H.J. and Kraan, B., Methods for CEC/USNRC Accident consequence uncertainty analysis of dispersion and deposition - Performance based aggregating of expert judgments and PARFUM method for capturing modeling uncertainty, EUR 15856, Luxembourg, June 1995.
- Paulsen, J.L. and Cooke R.M., Analysis of 221 Reports using Subsurvival Functions, Riso-I-795(EN), Riso National Laboratory, Roskilde, Denmark May 1994.
- Cooke, Roger M., Goossens, L. and Kraan, B., ``Performance Based Aggregating of Expert Judgments and Parfum Method for Capturing Modeling Uncertainty, 1994.
- Cooke, Roger M. Bedford, T., Meilijson, I. and Meester, L., ``Design of reliability data bases for aerospace applications'', ISSN 09211-5641 Report 93-110 TU Delft, 1993.
- Cooke R., "Expert Judgement study on atmospheric dispersion and deposition - main report and annexes", ISSN 0922-5641 Report 91-81 TU Delft, 300 pages, 1991. Annex I "Parameter fitting for uncertain models" with Frank Vogt 21 pp. Annex II "Expert judgment for uncertainty analysis of accident consequence codes" with H. van der Weide, 30 pp.
- Cooke, Roger M. French, S. and van Steen, J. "The use of expert judgement in risk analysis - Report to the European Space Agency" (contract no. 8051/88/NL/re(SC)) 220 p. Delft, 1990.
- Final Report to the Dutch Ministry of Housing, Physical Planning and Environment: 1989. Vol. I Expert Judgment in Risk and Safety Studies; Main Report, Goossens, L. Cooke, Roger M. and van Steen, J. 68 pp. Vol. III Model Description Report, Cooke, Roger M., Mendel, M. and van Steen, J. 98 pp. Vol. IV A Theory of Weights for Combining Expert Opinions, Cooke, Roger M. 36 pp. Vol V Case Studies, Cooke, Roger M. and van Steen. 119 pp.
- Cooke, Roger M.; Van der Horst, J.; Goossens, L. and Hale, A., Accident Sequence Precursor Methodology A feasibility study for the Chemical Process Industries: Report to the Ministry of Housing, Physical Planning and Environment, Delft, 1987.

Refereed International Journals

- Hoffmann, S., Aspinall, W. Devleeschauwer, B. Cooke, R.M., Corrigan, T., Havelaar, A.H., Gibb, H., Torgerson, P., Kirk, M., Angulo, F., Lake, R., Speybroeck, N., and Hald, T. (2015b) Attribution of Major Foodborne Diseases to Specific Food Exposures for Use in Assessing the Global Burden of Foodborne Diseases: Results from Coordinated Expert Elicitations in 14 WHO Subregions. *Risk Analysis*
- *****
- Colson A., and Cooke, R.M., (2017) In- and Out-of-Sample Validation for the Classical Model of Expert Judgment, accepted for publication by REEP.
- Colson, A. and Cooke, R.M., (2017) Cross Validation for the Classical Model of Structured Expert Judgment, *Reliability Engineering and System Safety*, Volume 163, July 2017, Pages 109–120 <http://dx.doi.org/10.1016/j.ress.2017.02.003>
- David M. Lodge, Paul W. Simonin, Stanley W. Burgiel, Reuben P. Keller, Jonathan M. Bossenbroek, Christopher L. Jerde, Andrew M. Kramer, Edward S. Rutherford, Matthew A. Barnes, Marion E. Wittmann, W. Lindsay Chadderton, Jenny L. Apriensnig, Dmitry Beletsky, Roger M. Cooke, John M. Drake, Scott P. Egan, David C. Finnoff, Crysta A.

- Gantz, Erin K. Grey, Michael H. Hoff, Jennifer G. Howeth, Richard A. Jensen, Eric R. Larson, Nicholas E. Mandrak, Doran M. Mason, Felix A. Martinez, Tammy J. Newcomb, John D. Rothlisberger Andrew J. Tucker, Travis W. Warziniack, Hongyan Zhang, (2016) Risk Analysis And Bioeconomics of Invasive Species To Inform Policy And Management, Annual Review of Environment and Resources, Vol. 41: (Volume publication date November 2016)
- Bamber, J.L., Aspinall, W.J. and Cooke, R.M. (2016) "A commentary on 'How to interpret expert judgment assessments of 21st century sea-level rise' by Hylke de Vries and Roderik SW van de Wal", Climatic Change DOI 10.1007/s10584-016-1672-7 http://www.readcube.com/articles/10.1007/s10584-016-1672-7?author_access_token=-ypLm3PLhLCaego8ujr8fe4RwlQNchNByi7wbcMAY7-baXVF_yRbTxA3UX6NKPV5c1BYLagv79Mf-MnCaDjVreTjX9w0cvVzuBe_AWvwHskY0_Na9rUHEb0LLmnPNXuOxiOW8185sVnZ5LMrNTT8Q%3D%3D
- Cooke, R.M., Saatchi, S. and Hagen, S. (2016) Global Correlation and Uncertainty Accounting, Dependence Modeling, vol. 4 nr 1 184-189, DOI10.1515/demo-2016-0009 <https://www.degruyter.com/view/j/demo.2016.4.issue-1/demo-2016-0009/demo-2016-0009.xml>
- Oppenheimer, M., Little, C.M., and Cooke, R.M. (2016) Expert Judgment and Uncertainty Quantification for Climate Change, Nature Climate Change. vol 6, May, 445-451, PUBLISHED ONLINE: 27 APRIL 2016 | DOI: 10.1038/NCLIMATE2959
- Hald, T. Aspinall, W. Devleesschauwer, B. Cooke, R.M., Corrigan, T., Havelaar, A.H., Gibb, H., Torgerson, P., Kirk, M., Angulo, F., Lake, R., Speybroeck, N., and Hoffmann, S. (2015) World Health Organization estimates of the relative contributions of food to the burden of disease due to selected foodborne hazards: a structured expert elicitation. PLOS ONE, : January 19, 2016 DOI: 10.1371/journal.pone.0145839, <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0145839>
- Aspinall, W.P., Cooke, R.M. Havelaar, A.H., Hoffmann, S. and Hald. T. (2015) Evaluation of a Performance-Based Expert Elicitation: WHO Global Attribution of Foodborne Diseases, [PLoS One](https://doi.org/10.1371/journal.pone.0149817). 2016 Mar 1;11(3):e0149817. doi: 10.1371/journal.pone.0149817. eCollection 2016.
- Zhang, H, Rutherford E.S., Mason, D.M., Breck, J.T., Wittmann M.E., Cooke R.M., [Lodge](https://doi.org/10.1080/00028487.2015.1069211) D.M., Rothlisberger J.D., Zhu X., and Johnson, T B., (2015) Forecasting the Impacts of Silver and Bighead Carp on the Lake Erie Food Web, Transactions of the American Fisheries Society, [Volume 145, Issue 1](https://doi.org/10.1080/00028487.2015.1069211), pp 136-162, DOI:10.1080/00028487.2015.1069211
- Koch, Benjamin J., Filoso, S., Cooke, R. M. Hosen, J. D., Colson, A.R. Febria, Catherine M., Palmer, M. A. , (2015) Nitrogen in stormwater runoff from Coastal Plain watersheds: The need for empirical data, reply to Walsh , Elementa DOI 10.12952/journal.elementa.000079. <https://www.elementascience.org/articles/79>
- Cooke, Roger M. Golub, Alexander, Wielicki, Bruce A. , Young, David F. Mlynczak, Martin G. Baize, Rosemary R. (2015) Integrated Assessment Modeling of Value of Information in Earth Observing Systems, *Climate Policy* ISSN: 1469-3062 (Print) 1752-7457 Online: <http://www.tandfonline.com/doi/full/10.1080/14693062.2015.1110109>
- Koch, Benjamin J., Febria, Catherine M. , Cooke, Roger M. Hosen, Jacob D. , Baker, Matthew E. , Colson, Abigail R. Filoso, Solange, Hayhoe, Katharine, Loperfido, J.V. , Stoner, Anne M.K. , Palmer, Margaret A. , (2015) Suburban watershed nitrogen retention: Estimating the effectiveness of storm water management structures, Elementa, DOI 10.12952/journal.elementa.000063 <https://www.elementascience.org/articles/63>
- Hoffmann, S., Aspinall, W., Cooke, R.M. Cawthorne, A., Corrigan, T. Havelaar, A.H., Gibb, H., Torgerson, P., Kirk, M., Angulo, F.J. , Lake, R., Speyboeck, N., Devleesschauwer, B., Hald, T. (2016), World Health Organization, Foodborne Epidemiology Reference Group, Source Attribution Task Force. Research Synthesis Methods in an Age of Globalized Risks: Lessons from the Global Burden of Foodborne Disease Expert Elicitation. *Risk Analysis* 36(2): 191-202.
- Cooke, Roger M. (2015) "The Aggregation of Expert Judgment: Do Good Things Come to Those Who Weight?" Risk Analysis, published online 2/2/2015, DOI: 10.1111/risa.12353.
- Cooke, Roger M. (2015) "Messaging climate change uncertainty with Supplementary Online Material" Nature Climate Change 5, 8–10 (2015) doi:10.1038/nclimate2466 Published online 18 December 2014 <http://www.nature.com/nclimate/journal/v5/n1/full/nclimate2466.html>
- Smith, Sigrid D.P., McIntyre, Peter B. , Halpern, Benjamin S. Cooke, Roger M. , Marino, Adrienne L. , Boyer, Gregory L., Buchsbaum, Andy, Burton Jr G.A. , Campbell, Linda M. , Ciborowski, Jan J.H. , . Doran, Dana Patrick J , Infante, M., Johnson, Lucinda B. , Read, Jennifer G. , Rose, Joan B. , Rutherford, Edward S., Steinman, Alan D. , and Allan, J. David (2015) Assessing relative impacts in a multi-stressor world: expert opinion on 50 stressors to the Laurentian Great Lakes, Ecological Applications, 25(3), 2015, pp. 717–728 _ 2015 by the Ecological Society of America
- Cooke, R.M., Kurowicka, D. and Wilson, K. (2015) "Sampling, Conditionalizing, Counting, Merging, Searching Regular Vines" Journal of Multivariate Analysis doi:10.1016/j.jmva.2015.02.001 Available online online 14 February 2015, ISSN 0047-259X, <http://dx.doi.org/10.1016/j.jmva.2015.02.001>. <http://www.sciencedirect.com/science/article/pii/S0047259X15000366>
- Cooke, R.M., Wittmann, M.E., Lodge, D.M., Rothlisberger, J.D., Rutherford E.S., Zhang, H. and Mason, D.M. (2014) "Out-of-Sample Validation for Structured Expert Judgment of Asian Carp Establishment in Lake Erie", Integrated

- Environmental Assessment and Management, open access. DOI: 10.1002/ieam.1559
<http://onlinelibrary.wiley.com/doi/10.1002/ieam.1559/abstract>
- Cooke, R. M. (2014) "Multivariate Survival Analysis and Competing Risk" *Journal of the American Statistical Association* A. book review 10.1080/01621459.2014.943116
- Ganguly, T., Wilson, K.J., Quigley, J., and Cooke, R.M. (2014) "Reaction to Babuscia, A. and Cheung, K-M "An approach to perform expert elicitation for engineering design risk analysis: methodology and experimental results", *Journal for the Royal Statistical Society: methodology and experimental results*. 0964–1998/14/177000
- Wittmann, M.E., Cooke, R.M., Rothlisberger, J.D., Lodge, D.M. (2014a) " Using Structured Expert Judgment to Assess Invasive Species Prevention: Asian Carp and the Mississippi - Great Lakes Hydrologic Connection", *Environmental Science & Technology*, DOI: 10.1021/es4043098 Publication Date (Web): January 27, 2014 Copyright © 2014 American Chemical Society, 2150–2156
- Wittmann, M.E., Cooke, R.M., Rothlisberger, J.D., Rutherford, E. S., Zhang, H., Mason, D., Lodge, D.M. (2014b): Structured expert judgment to forecast species invasions: Bighead and silver carp in Lake Erie, *Conservation Biology* . DOI: 10.1111/cobi.12369
<http://onlinelibrary.wiley.com/doi/10.1111/cobi.12369/full>
- Gradowska, P. and Cooke, Roger M. (2013) "Estimating expected value of information using Bayesian belief networks: a case study in fish consumption advisory" *Environment, Systems and Decisions*,. March 2014, Volume 4, Issue 1, pp 88-97 First online: 04 September 2013, DOI 10.1007/s10669-013-9471-4
- Cooke, Roger M. Wielicki, B.A., Young, D.F. and Mlynczak, M.G., (2013) "Value of Information for Climate Observing Systems" *Environment, Systems and Decisions*, DOI 10.1007/s10669-013-9451-8
- Cooke, Roger M. (2013) "Quantifying uncertainty on thin ice", *Nature Climate Change*, *Nature Climate Change* 3,311–312 doi:10.1038/nclimate1860.
- Halpern, B.S., Longo, C McLeod. C.L., Cooke, Roger M., Fischhoff, B., Samhoury, J.F., Scarborough, C.(2013) Elicited preferences for components of ocean health in the California Current, *Marine Policy* 42 (2013) 68–73,
- Tyshenko, M.G., S. ElSaadany, T. Oraby, S. Darshan, W. Aspinall, R. Cooke, A. Catford, and D. Krewski (2011) Expert elicitation for the judgment of prion disease risk uncertainties. *J Toxicol Environ Health A.*; 74(2-4):261-285.
- Cooke, Roger M. (2012) "Uncertainty Analysis Comes to Integrated Assessment Models for Climate Change...and Conversely" *Climatic Change*. Volume 117, Issue 3 (2013), Page 467-479 DOI: 10.1007/s10584-012-0634-y, free online access: <http://dx.doi.org/10.1007/s10584-012-0634-y>
- Cooke, Roger M. (2012) "Model uncertainty in economic impacts of climate change: Bernoulli versus Lotka Volterra dynamics" appearing in *Integrated Environmental Assessment and Management*. Published online 27 April 2012 in Wiley Online Library ([wileyonlinelibrary.com](http://onlinelibrary.wiley.com)). DOI: 10.1002/ieam.1316
<http://onlinelibrary.wiley.com/doi/10.1002/ieam.1316/abstract>
- Kousky, C. and Cooke, Roger M. (2012). "Explaining the Failure to Insure Catastrophic Risks." *The Geneva Papers on Risk and Insurance - Issues and Practice*, 37(2): 206-227.
- Gradowska, P. and Cooke, Roger M. (2012) "Least squares type estimation for Cox regression model and specification error", *Computational statistics and Data Analysis* [Volume 56, Issue 7](http://dx.doi.org/10.1016/j.csda.2012.01.006), July 2012, Pages 2288–2302,
<http://dx.doi.org/10.1016/j.csda.2012.01.006>
- Rothlisberger, J.D. Finnoff, D.C. Cooke, R.M. and Lodge, D.M. (2012) "Ship-borne nonindigenous species diminish Great Lakes ecosystem services" *Ecosystems* (2012) 15: 462–476 DOI: 10.1007/s10021-012-9522-6
- Ryan, J.C.H. Mazzuchi, T.A. Ryan, D.J., Lopez de la Cruz, J. and Cooke, Roger M. (2012) "Quantifying information security risks using expert judgment elicitation", *Computers & Operations Research Journal* 39, 774–784. , doi:10.1016/j.cor.2010.11.013
- Kousky, C., Kopp, R. E., and R. M. Cooke (2011). "Risk Premia and the Social Cost of Carbon: A Review." *Economics: The Open-Access, Open-Assessment E-Journal*, Vol. 5, 201 1-21. <http://dx.doi.org/10.5018/economics-ejournal.ja.2011-21>
- Flari, V., Qasim Chaudhry, Q., Neslo, R., and Cooke, Roger M. (2011) Expert judgment based multi-criteria decision model to address uncertainties in risk assessment of nanotechnology-enabled food products *J Nanopart Res* (2011) 13: 1813–1831; DOI 10.1007/s11051-011-0335-x
- Cooley, D. Holmes PT, Galik, CS, Kousky, C. and Cooke, Roger M.(2011) "Managing Dependencies in Forest Offset Projects: Toward a More Complete Evaluation of Reversal Risk", appearing in *Mitigation and Adaptation Strategies for Global Change* DOI: 10.1007/s11027-011-9306-x
- Cooke, Roger M. (2012) "Pitfalls of ROAT Cross Validation Comment on Effects of Overconfidence and Dependence on Aggregated Probability Judgments" *Journal of Modelling in Management*, vol.7, nr. 1, pp 20-22, ISSN 1746-5664.
- Neslo R.E.J., and Cooke, Roger M.,(2011) "Modeling and Validating Stakeholder Preferences with Probabilistic Inversion" *Applied Stochastic Models in Business and Industry*. *Applied Stochastic Models in Business and Industry Special Issue: Games and Decisions in Risk and Reliability Analysis*, Volume 27, Issue 2, pages 115–130, March/April 2011
- Cooke, Roger M. (2011) "Response to Conundrums Letter", *Risk Analysis* 2011

- Kurowicka, D. Bucura, C. Cooke, Roger M. and Havelaar, A. (2010) Probabilistic Inversion in Priority Setting of Emerging Zoonoses, *Risk Analysis*, Vol. 30, No. 5, 2010 DOI: 10.1111/j.1539-6924.2010.01378.x
- Kurowicka, D. Nauta, M. Jozwiak, K. 1 and Cooke, Roger M. (2010) "Updating Parameters of the Chicken Processing Line Model" *Risk Analysis*, Vol. 30, No. 6, 2010 DOI: 10.1111/j.1539-6924.2010.01379.x
- Sarah J. Teck, Benjamin S. Halpern, Carrie V. Kappel, Fiorenza Micheli, Kimberly A. Selkoe, Caitlin M. Crain, Rebecca Martone, Christine Shearer, Joe Arvai, Baruch Fischhoff, Grant Murray, Rabin Neslo, and Cooke, Roger M. (2010) Using expert judgment to estimate marine ecosystem vulnerability in the California Current, *Ecological Applications*, 20(5), 2010, pp. 1402–1416 2010 by the Ecological Society of America
- Tyshenko, Michael G. ElSaadany, Susie Darshan, Shalu Aspinall, Willy Cooke, Roger M. Oraby, Tamer and Krewski, Daniel (2010) "Expert Elicitation for the Judgment of Prion Disease Risk Uncertainties using the Classical Model and EXCALIBUR" *J Toxicol Environ Health A*, 2011;74(2-4):261-85. doi: 10.1080/15287394.2011.529783.
- Hanea, A., D. Kurowicka, R. Cooke, and D. Ababei (2010). Mining and visualising ordinal data with non-parametric continuous BBNs. *Computational Statistics and Data Analysis* 54 (3), 668-687. <http://dx.doi.org/10.1016/j.csda.2008.09.032>
- Cooke, Roger M. (2010) "Conundrums with uncertainty factors" *Risk Analysis*, Vol. 30, No. 3, 330-338, 2010.
- Cooke, Roger M. (2010) "Response to reviewers" *Risk Analysis*, vol. 30 No. 3, 353,, 2010.
- Rothlisberger, J.D., Lodge, D.M. Cooke, Roger M. and Finnoff, D.C. (2009) "Future declines of the binational Laurentian Great Lakes fisheries: recognizing the importance of environmental and cultural change" *Frontiers in Ecology and the Environment*; doi:10.1890/090002
- Ale, B.J.M. Bellamy, L.J. , Boom, R. van der, Cooper, J., Cooke, Roger M., Goossens, L.H.J., Hale, A.R., Kurowicka, D., Morales, O. Roelen, A.L.C. and Spouge, J. . "Further development of a Causal model for Air Transport Safety (CATS); Building the mathematical heart." *Reliability Engineering & System Safety*, Vol. 94, No. 9. (September 2009), pp. 1433-1441. doi:10.1016/j.res.2009.02.024 Key: citeulike:5143231
- Havelaar, A.H., Vargas Galindo, A., Kurowicka, D., Cooke, R.M. (2008) Attribution of Foodborne Pathogens Using Structured Expert Elicitation, *Foodborne Pathogens and Disease*, October 2008, 5(5): 649-659. doi:10.1089/fpd.2008.0115
- Cooke, Roger M. and MacDonell, M. (2008) "Regulating under Uncertainty: Newsboy for exposure limits" *Risk Analysis* vol. 28 no. 1.
- Kurowicka, D., Cooke, Roger M. Goossens, L. and Ale, B.J.M, Expert Judgment study for Placement Ladder Bowtie, *Safety Science*, 2007
- Lewandowski, D. Cooke, Roger M. and Duintjer Tebbens, R.J. "Sample Based Estimation of Correlation Ratio with Polynomial Approximation" *Transactions on Modeling and Computer Simulation*, vol. 18 no.1, article 3, 2007.
- Radboud J. Duintjer Tebbens, Kimberly M. Thompson, M.G. Myriam Hunink, M.D., Thomas M Mazzuchi, Daniel Lewandowski, Dorota Kurowicka, Cooke, Roger M. (2008) "Uncertainty And Sensitivity Analyses Of A Dynamic Economic Evaluation Model For Vaccination 3 Programs" *Medical Decision Making* .
- Goossens, L.H.J., Cooke, Roger M., Hale, A.R, Rodic-Wiersma, L., Fifteen years of expert judgement at TU Delft Safety Science 46 (2008) 234–244
- Cooke, Roger M. (2008) Special issue on expert judgment, Editor's Introduction *Reliability Engineering & System Safety*, 93, Available online 12 March 2007, Volume 93, Issue 5, May 2008, Pages 655-656
- Cooke, Roger M., ElSaadany, S., Xinzhen Huang, X. (2008) On the Performance of Social Network and Likelihood Based Expert Weighting Schemes, Special issue on expert judgment *Reliability Engineering & System Safety*, 93, 745-756, Available online 12 March 2007, Volume 93, Issue 5, May 2008.
- Cooke, Roger M., Goossens, L.H.J. (2008) TU Delft Expert Judgment Data Base, Special issue on expert judgment *Reliability Engineering & System Safety*, 93, 657-674, Available online 12 March 2007, Issue 5, May 2008.
- Cooke, Roger M., (2008) Response to Comments, Special issue on expert judgment *Reliability Engineering & System Safety*, 93, 775-777, Available online 12 March 2007. Volume 93, Issue 5, May 2008.
- Cooke, Roger M. Wilson, A.M., Tuomisto, J.T. Morales, O. Tainio, M. and Evans, J.S.. (2007) A Probabilistic Characterization of the Relationship Between Fine Particulate Matter and Mortality: Elicitation of European Experts. *Environmental Science and Technology* 2007 Sep 15;41(18): pp 6598-6605.
- Kurowicka, D., Cooke, Roger M. (2007) Sampling algorithms for generating joint uniform distributions using the vine-copula method, *Comp. Stat. & Data Analysis*, Volume 51, Issue 6 (March 2007)
- Papaefthymiou, P.H. Schavemaker, L. van der Sluis, W.L. King, Kurowicka, D., Cooke, Roger M.; (2006) "Integration of stochastic generation in power systems" *Electrical Power and Energy Systems* 28 (2006) 655-667
- Du C., Kurowicka D., Cooke R.M. (2006) Techniques for generic probabilistic inversion, *Comp. Stat. & Data Analysis* (50) 2006, 1164-1187.
- Kurowicka D., Cooke R.M. (2006) Completion Problem with Partial Correlation Vines, *Linear Algebra and Its Applications*, vol. 418, nr 1, pp 188-200.
- Cooke R.M. and Morales, O. (2006) "Competing Risk and the Cox proportional hazard model", *Journal of Statistical Planning and Inference* vol. 136, no 5, pp. 1621-1637, 2006,

- Cooke, Roger M. Nauta, M., Havelaar, A.H. and van der Fels, H.J. (2006) "Probabilistic inversion for chicken processing lines" *Reliability Engineering and System Safety*, 91 pp 13674-1372, 2006.
- Hanea, A.M., Kurowicka, D. and Cooke, Roger M.(2006) "Hybrid Method for Quantifying and Analyzing Bayesian Belief Nets" (2006) *Quality and Reliability Engineering International* 22,709-729, 2006.
- Tuomisto JT, Wilson A, Cooke RM, Tainio M, Evans J.S.(2005) "Mortality in Kuwait due to PM from oil fires after the Gulf War: Combining expert elicitation assessments" (2005) *Epidemiology*, Volume 16 (5) September 2005 p. S74-S75
- Evans J.S., Wilson A, Tuomisto JT, Tainio M, Cooke RM (2005) "What risk assessment can tell us about the mortality impacts of the Kuwaiti oil fires" *Epidemiology*, Volume 16 {5} September 2005 p.S137-S138
- Cooke, Roger M. Bosma, A. and Härte,F.(2005) "A practical model of Heineken's bottle filling line with dependent failures" *European Journal of Operational Research*, Volume 164, Issue 2, 16 July, Pages 491-504
- Van der Fels-Klerx, H.J., Cooke, Roger M., Nauta, M.J., Goossens, L.H.J., Havelaar, A.H. "A Structured Expert Judgement Study For A Model of Campylobacter Transmission During Broiler Chicken Processing" *Risk Analysis* 25 No. 1, 2005, pp 109-124.
- Shrader-Frechette, K. and Cooke, Roger M. (2004) *Ethics and Choosing Appropriate Means to an End: Problems with Coal Mine and Nuclear Workplace Safety*, *Risk Analysis*, volume 24, no. 1, 2004 pp 147-156.
- Cooke, Roger M. and Goossens L.H.G.(2004) "Expert judgement elicitation for risk assessments of critical infrastructures" *Journal of Risk Research* vol. 7 issue 6, 2004, ISSN 1366-9877, pp 643-657.
- Cooke, Roger M. (2004) "The anatomy of the Squeeze - the role of operational definitions in science" *Reliability Engineering and System Safety* 85, 2004, 313-319.
- Kurowicka, D., & Cooke, Roger M.," (2003) *A Parametrization of Positive Definite Matrices in Terms of Partial Correlation Vines*", in *Linear Algebra and its Application* 372 (2003) 225-251. Published by Elsevier Inc. doi:10.1016/S0024-3795(03)00507-X
- Cooke, Roger M., Kurowicka, D., I. Meilijson (2003) "Linearization of local probabilistic sensitivity via sample re-weighting" *Reliability Engineering and System Safety*", 79, 2003 pp. 131-137; Published by Elsevier Science Ltd. PII: S0951 - 8320(02)00223-5.
- Cooke, Roger M., (2003) *Book Review Elicitation of expert opinions for uncertainty and risks Elsevier, Fuzzy Sets and Systems* 133 (2003), page 267-268, ISBN 0-8493-1087-3
- J.G. Norstrom, Cooke, Roger M., T. Bedford (2002) "Value of information based design of control software" *Reliability Engineering and System Safety*", 77 (2002) 291-300, Published by Elsevier Science Ltd. PII: S09 1-8320(02)00062-5
- Cooke, Roger M. & Bedford, T.J.,(2002) "Reliability Data Bases in Perspective", *IEEE Trans. Reliab.*, Vol 51 no3 294-311. 2002. [10.1109/TR.2002.802889](https://doi.org/10.1109/TR.2002.802889)
- Bedford, T.J., & Cooke, Roger M., (2002) "Vines - a new graphical model for dependent Random Variables" *Annals of Statistics*, vol. 30, No.4, August 2002.
- Jolanta K. Misiewicz and Cooke, Roger M."Simple fractions and Linear decomposition of some convolutions of measures" *Probability and Statistics*, 21, 2001, 149-157.
- Thompson, K.M. Rabouw, R.F. and Cooke, Roger M.; The risk of groundlings fatalities form unintentional airplane crashes. In: *Risk analysis*, Vol : 21,6, 2001, p. 1025-1037. ISSN: 0272-4332
- Siekman S., R. Kruse, J. Gebhardt, P. Overbeek, Cooke, Roger M.; Information fusion in the context of stock index prediction. In: I. Bloch, A. Hunter (eds.); *International journal of intelligent systems*, Vol : 16, 11, 2001, p. 1285-1298. ISSN: 0884-8173
- Cooke R.M., P. Smets "Self-conditional probabilities and probabilistic interpretations of belief functions, In: *Annals of Mathematics and Artificial Intelligence*, Vol : 32, 2001, p. 269-285. ISSN:1012-2443
- Bedford, T.J. and Cooke, Roger M. (2001) "Probability density decomposition for conditionally dependent random variables modelled by Vines, " *Annals of Mathematics and Artificial Intelligence*, Volume 32 (2001) Nos.1-4, ISSN 1012 2443, pp 245-268
- J.K. Misiewicz and Cooke, Roger M.. (2000) "Isotropic sequence of random variables and stochastic rescaling" In: *Theoretical Probability and Mathematical Statist*, Vol: 20, 2000, p. 151-157. ISSN: 0868-6904
- B.C.P. Kraan, Cooke, Roger M., (2000) "Uncertainty in compartmental models for hazardous materials-a case study. 71 (2000) 253-268 " *Journal of hazardous materials*" Elsevier Science BV.ISSN0304-3894
- Cooke R.M. and Van Noordwijk J.M., (2000) "Generalized graphical Methods for uncertainty and sensitivity analysis", page 54 - 57. *Bashkir ecological journal* 1 (8) 2000, Special Issue Problems of risk estimation and reduction in exceptional circumstances of natural and technogenic character for population of industrial regions.In Russian.
- J.M. van Noordwijk, Cooke, Roger M. and J.K. Misiewicz. (2000) "Characterizations of scale Mixtures of gamma Processes in terms of sufficiency and isotropy" *Journal of Mathematical Sciences* Vol. 99, No. 4, 2000. page 1469-1475, 1072-3374/00/9904-1469
- B.C.P. Kraan and Cooke, Roger M.. (2000)"Processing Expert Judgements in Accident Consequence Modeling". *Radiation Protection Dosimetry* Vol. 90 No. 3, 2000.ISBN 1 870965 64 7.

- Cooke, Roger M. and L.H.J. Goossens, (2000) "Procedures Guide for Structured Expert Judgement in Accident Consequence Modeling", *Radiation Protection Dosimetry* Vol. 90 No. 3.2000.ISBN 1 870965 64 7, page 303-311.
- Lennaert J.P. Speijker, Jan. M. van Noordwijk, Matthijs Kok, Cooke, Roger M. (2000),"Optimal Maintenance Decisions for Dikes" *Probability in the Engineering and Informational Science* 14, 2000, 101-121, Printed in USA, Cambridge University Press, 0269-9648/00.
- Cooke, Roger M., Bedford, T.,(1999) "A new generic model for applying MAUT" *European Journal of Operational Research* 118, 589-604, 1999.
- Cooke, Roger M., Noordwijk, J.M. van, (1998) "Local probabilistic sensitivity measures for comparing FORM and Monte Carlo calculations illustrated with dike ring reliability calculations", *Computer Physics Communications* 115, 1-12, 1998.
- Goossens, L.H.J., Cooke, Roger M., Woudenberg, F. and van der Torn, P.(1998) "Expert judgement and lethal toxicity of inhaled chemicals" *Journal of Risk Research* Vol. 1 (2), pp. 117-133, 1998.
- Cooke, Roger M. & Jager, E. "Failure Frequency of Underground Gas Pipelines", In *Risk Analysis*, vol. 1, no 4, 511-527, 1998.
- Bedford T, Cooke, Roger M., (1997)"Reliability methods as management tools: dependence modeling and partial missions success", *Reliability Engineering and Systems Safety*, 58, 1997 p. 173-180, ISSN 0951-8320.
- Goossens, L.H.J., Cooke, Roger M., `Applications of some risk assessment techniques: Formal expert judgment and accident sequence precursors", *Safety Science* Vol. 26, no. 1/2, pp. 35-47, 1997.
- Cooke, Roger M. `Uncertainty modeling: examples and issues", *Safety Science* Vol. 26, no. 12, pp. 49-60, 1997.
- Cooke, Roger M. & Paulsen, J. "Concepts for Measuring Maintenance Performance and Methods for Analysing Competing Failure Modes", *Reliability Engineering and System Safety*, Vol. 55, no. 2, p. 135-141, 1997. Selected from *Proceedings ESREL 94, 9th International Conference Reliability and Maintainability 30/5/94*.
- Kraan, B., and Cooke, Roger M. "Post-Processing Techniques for the joint CEC/USNRC Uncertainty Analysis of Accident Consequence Codes". *Journal of Stat. Comp. and Simulation*, Vol. 57, nos. 1-4, pp. 243-261, 1996.
- Cooke, Roger M. "Guest Editorial". *Reliability Engineering and System Safety*, vol. 51 no. 2, p. 123, 1996.
- Cooke, Roger M. "The Design of Reliability Data Bases, Part I: Review of Standard Design Concepts". *Reliability Engineering and System Safety*, vol. 51 no. 2, p. 137-146, 1996.
- Cooke, Roger M. "The design of Reliability Data Bases, Part II: Competing Risk and Data Compression". *Reliability Engineering and System Safety*, vol. 51 no 2, p. 209-223, 1996.
- Goossens, L.H.J., Cooke, Roger M., Woudenberg, F., and van der Torn, P. "Probit relations of hazardous substances through formal expert judgement". *Loss Prevention and Safety Promotion in the Process Industries*, vol. II., p. 173-182, 1995, Elsevier Science B.V.
- Cooke, Roger M. "Coherent combination of experts' opinions: Discussion", *Test*, vol. 4 no. 2, p. 285, 1995.
- v. Noordwijk, J.M., Cooke, Roger M., and Kok, M. "A Bayesian failure model based on isotropic deterioration", *European Journal of Operational Research* 82, p. 270-282, 1995.
- Paulsen, J., Cooke, Roger M., and Nyman, R. "Comparative Evaluation of Maintenance Performance using Subsurvival Functions" *Reliability Engineering and System Safety*, 1996. Selected from *Proceedings ESREL 95. 10th International Conference on Reliability and Maintainabilities*, Bournemouth June 1995.
- Cooke, Roger M., Coherent combination of expert opinions, *Test* 4, 1995, p. 293-296.
- Cooke, Roger M. "Uncertainty in dispersion and deposition in accident consequence modeling assessed with performance-based expert judgment", *Reliability Engineering and System Safety* 44, p. 35-46, 1994.
- Cooke, Roger M. "Parameter fitting for uncertain models: modeling uncertainty in small models", *Reliability Engineering and System Safety*, vol 44, 1994, 89-102.
- Cooke, Roger M. "The total time on test statistic and age-dependent censoring", *Statistics & Probability Letters* 18, 1993, 307-312.
- v. Noordwijk, J., Dekker, R. Cooke, Roger M. and Mazzuchi, T. (1992)"Expert Judgment in Maintenance Optimization", *Trans. IEEE on Reliability*, vol 41 no 3, 1992, p. 427-432.
- Wang, X. and Cooke, Roger M. "Optimal Inspection Sequence in Fault Diagnosis",(1992) *Reliability Engineering and System Safety* 37, 206-210, 1992.
- Bhola, B., Cooke, Roger M., Blaauw, H., and Kok, M. (1991) "Expert opinion in project management" *European Journal of Operations Research* 57, p. 1-8, 1991.
- French, S., Cooke R., and Wiper, M. (1991) "The use of expert judgment in risk assessment", *Bulletin of the institute of mathematics and its applications*, vol. 27 no. 3 march 1991, pp. 36-40; also published in *Bayesian Methods in Reliability* (eds. M. Newby and P. Sander) p. 119-134.
- Cooke, Roger M. and Goossens, L., "The Accident Sequence Precursor Methodology for the Post-Seveso Era in Europe", *Reliability Engineering and System Safety*, 27, p. 117-130, 1989.
- Cooke, Roger M., "Entropy and Experts", *Reliability Engineering and System Safety*, 26 1989.
- Cooke, Roger M. and Pinter, J. "Optimization in Risk Management". *Civil Engineering Systems*, 1989, p. 122-128.
- Cooke, Roger M. "Uncertainty in Risk Assessment" *Reliability Engineering and System Safety* 23 227-233, 1988.

- Cooke, Roger M., Mendel, M., Thijs, W., "Calibration and Information in Expert Resolution". *Automatica*, 24, 1, 87-94, 1988.
- Cooke, Roger M., "Problems with Empirical Bayes", *Risk Analysis* vol. 6 nr. 3, 1986. pages 269-272.
- Cooke, Roger M., Waij, R., Monte Carlo Sampling For Generalized Knowledge Dependence, with application to Human Reliability". *Risk Analysis*, vol. 6 nr. 3, 1986, pages 335-343.
- Cooke, Roger M., "Conceptual Fallacies in Subjective Probability" *Topoi* 5, 1986, p. 21-28.
- Cooke, Roger M., Keane, M., and Moran, W. (1985) "An Elementary Proof of Gleason's Theorem" *Mathem. Proc. Camb. Phil. Soc.* 1985, 98, pages 117-128.
- Cooke, Roger M., "Price-Anderson Revisited", *Risk Analysis*, Vol. 4, nr. 3 (september 1984), pages 155.
- Cooke, Roger M., and Draaisma, H., "A Method of Weighing Qualitative preference Axioms in Subjective Probability", *Journal of Mathematical Psychology*, vol. 28, 1984, pages 436-477.
- Cooke, Roger M., A Result in Renyi's Conditional Probability Theory With Application to Subjective Probability, *Journal of Philosophical Logic*, May 1983, p. 19-32.
- Cooke, Roger M., and van Lambalgen, M., The Representation of Takeuti's operator, *Studia Logica* no. 4, 1983, p. 407-415.
- Cooke, Roger M., *Risk Assessment and Rational Decision Theory*, *Dialectica*, 1982, p. 329-35.
- Cooke, Roger M., A Paradox in Hempel's Criterion of Maximal Specificity, *Philosophy of Science* 48, 1981, no. 2, p. 327-328.
- Cooke, Roger M., A Trivialization of Nagel's definition of Explanation for statistical laws. *Philosophy of Science* 47, 1980, p. 644-645.
- Cooke, Roger M. and Hilgevoord, J., The Algebra of Physical Magnitudes, *Foundations of Physics* 10, 1980 no. 5/6 p. 363-373.
- Cooke, Roger M. and Hilgevoord, J., Correspondence, Equivalence and Completeness *Epistemological Letters*, March 1979, p. 42-54.
- Cooke, Roger M., The Friedman-Putnam Realism, *Epistemological Letters*, October 1979, p. 37-40.

Refereed Proceedings of International Conferences and Book Contributions

- Quigley J, Colson A, Aspinall W and Cooke R, Elicitation in the Classical Model, in: Dias LC, Morton A, Quigley J (eds), *Elicitation: The science and art of structuring judgement*. Springer, New York, 2018 (Chapter 2)
- Cooke R, (2018) Validation in the Classical Model, in: Dias LC, Morton A, Quigley J (eds), *Elicitation: The science and art of structuring judgement*. Springer, New York, 2018 (Chapter 3)
- Cooke, R.M., Thomas A. Zang Dimitri N. Mavris and Jimmy Tai (2015) *Sculpting: A Fast, Interactive Method for Probabilistic Design Space Exploration and Margin Allocation*, American Institute of Aeronautics and Astronautics.
- Cooke, Roger M. (2014) "Deep and Shallow Uncertainty in Messaging Climate Change" in *Safety, Reliability and Risk Analysis: Beyond the Horizon*, RDJM Steenbergen, PHAJM van Gelder, S. Miraglia, ACWM Vrouwenvelder (eds). *Safety, Reliability and Risk Analysis: Beyond the Horizon – Steenbergen et al. (Eds)* © 2014 Taylor & Francis Group, London, ISBN 978-1-138-00123-7
- Cooke, Roger M. (2014) "Risk Management and Model Uncertainty in Climate Change", *Logic, Methodology and Philosophy of Science. Proceedings of the Fourteenth International Congress*. Peter Schroeder-Heister, Wilfrid Hodges, Gerhard Heinzmann and Pierre Edouard Bour, eds., London: College Publications. ISBN 978-1-84890-169-8
- Cooke, Roger M. (2014) Validating Expert Judgments with the Classical Model" in *Experts and Consensus in Social Science - Critical Perspectives from Economics, Sociology, Politics, and Philosophy*. Editors: Carlo Martini and Marcel Boumans, Series title: *Ethical Economy - Studies in Economic Ethics and Philosophy*, Springer
- Aspinall, W.P., Cooke, Roger M. (2013) Quantifying scientific uncertainty from expert judgement elicitation. In "Risk and Uncertainty assessment in Natural Hazards." Hill, L., Rougier, J.C., Sparks R.S.J. (eds). Cambridge University Press, Chapter 4, 64-99.
- Kappel, C.V., Halpern, B.S. Selkoe, K.A. Cooke, R.M 2012. Eliciting expert knowledge of ecosystem vulnerability to human stressors to support comprehensive ocean management. In: *Expert knowledge and landscape ecological applications*. A.J. Perera, C.A. Drew, and C.J. Johnson (eds.). Springer, New York. <http://www.springer.com/life+sciences/ecology/book/978-1-4614-1033-1>

- Kurowicka, D. and Cooke, Roger M. (2011) "Vines and continuous non-parametric Bayesian belief nets, with emphasis on model learning" appearing in Klaus Boecker (ed) *Re-Thinking Risk Measurement and Reporting, Uncertainty, Bayesian Analysis and Expert Judgement*, pp 273-294, Risk Books, London
- Kousky, C. and Cooke, Roger M. (2011) "The Limits of Securitization Micro-correlations, Fat Tails and Tail Dependence" appearing in Klaus Boecker (ed) *Re-Thinking Risk Measurement and Reporting, Uncertainty, Bayesian Analysis and Expert Judgement*, pp 295-330, Risk Books., London.
- Cooke, Roger M., Joe, H. and Aas, K. (2010) Vines Arise, in Kurowicka and Joe (eds) *Dependence Modeling: Handbook on Vine Copulae*, World Scientific, Singapore, 978-981-4299-87-9, 981-4299-87-1, pp43-84.
- Cooke, Roger M., Kousky C. and Joe, H (2010) Micro Correlations and Tail Dependence, in Kurowicka and Joe (eds) *Dependence Modeling: Handbook on Vine Copulae*, World Scientific, Singapore, 978-981-4299-87-9, 981-4299-87-1
- Joe, H., Cooke, Roger M., and Kurowicka, D. (2010) Regular vines: Generation Algorithm and Number of Equivalent Classes in Kurowicka and Joe (eds) *Dependence Modeling: Handbook on Vine Copulae*, World Scientific, Singapore, 978-981-4299-87-9, 981-4299-87-1
- Cooke, R.M. (2009). Obtaining distributions from groups for decisions under uncertainty. In T Williams, K Sunnevag & K Samset (Eds.), *Making essential choices with scant information / front-end decisions making in major projects* (pp. 257-274). Pelgrave Macmillan Publishers, Houndmills.
- Neslo, REJ Micheli, F , Kappel, CV , Selkoe, KA , Halpern, BS & Cooke, Roger M. (EWI Ch. Risk Analysis) (2009). Modeling stakeholder preferences with probabilistic inversion; Application to prioritizing marine ecosystem vulnerabilities. In I Linkov, E Ferguson & VS Magar (Eds.), *Real-Time and Deliberative Decision Making* (3) (pp. 265-284). Dordrecht, Netherlands: Springer.
- Cooke, Roger M. and MacDonell, M. (2009) "Introduction" in *Uncertainty Modeling in Dose Response: Bench Testing Environmental Toxicity* Wiley, New York, pp 1-16. ISBN 978-479-44750-5
- Kousky, C. and Cooke, Roger M. (2009) "Are Catastrophes Insurable?" *Resources Magazine*, summer 2009 (172)
- Cooke, Roger M. (2009) "Uncertainty Modeling in dose Response Using Probabilistic Inversion with Isotonic Regression; Bench Test Results" in *Uncertainty Modeling in Dose Response: Bench Testing Environmental Toxicity* Wiley, New York, pp 51-81, ISBN 978-479-44750-5
- Kousky C. and Cooke, Roger M. (2009) *The Unholy Trinity, Fat Tails, Tail Dependence and Micro Correlations*", RFF DP-0936
- Cooke, Roger M. (2009) "Statistical Tests for Statistics-as-Usual Confidence Bands" in *Uncertainty Modeling in Dose Response: Bench Testing Environmental Toxicity* Wiley, New York, pp45-46, ISBN 978-479-44750-5
- Cooke, Roger M. (2009) "Math/stats Perspective on Non-Parametric Bayes" in *Uncertainty Modeling in Dose Response: Bench Testing Environmental Toxicity* Wiley, New York, pp 147-150, ISBN 978-479-44750-5
- Goossens, LHJ & Cooke, Roger M. (2008). Twenty years of experience with expert judgments. In Enrico.Zio, Vincent Ho Tsu-Mu Kao (Ed.), *Int. Conference on Probabilistic Safety Assessment and Management* (pp. 1-8). Hong Kong: Edge Publication Group Limited.
- Cooke, Roger M. (2008) "The Cox Proportional Hazard Model" in *Encyclopedia of Statistics in Quality and Reliability*, Wiley, New York, published online Mach 15, 2008.
- Ale, BJM, Bellamy, LJ, Boom, R van den, Cooke, Roger M., Goossens, LHJ, Hale, AR, Kurowicka, D, Lin, PH, Morales-Napoles, O, Roelen, ALC, Cooper, J & Spouge, J. (2008). Further development of a causal model for air transport safety (CATS); the complete model. In Enrico.Zio, Vincent Ho Tsu-Mu Kao (Ed.), *Int. Conference on Probabilistic Safety Assessment and Management* (pp. 1-8). Hong Kong: Edge Publication Group Limited. (TUD)
- Cooke, Roger M. Vines in *Overviews* (2007) Invited Paper: Third Brazilian conference on statistical Modelling in Insurance and Finance, Mareasias, March 25-30, 2007 <http://www.ime.usp.br/~ubatuba/3rd/>
- Cooke, Roger M. (2007) "Stakeholder Preference Elicitation" in I. Linkov et al, (eds) *Environmental Security in Harbors and Coastal Areas*, Springer, pp 149-160.
- Kurowicka, D., Cooke, Roger M. Goossens, L. and Ale, B.J.M. (2006) "Expert judgment study for placement ladder bowtie" *Safety and Reliability for Managing Risk*" Guedes Soares & Zio (eds) Taylor and Francis Group, London ISBN 0-415-41620-56 p. 21-27.
- Kurowicka, D., Cooke, Roger M. Goossens, L. and Ale, B.J.M. (2006) "Quantification with imperfect data from different sources" *Safety and Reliability for Managing Risk*" Guedes Soares & Zio (eds) Taylor and Francis Group, London ISBN 0-415-41620-56 p. 897-904. 05-79374
- Rabin Neslo, Fiorenza Micheli, Carrie V. Kappel, Kimberly A. Selkoe, Benjamin S. Halpern Cooke, Roger M., "Modeling Stakeholder Preferences with Probabilistic Inversion: Application to Prioritizing Marine ecosystem Vulnerabilities" appearing in Linkov, I., Ferguson, E., Magar, V. (in press). *Real Time and Deliberative Decision Making: Application to Risk Assessment for Non-chemical Stressors*. Springer, Amsterdam, pp 248-271.

- Cooke, Roger M. "Obtaining distributions from Groups for Decisions under Uncertainty", Appearing in Making decisions with scant information - front-end decision-making in major projects, T. Williams, K. Samset and K. Sunnevag
- A.M.Hanea & D.Kurowicka & Cooke, Roger M. (2007) The population version of Spearman's rank correlation coefficient in the case of ordinal discrete random variables" Third Brazilian conference on statistical Modelling in Insurance and Finance, Maresias, March 25-30, 2007 <http://www.ime.usp.br/~ubatuba/3rd/>
- D.A.Ababei & D.Kurowicka & Cooke, Roger M. Uncertainty Analysis with UNICORN (2007) Third Brazilian conference on Statistical Modelling in Insurance and Finance, Maresias, March 25-30, 2007 <http://www.ime.usp.br/~ubatuba/3rd/>
- B.J.M. Ale, L.J. Bellamy, A.L.C. Roelen, Cooke, Roger M., L.H.J.Goossens A.R. Hale, Kurowicka, D. E. Smith (2005) Development of a causal model for air transport safety, Proceedings of IMECE2005, 2005 ASME International Mechanical Engineering Congress and Exposition November 5-11, 2005, Orlando, Florida USA IMECE2005-79374
- Morales-Napoles, O., Hanea, A. Kurowicka, D., and Cooke, Roger M. (2006) "Causal modeling in the aviation industry: an application for controlled flight into terrain", Safety and Reliability for Managing Risk" Guedes Soares & Zio (eds) Taylor and Francis Group, London ISBN 0-415-41620-56 p. 1831-1838.
- Speijker, L.J.P., Vidal, A., Cooke R.M. (2006) "Safety assessment of ATC-wake singly runway departures" Safety and Reliability for Managing Risk" Guedes Soares & Zio (eds) Taylor and Francis Group, London ISBN 0-415-41620-56 p. 1851-1861..
- Kurowicka, D. and Cooke, Roger M. "Distribution - Free Continuous Bayesian Belief Nets" Modern Statistical and Mathematical Methods in Reliability. (A. Wilson, N. Limnios, S. Keller-McNulty, Y. Armijo, eds) 309-323, 2005
- Ale, B.J.M., Bellamy, L.J., Cooke, Roger M., L.H.J. Goossens, A.R. Hale & Kurowicka, D., A.L.C. Roelen, E. Smith Development of a causal model for air transport safety, Advances in Safety and Reliability – Kołowrocki (ed.)© 2005 Taylor & Francis Group, London, ISBN 0 415 38340 4
- Kurowicka, D. and Cooke, Roger M. "Non parametric continuous Bayesian belief nets with expert judgement" Probabilistic Safety Assessment and Management 2004 C. Spitzer, U.Schmocker, V.N. Dang (eds) Springer, London, 2004, 2784-2790.
- van der Fels, H.J. Havelaar, A.H., Nauta, M.J. , Goossens, L.H.J. and Cooke R.M. " CARMA: food safety and expert judgement", Probabilistic Safety Assessment and Management 2004 C. Spitzer, U.Schmocker, V.N. Dang (eds) Springer, London, 2004, 1541-1552.
- Roelen, A.L.C., Wever, R. Cooke, Roger M., Lopuhaa, R., Goossens, L.H.J. "Aviation causal model using Bayesian Belief Nets to quantify management influence" Proceedings ESREL 2003, T. Bedford and P.H.A.J.M van Gelder (eds) Balkema, Lisse, (1315-1321) 2003. ISBN 90 5809 551 7.
- Roelen, A.L.C., Wever, Hale, A. R., Goossens, L.H.J. Cooke, Roger M., Lopuhaa, R.,M. Simons and P.J.L. Valk "Causal modeling for integrated safety at airports" Proceedings ESREL 2003, T. Bedford and P.H.A.J.M van Gelder (eds) Balkema, Lisse, (1321-1329) 2003. ISBN 90 5809 551 7.
- Bunea, C., Charitos, T. Cooke, Roger M. and Becker, G. "Two stage Bayesian model - application to ZEDB project" Proceedings ESREL 2003, T. Bedford and P.H.A.J.M van Gelder (eds) Balkema, Lisse, (321-331) 2003. ISBN 90 5809 551 7.
- Bunea, C., Cooke, Roger M., Mazzuchi, T.A. and Becker, G. "A non-parametric two stage Bayesian model using Dirichlet distribution" Proceedings ESREL 2003, T. Bedford and P.H.A.J.M van Gelder (eds) Balkema, Lisse, (331-339) 2003. ISBN 90 5809 551 7.
- Callies, U., Kurowicka, D. and Cooke, Roger M. "Graphical models for the evaluation of multisite temperature forecasts: comparison of vines and independence graphs" Proceedings ESREL 2003, T. Bedford and P.H.A.J.M van Gelder (eds) Balkema, Lisse,, (363-373) 2003. ISBN 90 5809 551 7.
- Cooke, Roger M. and Slijkhuis, Karen A. (2003) "Expert Judgment in the Uncertainty Analysis of Dike Ring Failure Frequency" Case Studies in Reliability and Maintenance. Edited by Wallace R. Blischke, D.N. Prabhakar Murthy; p. 331-352, ISBN: 0-471-41373-9, 2003, John Wiley and Sons, Inc.
- Cooke, Roger M.,Eric Jager and D. Lewandowski "Reliability Model for Underground Gas Pipelines" Case Studies in Reliability and Maintenance. Edited by Wallace R. Blischke, D.N. Prabhakar Murthy; p. 423-446, ISBN: 0-471-41373-9, 2003, John Wiley and Sons, Inc.
- Kurowicka, D., and Cooke, Roger M., "The vine copula method for representing high dimensional dependent distributions: applications to continuous belief nets" Proceedings of the 2002 Winter Simulation conference, E. Yucesan, C.H. Chen, HJ.L. Snowdon, and J.M Charnes, eds; Dec. 8-11 2002, San Diego, CA.
- C. Bunea, Cooke, Roger M., and B. Lindqvist "Competing risk perspective over reliability data bases" Mathematical and Statistical Methods in Reliability (B.H. Lindqvist and K.A.Doksum eds), World Scientific Publishing, Singapore, 2003,p 355-370.

- C. Bunea, Cooke, Roger M., and B. Lindqvist, "Maintenance study for components under competing risks" European Safety and Reliability conference ESREL, 2002, Lyon, France, 18-21 March, Safety and Reliability Vol. 1 p 212-217.
- C. Bunea, Cooke, Roger M., and B. Lindqvist, "Analysis tools for competing risk failure data" European Network for Business and Industrial statistics, ENBIS, 2002, Rimini, Italy, September 23,24.
- Kurowicka, D., and Cooke, Roger M., (2002) "Techniques for generic probabilistic inversion" Probabilistic Safety Assessment and Management E.J. Bonano, A.L. Camp, M.J. Majors, R.A. Thompson (eds),Elsevier, 2002; 1543-1550.
- Kallen, M.J. and Cooke, Roger M., "Expert aggregation with dependence" Probabilistic Safety Assessment and Management E.J. Bonano, A.L. Camp, M.J. Majors, R.A. Thompson (eds),Elsevier, 2002; 1287-1294.
- Cooke, Roger M., E. Jager, D. Lewandowski "Reliability model for underground gas pipelines" Probabilistic Safety Assessment and Management E.J. Bonano, A.L. Camp, M.J. Majors, R.A. Thompson (eds),Elsevier, 2002; 1045-1050.
- L.H.J. Goossens and Cooke, Roger M. "Expert Judgement elicitation in risk assessment. In: I Linkov, J. Palma-Oliveria (eds.); Proceedings. NATO Advanced Research Workshop on Assessment and Management of Environmental Risks: Methods and Applications in Eastern European and Developing Countries (Lisbon, Oct. 1-4, 2000), Kluwer Academic Publisher, Dordrecht, 2001, p. 411-426. ISBN: 1-4020-0025-1
- Cooke, Roger M. and Daniel Lewandowski; Bayesian Sensitivity Analysis" System and Bayesian Reliability, Vol. 5, Series on Quality, Reliability & Engineering Statistics. Editors: Yu Hayakawa, Telba Irony, Min Xie; Blz. 315 - 331; ISBN:981-02-4865-2; 2001
- Farit M. Akhmedjanov, Roger M. Cooke, Victor G. Krymsky, and Jette L. Paulsen.; "Competing Risks in Maintenance in Planning: Technique for Decision Support" ; ASMDA 2001 10th International Symposium on Applied Stochastic Models and Data Analysis, Volume 1/2, June 12-15 2001 Universit'e de Technologie de Compi'egne France. Geen ISBN-nummer bekend; pag 83-88.
- J.G. Norstrom, R. Cooke and T. Bedford; Value of Information Based Design of Control Software; In: E. Zio, M. Demichela, N. Piccinini (eds.); Proceedings ESREL 2001. European Conference on Safety and Reliability. Safety and Reliability; towards a safer world (Torino, 16-20 Sept. 2001), Politecnico di Torino, Torino, 2001, p. 419-426. ISBN: 88-8202-099-1
- T. Bedford and Cooke, Roger M.; Monte Carlo Simulation of Vine Dependent Random Variables for Applications in Uncertainty Analysis; European Safety and Reliability Conference, ESREL 2001, Torino, Italy, 16-20 september 2001; In: Safety and Reliability, 2st volume, Edited by: Enrico Zio, Micaela Demichela, Norbeto Piccinini, ISBN 88-8202-099-2, 2001, pp 863-870
- R.F. Rabouw, K.M. Thompson and Cooke, Roger M.; The Aviation Risk to Groundlings with Spatial Variability; In: E. Zio, M. Demichela, N. Piccinini (eds.); Proceedings ESREL 2001. European Conference on Safety and Reliability. Safety and Reliability; towards a safer world (Torino, 16-20 Sept. 2001), Politecnico di Torino, Torino, 2001, p. 1219-1226. ISBN: 88-8202-099-2
- Kurowicka, D., and Cooke, Roger M.; Conditional, Partial and Rank Correlation for the Elliptical Copula: Dependence Modeling in Uncertainty Analysis; In E. Zio, M. Demichela, N. Piccinini (eds.); Proceedings ESREL 2001. European Conference on Safety and Reliability. Safety and Reliability; towards a safer world (Torino, 16-20 sept. 2001), Politecnico di Torino, Torino, 2001, p. 1795-1802. ISBN: 88-8202-099-3
- Kurowicka, D., J.K. Misiewicz, Cooke, Roger M.. Elliptical copulae. In: G.I. Schueller, P.D. Spanos (eds.); Proceedings Monte Carlo Simulation. Internationale Conference on Monte Carlo Simulation (Monte Carlo, 18-21 June 2000), Balkema, Lisse, 2001, p. 209-214. ISBN: 90-5809-188-0
- L.H.J. Goossens, F.T. Harper, J. Ehrhardt, J.A. Jones, B.C.P. Kraan, Cooke, Roger M.. Lessons learnt from EC/USNRC expert judgement study on probabilistic accident consequence codes applied in the COSYMA uncertainty analyses. In: S. Kondo and K. Furuta, PSAM5 - Probabilistic Safety Assessment and Management, (PSAM5, OSAKA, Japan, 27 nov- 1 Dec 2000) Universal Academy Press, INC., Tokyo, Japan, Volume 2, pp 965-970; ISBN 4-946443-64-9
- L.H.J. Goossens and Cooke, Roger M.; Expert judgement elicitation in risk assessment; Assessment and Management of Environmental Risks, Cost-efficient Methods and Applications; Proceedings of the NATO advanced Research Workshop on Assessment and Management of Environmental Risks: Methods and Applications in Eastern European and Developing Countries; Lisbon, Portugal, Oktober 1-4, 2000; pag 411-426; ISBN: 1-4020-0025-1(PB)
- L.H.J. Goossens, J. Ehrhardt, B.C.P. Kraan, Cooke, Roger M.. Expert judgement of uncertainties in Modeling emergency actions after nuclear accidents. In: S. Kondo and K. Furuta, PSAM5 - Probabilistic Safety Assessment and Management, (PSAM5, Osaka, Japan, 27 Nov - 1 Dec 2000) Universal Academy Press, Inc., Tokyo, Japan, Volume 2, pp. 971-976; ISBN 4-946443-64-9
- Shane G. Henderson, Belinda. A. Chiera and RogeCooke, Roger M.. Generating "Dependent" quasi-random numbers; Proceedings 2000, Winter Conference Simulation, J.A. Jones, R.R. Barton, K. Kang, P.A. Fishwick (eds) IEEE

- Cooke, Roger M. and Cor Kraaikamp "Risk Analysis and Jurisprudence: A Recent Example" *Safety Engineering and Risk Analysis 2000 Sera-Vol.10*. page 67 - 72, ISBN No. 0-7918-1898-5. The American Society Of Mechanical Engineers.
- J.M. van Noortwijk and Cooke, Roger M., "Graphical Methods" in Saltelli, A, Chan, K and Scott, E.M *Sensitivity Analysis*, Wiley, West Sussex, U.K., 2000, pp 245-264.
- Kurowicka, D. and Cooke, Roger M. "Conditional and partial correlation for graphical uncertainty models" in Limnios, N. and Nikulin, M. *Recent Advances in Reliability Theory*, Birkhauser, Berlin, pp 259-276.
- B.A. Chiera en Cooke, Roger M.: *Dependent quasirandom numbers*. In: *Foresight and Precaution*, volume 2. Edited by M.P. Cottam, D.W. Harvey, R.P. Pape and J. Tait. Balkema, blz. 1519-1523. ISBN 90 5809 140 6. Rotterdam, 2000.
- Cooke, Roger M., Atze Bosma en Frank Harte: *A simple reliability model for Heineken bottle filling lines*. In: *Materialy na Krajowa Konferencje Bezpieczenstwo i niezwadnosc, KONBiN'99*, blz. 205-212. ISBN ??????. Poland, 1999.
- Cooke, Roger M., and Joan Willem Dorrepaal: *Evaluation of reliability data and maintenance indicators*. In: *Handbook on Quality of Reliability Data*, blz. 86-94. ISBN 82-515-02535. Det Norske Veritas. Norway 1999.
- Andrey R. Yunusov, Cooke, Roger M., and Victor G. Krymsky: *Rexcalibr-integrated system for processing expert judgement*. In: *Proceedings 9th Annual Conference Risk Analysis: Blz. 587-589: Facing the New Millenium Rotterdam*, The Netherlands, Oktober 10-13, 1999. Editor: L.H.J. Goossens. ISBN: 90-407-1954-3. Delft University Pers.
- Victor G. Krymsky, Cooke, Roger M., and Andrey R. Yunusov: *The role of expert judgement in hazardous factors influence prognosis: parametric elicitation technique*. In: *Proceedings 9th Annual Conference Risk Analysis: Blz. 571-574: Facing the New Millenium Rotterdam*, The Netherlands, Oktober 10-13, 1999. Editor: L.H.J. Goossens. ISBN: 90-407-1954-3. Delft University Pers.
- Norstrom, J.G., Cooke, Roger M., Bedford, T.: "Value of information based inspection-strategy of a fault-tree". In: *Safety and Reliability*, Schu"eller & Kafka (eds.), 1999, Vol. 1. 1999. Balkema, Rotterdam, ISBN 90 5809 109 0.
- Goossens, L.H.J., Cooke, Roger M., Kraan, B.C.P., Harper, F.T.: "Results of the EC/USNRC expert judgement uncertainty analysis of accident consequence models for nuclear power plants: Project overview and lessons learned". In: *Safety and Reliability*, Schu"eller & Kafka (eds.), 1999, Vol. 2. 1999 Balkema, Rotterdam, ISBN 90 5809 1090.
- Cooke, Roger M., Kraan, B., Goossens, L.H.: "Results of the EU-USNRC expert judgment quantification of accident". In: *Safety and Reliability*, Schu"eller & Kafka (eds.), 1999. Vol. 2. 1999 Balkema, Rotterdam, ISBN 90 5809 1090.
- Cooke, Roger M., Noortwijk, J.M. van; "Generic graphics for uncertainty and sensitivity analysis". In: *Safety and Reliability*, Schu"eller & Kafka (eds.), 1999. Vol. 2. 1999 Balkema, Rotterdam, ISBN 90 5809 109 0.
- Cooke, Roger M., Bier, V.M.: "Simulation Results for Precursor Estimates". In: V. Bier (ed.), *Proceedings of Workshop on: Accident Sequence Precursors and Probabilistic Risk Analysis*. (Maryland, USA, 1998), p. 61-76. ISSN: 1084-5658.
- Bedford, T.J., Cooke, Roger M.; *Applying MAUT for risk-based management of design problems in the aerospace industry*. In: P. PYY, S.P. Arsenis (eds.); *Decision Analysis and its Applications in Safety and Reliability*. (Espoo, Finland, 15-05-97), ESReDA, Espoo, Finland, 1998, p. 209-227, ISBN:.
- Goossens, L.H.J., Cooke R.M., Kraan, B.C.P., "Evaluation of weighting schemes for expert judgment studies" In: A. Mosleh, R.A. Bari (eds.) *Probabilistic Safety Assessment and Management*, Vol. 3., sept 13-18-98, New York. Springer Verlag London Limited, Great Britain, 1998, pp. 1937-1942. ISBN 3540762620.
- Willy Aspinall and Cooke, Roger M., "Expert Judgement and the Montserrat Volcano Eruption" In: A. Mosleh, R.A. Bari (eds.) *Probabilistic Safety Assessment and Management*, Vol. 3., sept 13-18-98, New York. Springer Verlag London Limited, Great Britain, pp. 2113-2118. ISBN 3540762620.
- Mark Little, Colin Muirhead, Louis Goossens, Roger Cooke, Bernd Kraan, Fred Harper, "Results of expert judgement assesments for the late health effects models" Joint EC/USNRC project, In: A. Mosleh, R.A. Bari (eds.); *Probabilistic Safety Assessment and Management*, Vol. 3., sept. 13-18-98, New York, Springer Verlag London Limited, Great Britain, pp. 1925-1930. ISBN 3540762620.
- Karen A.H. Slijkhuis, Martijn P.C. Frijters, Cooke, Roger M., Anton C.W.M. Vrouwenvelder, "Probability of flooding: An uncertainty analysis" In: *Safety and Reliability*, Volume 2, Trondheim, Noorwegen. Lydersen, Hansen, & Sandtorv (eds) copyright 1998 Balkema, Rotterdam, pp. 1419-1426. ISBN 9054109661
- L.H.J. Goossens, B.C.P. Kraan, Cooke, Roger M., J.A. Jones, J. Brown, J. Ehrhardt, I. Hasemann, F. Fischer, "COSYMA accident consequence uncertainty analysis: Procedure and first results" In: *Safety and Reliability*, Volume 2, Trondheim, Noorwegen. Lydersen, Hansen & Sandtorv (eds) copyright 1998 Balkema, Rotterdam, pp. 1411-1418. ISBN 9054109661

- J.G. Norstrom, Cooke, Roger M., T. Bedford, "Statistical methods in design of safety critical software", In: Safety and Reliability, Volume 2, Trondheim, Noorwegen. Lydersen, Hansen & Sandtorv (eds) copyright 1998 Balkema, Rotterdam, pp. 1061-1067. ISBN 9054109661
- Cooke, Roger M., "FN Data need Supplement of temporal trend Analysis" in R.E. Jorissen and Stallen (eds) Quantified Societal Risk and Policy Making. Kluwer Academic Publishers, Boston 1998, p. 126-132. ISBN 0-7923-4955
- Noortwijk J. van, M. Kok, R. Cooke; Reply to the reviews. In. R. Cooke M. Mendel (eds): Engineering probabilistic design and maintenance for flood protection. Kluwer Academics, Dordrecht, 1997, p. 85-86 ISBN 0-7923-4399-9
- L.H.J. Goossens, Cooke, Roger M., B.C.P. Kraan, F.T. Harper, M. Young, L. Miller, S.G. Hora and J. Palsen-Sauer, "Uncertainty analysis of nuclear accident consequence codes: A formal expert judgement approach", In: O. Renn (Ed.), Risk analysis and management in a global economy, Vol. 1.1. Risk Management in Europe: New challenges for an industrial world, SRA-Europa, Stuttgart 1997, Vol. 1.1, pp. 779-793.
- Cooke, Roger M., J. Dorrepaal and T. Bedford, "Mathematical review of Swedish Bayesian methodology for nuclear plant reliability data bases", Book: The Practice of Bayesian Analysis, edited by S. French and J.Q. Smith, pp. 25-54, 1997, ISBN 0 340 66240 9, 1997.
- Noortwijk J.M. van, M. Kok and Cooke, Roger M., "Optimal decisions that reduce flood damage along the Meuse: an uncertainty analysis" Book: The Practice of Bayesian Analysis, edited by S. French and J.Q. Smith. pp. 151-172, 1997. ISBN 0 340 66240 9, 1997.
- Cooke, Roger M. (1977) "Markov and entropy properties of tree- and vine-dependent variables" Proceedings of the Section on Bayesian Statistical Science, American Statistical Association, 1429 Duke Street, Alexandria, VA, 22314.
- Goossens L.H.J. and Cooke, Roger M., "Evaluation of calibration variables for optimising expert judgements in risk assessments", Proceedings Annual Meeting of the Society for Risk Analysis-Europe, New Risk Frontiers Stockholm 1997. Ed. B.-M. Droftz-Sjoberg, ISSN 1101-9689.
- Noortwijk J.M. van, M. Kok and Cooke, Roger M., "Optimal maintenance decisions for the sea-bed protection of the eastern-scheldt barieen", in Engineering Probabilistic design and maintenance for flood protection, edited by Cooke, Roger M., Mendel, M. and Vryling, K. (eds). pp. 25-57, Kluwer Dordrecht, 1997, ISBN 0-7923-4399-9.
- Bischoff, K., and Cooke, Roger M. "Integrated Risk-Uncertainty Analysis for the European Space Agency". In: P.C. Cacciabue and I.A. Papazoglou (Eds.), Probabilistic Safety Assessment and Management Springer 1996, Vol. 3, p. 1831-1836. Proceedings of the ESREL'96-PSAM III Meeting at Crete, Greece, June 24-28, 1996.
- Goossens, L.H.J., and Cooke, R. M. (1996) "Procedures guide for the use of expert judgement in uncertainty analyses". In: P.C. Cacciabue and I.A. Papazoglou (Eds.), Probabilistic Safety Assessment and Management, Springer, 1996, Vol. 2, pp. 978-985. Proceedings of the ESREL'96-PSAM III Meeting at Crete, Greece, June 24-28, 1996.
- Kraan, B., and Cooke, Roger M. "Dealing with Dependencies in Uncertainty Analysis". In: P.C. Cacciabue and I.A. Papazoglou (Eds.), Probabilistic Safety Assessment and Management, Springer, 1996, Vol. 1, pp. 625-630. Proceedings of the ESREL'96-PSAM III Meeting at Crete, Greece, June 24-28, 1996.
- Kraan, B., and Cooke, Roger M. "Processing of Expert Judgement Assessments into Parameter Uncertainties". In: P.C. Cacciabue and I.A. Papazoglou (Eds.), Probabilistic Safety Assessment and Management, Springer, 1996, Vol. 2, pp. 988-991. Proceedings of the ESREL'96-PSAM III Meeting at Crete, Greece, June 24-28, 1996.
- Cooke, Roger M., Jager, E., and Geervliet, S. "Failure Frequency of underground Gas Pipelines". In: P.C. Cacciabue and I.A. Papazoglou (Eds.), Probabilistic Safety Assessment and Management, Springer, 1996, Vol. 2, pp. 992-1000. Proceedings of the ESREL'96-PSAM III Meeting at Crete, Greece, June 24-28, 1996.
- F. Harper, L. Goossens, M. Abbott, J. Boardman, J. Brown, R. Cooke, J. Harrison, E. Haskin, S. Hora and M. Little, "Joint USNRC/EC consequence uncertainty analysis: The ingestion pathway, dosimetry and health effects expert judgement elicitations and results". Proceedings of the International Topical Meeting on Probabilistic Safety Assessment - PSA '96 - Moving towards risk-based regulation, Park City, Utah, USA, September 29-October 3, 1996, Vol. II, pp. 1083-1088.
- Cooke, Roger M., and Bier, V. "Simulation results for precursor estimates", Proceedings Safety Assessment, Advanced Topics Workshop Precursor Methods, Madison Wisconsin, May 1995.
- Cooke, Roger M., and Bedford, T. "Analysis of Reliability Data Using Subsurvival Functions and Censoring Models", Recent Advances in Life-Testing and Reliability, 1995.
- Cooke, Roger M., F.T. Harper, L.H.J. Goossens, S.C. Hora, M.L. Young, J. Palsen-Sauer, L.A. Miller, B. Kraan, C. Lui, M.D. McKay, J.C. Helton, J.A. Jones "Joint USNRC/CEC uncertainty study: Dispersion and deposition panels, Proceedings of a technical committee meeting organized by the International atomic energy agency and held in Vienna, Austria 21-25 november 1994, IAEA, Vienna Austria, 1995.
- Paulsen, J., Cooke, Roger M., and Nyman, R. "ESREL 95. 10th International Conference on Reliability and Maintainabilities, Bournemouth June 1995". Appearing in Reliability Engineering and System Safety, 1996.

- Harper, F., Boardman, J., Harrison, J., Little, M., Goossens, L., Brown, J., Haskin, E., Abbott, M., Cooke, Roger M., Hora, S., Joint USNR/EC Consequence Uncertainty Study: the Ingestion Pathway, Dosimetry and Health Effects Expert Judgment Elicitations and Results, in Proc. of the Intern. Topical Meeting on Probabilistic Safety Assessment PSA 1996, American Nuclear Society, Inc., p. 1083-1088.
- Harper, F.T.; Goossens, L.H.J.; Cooke, Roger M.; Hora, S.C.; Miller, L.A.; P"asler-Sauer, J.; Lui, C. and Kelly, G.N., Summary of uncertainty analysis of dispersion and deposition modules of the MACCS and nr COSYMA consequence codes - A joint USNRC/CEC study, Paper presented at PSAM-II Conference, San Diego, Ca/USA, 20-25 March 1994, Vol 1, session 009.
- Cooke, Roger M. "de Finetti Representations of Survival Functions Level to a product Measure", Recent Adv. in Stat. and Prob., J. Perez Vilaplana and M.L. Puri (eds) 441-450, VSP 1994.
- Cooke, Roger M., "The Analysis of Competing Failure Modes" PSAMII March 20-24, 1994, San Diego.
- Meeuwissen, A.M.H. and Cooke, Roger M., "A Latent Variable Model in Uncertainty Analysis" PSAMII, March 20-24, 1994, San Diego.
- Goossens, L.H.J., Cooke, Roger M., e.a. "Uncertainty Analysis of Probabilistic Accident Consequence Codes for the Nuclear Industries – A Joint CEC/USNRC Expert Judgement Study" Joint International Conference on Mathematical methods and Supercomputing in Nuclear Applications 19-23 April 1993, Karlsruhe, Germany.
- Goossens, L. Cooke, Roger M. Woudenberg, F. and van der Torn, P. "Protocol for using expert judgment in establishing probit relations of hazardous materials". Appearing in Proceedings of the Society of Risk Analysis, Paris 1992.
- French, S. Cooke R. and Vogt, F. "The use of expert judgement in the context of a postulated mathematical model" Proceedings of the Fourth Valencia International Meeting, J.M. Bernado, J.O. Berger, A.P. David, and A.R.M. Smith (eds) 617-624, Oxford University Press, 1992.
- Cooke R. and van der Weide, H. 1991 "Uncertainty Analysis for Dispersion and Deposition; Active Issues" Proceedings of the Specialists' Meeting on Advanced Modeling and Computer Codes for Calculating Local Scale and Meso-Scale Atmospheric Dispersion of Radionuclides and their Applications, 6-8 March 1991 OECD/NEA Data Bank, Saclay, France.
- Cooke R., Meeuwissen H., and Preyssl C., "Modularizing fault tree uncertainty analysis, the treatment of dependent information sources" in Probabilistic Safety assessment and Management (ed. G. Apostolakis) Elsevier, New York, 1991 p. 1063-1069.
- Mazzuchi T., Cooke R., Dekker R., van Dorp J., and van Noortwijk, J. "The elicitation and use of expert judgment for maintenance optimization", Proceedings of the World Congress on Expert Systems, Orlando Florida, 1991.
- Cooke, Roger M., and van der Weide, H. "Expert judgement for uncertainty analysis of accident consequence codes" Proceedings of the World Congress on Expert Systems, Orlando Florida 1991.
- Cooke, Roger M., Misiewicz, J. and Mendel, M. "Applications of LP invariant measures" COSMEX-89 Conference on Stochastic methods in Experimental Sciences W. Kasprzak and A. Weron (eds) 96-113, Singapore, 1990.
- Cooke, Roger M. "Statistics in Expert Resolution" Proceedings of the conference Statistics in Science Luino, Italy, May 21-May 28 1988 (Constantini and Cooke, eds.) Reidel 1990.
- v. Steen, J., Goossens, L., Cooke, Roger M. "Protocols for Expert Opinion Use in Risk Analysis" 6th International Symposium Loss Preventions and Safety Promotion in the Process industries, Oslo, Norway, June 19-22 1989 Vol. 11 42-7, 42-20.
- van Steen, J. and Cooke, Roger M., "Expert Opinions as Data Source: Methods and Experiences", v. Colombari (ed), Reliability Data collection and Use in Risk and Availability Assessments. proceedings EURODATA conference 1989, Springer verlag, Berlin 1989, 262-286.
- Preyssl, C. and Cooke, Roger M. "Expert Judgement in Subjective & Objective Data for Risk Analysis of Spaceflight Systems". Proceedings of The International Meeting on Probability, Reliability, and Safety Assessment, April 1989.
- Cooke, Roger M., Expert Systems Front End: Expert Opinions in G. Mitra (ed). Mathematical Models for Decision Support, NATO ASI series F , Vol. 48. Springer Verlag, Berlin 1988; 559-574.
- Goossens, L. Hale, A., Cooke, Roger M., and van der Horst, J. "Accident Sequence Precursor Methodology: A Tool for Evaluation of Chemical Systems" in Securite des Systems: Proceedings of the 5-th European Symposium on System Safety, 73-89, Grenoble, 1988.
- Cooke, Roger M., "Probabilistic reasoning in Expert Systems reconstructed in Probability Semantics". PSA 1986, vol. 1 pages 409-420.
- Cooke, Roger M., "Expert Resolution" Proceedings of the 2nd IFAC conference on Analysis Design, and Evaluation of Man-Machine Systems, Varese, Italy, September 10-12, 1985, Pergamon Press.
- Cooke, Roger M. and Van Lambalgen, M., "Lattice Valued Commutativity Measures" in Proceedings of the International Symposium on Quantum Logic June 13-16, 1984 pages 147-159, Bibliographisches Institut, Manheim.

Cooke, Roger M., Keane, M., and Moran, W., "An Elementary Version of Gleason's Theorem" in Proceedings of the International Symposium on Quantum Logic June 13-16, 1984 pages 299-313, Bibliographisches Institut, Mannheim.

Cooke, Roger M. and Hilgevoord, J., A New Approach to Equivalence in Quantum Logic, in Current Issues in Quantum Logic, Plenum Press 1981, p. 101-113.

Cooke, Roger M., Mystical Realism, in Structure and Approximation in Physical Theories, Plenum Press 1981, p. 165-196.

Links and Blogs

RFF Researcher Page

<http://www.rff.org/Researchers/Pages/ResearchersBio.aspx?ResearcherID=22>

Risk and Environmental Modeling Dept Mathematics, TU Delft

<http://risk2.ewi.tudelft.nl/>

Personal Homepage

<http://rogermcooke.net/>

Video combining disparate information sources:

<https://youtu.be/NBz5RirkXgw>

Featured articles:

Climate Policy

<http://www.tandfonline.com/loi/tpco20>

Elementa

<https://www.elementascience.org/articles/63>

J. Multivariate Analysis

[doi:10.1016/j.jmva.2015.02.001](https://doi.org/10.1016/j.jmva.2015.02.001)

PLoS ONE

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0145839>

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0149817>

Nature Climate Change

<http://www.nature.com/nclimate/journal/v5/n1/full/nclimate2466.html>

<http://www.nature.com/nclimate/journal/v6/n5/full/nclimate2959.html>

Climatic Change

<http://link.springer.com/article/10.1007%2Fs10584-012-0634-y>

IEAM

<http://onlinelibrary.wiley.com/doi/10.1002/ieam.1316/pdf>

E-economics Risk Premia Review

<http://www.economics-ejournal.org/economics/journalarticles/2011-21>

E-economics Shapley Value SCC

<http://www.economics-ejournal.org/economics/discussionpapers/2011-17?searchterm=roger%20cooke>

Selected Discussion Papers

Unholy Trinity

<http://www.rff.org/rff/documents/rff-dp-09-36-rev.pdf>

Fat Tails, Data, Diagnostics, Dependence

<http://www.rff.org/Publications/Pages/PublicationDetails.aspx?PublicationID=21529>

Recent Blogs, Wiki pages:

<http://common-resources.org/2012/scientists-sentenced-to-6-years-in-prison-for-optimizing-uncertainty-of-laquila-earthquake/>
<http://common-resources.org/2013/quantifying-uncertainty-on-thin-ice/>
<http://common-resources.org/2013/why-the-climate-problem-requires-a-new-generation-of-uncertainty-analysis/>
<http://common-resources.org/2014/deep-and-shallow-uncertainty-in-messaging-climate-change/>
<http://www.rff.org/blog/2014/flood-insurance-claims-fat-tail-getting-fatter>
<http://www.rff.org/blog/2015/dispelling-epicycles-regression>
<http://www.rff.org/blog/2016/respectability-looming-expert-judgment-announcing-justin-eggstaff-s-rff-academic-seminar>
<http://www.rff.org/blog/2017/whither-co2-seeking-science-based-quantification-carbon-cycle-uncertainty>

https://en.wikipedia.org/wiki/Structured_expert_judgment:_the_classical_model
https://en.wikipedia.org/wiki/Vine_copula

Workshops at RFF:

Icesheets on the Move, (First Wednesday) June 12, 2013

<http://www.rff.org/Events/Pages/Ice-Sheets-on-the-Move.aspx>

tail risk (First Wednesday):

<http://www.rff.org/Events/Pages/Managing-the-Risk-of-Extreme-Weather-Events-in-a-Changing-Climate.aspx>

tail risk workshop

<http://www.rff.org/events/pages/presentations-climate-change-extreme-events.aspx>

Uncertainty modeling in dose response

<http://www.rff.org/events/pages/cooke-uncertainty-workshop.aspx>

Expert Judgment Workshop

<http://www.rff.org/events/pages/expert-judgment-workshop.aspx>

Workshops, Software Systems, Course Books, Reports

Colson, A. Cooke, R.M., Lutter, Randall, (2016) How Does Breastfeeding Affect IQ? Applying the Classical Model of Structured Expert Judgment, Resources for the Future, RFF DP16-28

<http://www.rff.org/research/publications/how-does-breastfeeding-affect-iq-applying-classical-model-structured-expert>

Cooke, Roger M. Golub, Alexander, Wielicki, Bruce, Mlynczak, Martin, Young, David, Baize, Rosemary Rallo (2016) Real Option Value for New Measurements of Cloud Radiative Forcing, RFF DP 16-19.

<http://www.rff.org/research/publications/real-option-value-new-measurements-cloud-radiative-forcing>

Cooke, Roger M., Joe, Harry, Chang, Bo, (2015) Vine Regression RFF-DP 15-52,

<http://www.rff.org/research/publications/vine-regression>

Cooke, Roger M. (2014) Deep and shallow uncertainty in messaging climate change, RFF-DP 14-11.

Bush, B, Jenken, T. , Lipowicz, D., Arent, D. and Cooke, Roger M. (2012) "Variance Analysis of Wind and Natural Gas Generation under Different Market Structures: Some Observations" National Renewable Energy Laboratory, NREL/TP-6A20-52790, Contract No. DE-AC36-08GO28308.

- Cooke, Roger M. Nieboer, D. and Misiewicz, J. (2011) "Heavy Tailed distributions: Data, Diagnostics and New Developments" Resources for the Future RFF-DP-11-19.
- Cooke, Roger M. Ross, H. L. and Stern, A. (2010) "Precursor Analysis for Offshore Oil and Gas Drilling From Prescriptive to Risk-Informed Regulation" Resources for the Future RFF-DP-10-61.
- Kousky, C. and R. Cooke (2009). What the Feds Can Do about Hurricanes. St. Petersburg Times. May 31.
- Kousky, C. and Cooke, Roger M. (2009) "Climate Change and Risk Management Challenges for Insurance, adaptation, and Loss Estimation RFF-DP 09-03-REV, Resources for the Future, Washington DC.
- Kousky, C. and Cooke, Roger M. (2009) "The Unholy Trinity: Fat Tails, Tail Dependence, and Micro-Correlations" RFF-DP 09-36, Resources for the Future, Washington DC.
- Cooke, Roger M. and Singuran, T. (2008) System Level Risk Analysis of New Merging and Spacing Protocols Final Report to NASA, September 2008.
- Roelen, A.L.C., Baren, G.B. van, Lin, P.H., Morales, O. Kurowicka, D. Cooke, Roger M., "A generic air traffic controller performance model for application in a causal model of air transport" NLR-CR-2007-593, National Aerospace Laboratory, Amsterdam.
- Workshop Structured Expert Judgment, Resources for the Future, Washington DC, March 13, 14, 2006
- Cooke, Roger M. (ed) Technical Committee Uncertainty Modeling: Benchmark Workshop, European Safety Reliability Association, Delft 1997, workshop proceedings.
- Noortwijk, J.M. van, Kok, M., Cooke, Roger M., Optimal maintenance decisions for the sea-bed protection of the Eastern-Scheldt barrier, Report 96-38. Dept. of Mathematics, Delft University of Technology, 1996
- Cooke R.M., UNICORN: Methods and code for uncertainty analysis, Published by Atomic Energy Authority, SRD Association. 1995
- Cooke R.M., Uncertainty Modeling: An Aid to Decision Making? The SRD Association, Members' Conference 1994 AEA Conference Centre, Risley, Warrington Cheshire on 5-6 October 1994.
- Cooke, Roger M.; Meeuwissen, A.M.H. "Tree dependent random variables" Report 94-28. Dept. of Mathematics, Delft University of Technology, 1994.
- Cooke, Roger M.; van Noortwijk, J.M.; Misiewicz, J.K., "A characterization of generalized gamma processes in terms of isotropy" Report 94-65 Dept. of Mathematics, Delft University of Technology, 1994.
- Cooke, Roger M., "The Ill-Advised Bayesian", Official newsletter of the International Society for Bayesian Analysis, Issue no 2, October 1993.
- Cooke, Roger M., Book Review: Reliability and Decision Making; R.E. Barlow, C.A., Clarotti, and F. Spizzicjino (eds), Chapman & Hall, 1993, 370 pp. Appearing in Reliability Engineering and Systems Safety.
- Cooke, Roger M. M. "The total time on test statistic and age-dependent censoring" Engineering Systems Research Center, report 92-19, University of California at Berkeley, 1992.
- Cooke, Roger M. M. "De Finetti representations of survival functions level to a product measure" Engineering Systems Research Center, report 92-18, University of California at Berkeley, 1992.
- Cooke, Roger M. "Procedures for using expert judgment in risk analysis" Reliability Data Collection and Analysis, J. Flamm and T. Luisi (eds) ECSC, EEC, EAEC, 193-211. Brussels, 1992.
- Cooke, Roger M. Risan User's Manual, Software developed under contract for the European Space Agency, 1991.
- Cooke, Roger M. and Solomatine, D., "EXCALIBUR – software package for expert data evaluation and fusion and reliability assessment" report to the Commission of the European Communities 76 pp, Delft, 1990.
- Lootsma, F., Boonekamp, P., Cooke, Roger M., v. Oostvoorn, F. Scenario Analysis and the Choice of a strategy for the Dutch Electricity Supply. Report 89-12, 26 pp.
- Cooke, Roger M. and Solomatine, D. "EXPO; integrated system for processing Expert Judgment, User's Manual". Report Dutch ministry of Housing, Physical Planning and Environment, 19 pp. 1990.
- Cooke, R., van Noortwijk, J., and Waij, R. "DETECT: Dependency Tree Evaluations and Confidence Test" Users Manual Report 88-55. Dept. of Mathematics, Delft University of Technology, 1988.
- Misiewicz, J., and Cooke, Roger M., "Ip-Invariant Measures", Report 88-91, Dept. of Mathematics, Delft, University of Technology.
- Cooke, Roger M. Game Theory (in Dutch) Course Book T.U. Delft, 1987.
- Cooke, Roger M. and Pinter, J. "Mathematical Programming and Risk Analysis" Report 87-50. Dept. of Mathematics, Delft University of Technology, 1987.
- Cooke, Roger M., A Theory of Weights for Combining Expert Opinions, Report 87-25.. Dept. of Mathematics, Delft University of Technology, 1987.
- Cooke, Roger M., Keane, M, and Moran, W., "Gleason's Theorem", Delft Progress Reports 1984 vol. 9, no. 2, p. 135-150.
- Cooke, Roger M., On Subjective Probability (in Dutch), THD-Nieuws, Vol 14, No. 29, 26 november 1982.
- Cooke, Roger M., Subjective Probability, Course book Delft, 1981, 80 pages.

Dutch Journals

- Louis Goossens and Roger Cooke, "Expert judgement and hazard assessments" MEG Bulletin Issue 2, March 1997, Brussels.
- Cooke, Roger M. "Wiskunde voor Risico- en Milieueffect Berekening". Nieuwe Wiskrant, Dec. 1995.
- Cooke, Roger M. "Een Aantal Dingen". Oratie, Nov. 1995.
- Cooke, Roger M. "Empirical Bayes Methods (second edition) review, Kwan-ti-ta-tie-ve Methoden, nummer 42, 1992
- Lootsma, F., Boonekamp, P., Cooke, Roger M., v. Oostvoorn, F. "Scenario Analysis National Electricity Supply" (in Dutch). De Ingenieur nr. 10. October 1989, 19-23.
- Cooke, Roger M., "Comparative Statistical Inference" (in Dutch) Book review, Statistica Neerlandica 19, 1985.
- Cooke, Roger M., "The Cunning of Science; Variation and Selection" (in Dutch) book review in Algemeen Nederlands Tijdschrift voor Wijsbegeerte, 77 afl. 2, 1985 pages 126-128.
- Cooke, Roger M., "Reactions", De Ingenieur no. 7/8 August 1984 pages 11-13.
- Cooke, Roger M., "The credibility of Risk Analysis" (in Dutch) De Ingenieur no. 6, June 6, 1984, pages 52-53.
- Cooke, Roger M., "Herman Kahn, apologist for the arms race" (in Dutch), Wetenschap & Samenleving, april 1984.
- Cooke, Roger M. and Hilgevoord, J., Quantum Logic (in Dutch), Kennis en Methode 5, 1981, no. 4.
- Cooke, Roger M., Science and Politics, Filosofische Reeks, 1980 no. 6 p. 146-152.
- Cooke, Roger M., Realism and Content, Kennis en Methode 2, 1979, no. 4, p. 319-340.
- Cooke, Roger M., The Objective Content of Classical Particle Mechanics, Filosofische Reeks, Universiteit van Amsterdam 1977.

Oration

"A Number of Things" Oration for the acceptance of the Professorship Applications of Decision Theory, Department of Mathematics, Delft University, Delft, The Netherlands, Nov. 8, 1995.

Ph.D. Disstertation

Cooke, Roger M., Non-objectivity in Classical Mechanics, A Study in The Foundations of Mechanics from the Viewpoint of Heinrich Hertz, Ph.D. dissertation, Yale University 1974.