Céline Kermisch – Curriculum vitae

1. Personal details

Kermisch Céline
Nationality: Belgian and French
E-mail: celine@kermisch.eu

2. Education

2008 PhD in Philosophy (Université libre de Bruxelles, ULB)
Title: "Risk and risk perceptions. Historical and critical analysis".

2003 Graduate (MA equivalent) in Philosophy (ULB), specialization: Philosophy of Science, summa cum laude.

2000 Graduate (MA equivalent) in Mechanical Engineering (ULB), specialization: Fluid Mechanics, cum laude.

3. Professional experience

3.1 Consulting

2017- Projects for the *Organisme National des Déchets RAdioactifs et des matières Fissiles enrichies* (ONDRAF/NIRAS, Belgium) dedicated to the ethical and societal aspects of radioactive waste management:

- 2026: Further development of ONDRAF/NIRAS' ethical framework
- 2025-2024:
  - Ethical analysis of multinational shared repositories
  - Development of ONDRAF/NIRAS' ethical framework
- 2023: Overview of ethical tools as alternatives to ethical matrices.
- 2022: Societal and ethical aspects of SFC1 – Update.
- 2021: Ethical studies SFC1 – national policy – reversibility/retrievability.
- 2020: Ethical studies SFC 1 – strengthening fundamentals – Accounting for future generations in radioactive waste management: The case for temporalized ethical matrices.
- 2019-2020: On overcoming intergenerational conflicts.
- 2018-2019: Societal and ethical aspects of SFC1.
- 2017-2018: Ethical evaluation of the optimization principle applied to the long-term management of category B and C waste: application to the choice of host rock.

2025 Project for the *King Baudouin Foundation* : Prefiguring an ethical framework to guide the decision-making process for the long-term management of category B&C waste in Belgium.

2018-2022 Project for the *Institut pour la Maîtrise Des Risques* (IMDR, France) : "Understanding risk judgement and risk perception in decision making: understanding the choice of individuals and groups facing hazardous situations".

3.2 Expertise

2026- Expert for the CTI (Commission des titres d'ingénieurs), France.

2025 Member of the committee of the *Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur* (Hcéres) in charge of the assessment of the *Commissariat à l'énergie atomique et aux énergies alternatives* (CEA), France.

2022-2026 Member of the *Comité éthique de la Recherche* of the *Université Libre de Bruxelles*.

2019- Member of the *Comité éthique et société* of the *Agence Nationale pour la gestion des Déchets RAdioactifs* (ANDRA), France.

2013- Ethical assessment of projects for the European Commission (MSCA, ERC, ICT...).

2012- Member of the program committee for the conferences of the *Institut pour la Maîtrise Des Risques* (IMDR), France.

2011- Various scientific assessments of research projects (European Commission, ANSES (French agency for food, environmental and occupational health safety), ANR (French national agency for research), etc.).

3.3 Teaching

2021- "Epistemology of science and engineering ethics" (ULB, Ecole polytechnique de Bruxelles, 5ECTS, Mandatory BA3 course).

2021- "Socio-technical controversies" (ULB, Ecole polytechnique de Bruxelles and UMONS, Polytech Mons, 2ECTS, Mandatory BA3 course).

2015-2021 "Epistemology of science and technology" (ULB, Ecole polytechnique de Bruxelles and Ecole interfacultaire de Bioingénieurs, 3ECTS, Mandatory BA3 course).

2012-2021 "Engineering ethics" (ULB, Ecole polytechnique de Bruxelles, 3ECTS, MA2 course).

2014-2019 In charge of the doctoral training "Ethics in research" (ULB, 3ECTS equivalent).

2009-2011 "Reflective practice" and "Didactics of philosophy" (ULB, Faculté de Philosophie et Lettres, 3ECTS, MA2 course).

3.4 Scientific research

3.4.1 Scientific career

2013-2017 ULB, researcher (from 2016 projects funded by ONDRAF/NIRAS).

Research topics: ethical aspects related to the management of radioactive waste, philosophy of risk, communication about nuclear accidents.

2008-2013 FNRS (Belgian Fund for Scientific Research), Postdoctoral researcher at ULB.

Research topics: philosophy of risk, engineering ethics, technology ethics, emerging technologies.

2004-2008 FNRS, Research fellow at ULB.

Research topic: risk perception.

2001-2004 ULB, part time researcher (project funded by the *Institut pour la Maîtrise Des Risques*, IMDR, France).

Research topics: Safety and reliability of industrial systems.

3.4.2 Scientific activities

A. Foreign research stays as visiting scholar

- 15/09/2016-15/12/2016: *Visiting scholar* at Delft University of Technology, Department of Values, Technology and Innovation.
- 11/03/2013-11/04/2013: *Visiting scholar* at UC Berkeley, Philosophy department (Funding from the FNRS).
- 1/10/2008-31/12/2009: *Visiting scholar* at the University of Cambridge, Department of History and Philosophy of Science (Funding from the Wiener-Anspach Foundation and from the FNRS).

B. Selection of publications

Articles in international peer-reviewed journals

- Kermisch C. and Depaus C., "An ethical analysis of the impact of reversibility and retrievability provisions on well-being", *Progress in Nuclear Energy* 177, 2024.
- Kermisch C. and Depaus C., "Accounting for future generations in energy ethics: the case for temporalized ethical matrices", *Ethics, policy & environment*, 27(1), 2024, p. 30-47.
- Taebi B., Kwakkel J., and Kermisch C., "Governing climate risks in the face of normative uncertainties", WIREs: Climate Change 11(5), 2020, 11p.
- Kermisch C. and Depaus C., "The strength of ethical matrixes as a tool for normative analysis related to technological choices: the case of geological disposal for radioactive waste", *Science and engineering ethics*, 24(1), 2018, p. 29-48.
- Kermisch C. and Taebi B., "Sustainability, ethics and nuclear energy: escaping the dichotomy", *Sustainability* 9(3), 2017, 13p.
- Kermisch C., Depaus C. and Labeau P.-E., "A contribution to the analysis of equity associated with high-level radioactive waste management", *Progress in nuclear energy* 92, 2016, p. 40-47.
- Kermisch C., "Can today's decisions really be future-proofed?", *Nature* 530 (7591), February 2016, p 383.
- Kermisch C., "Specifying the concept of future generations for addressing issues related to high-level radioactive waste", *Science and engineering ethics* 22(6), 2016, p. 1797-1811.
- Turcanu C., Perko T. and Kermisch C., "What makes nuclear energy (not) acceptable?", *ATW - International Journal for nuclear power* 58 (8/9), 2013, p. 491-498.
- Kermisch C. and Labeau P.-E., "Communicating about nuclear events: some suggestions to improve INES", *Reliability engineering & system safety* 119, 2013, p. 165-171.
- Kermisch C., "Vers une définition multidimensionnelle du risque", *Vertigo* 12(2), 2012, http://vertigo.revues.org/12214.
- Kermisch C., "Do new ethical issues arise at each stage of nanotechnological development?", *Nanoethics* 6(1), 2012, p. 29-37.
- Kermisch C., "Risk and responsibility: a complex and evolving relationship", *Science and engineering ethics* 18(1), 2012, p. 91-102.
- Kermisch C., "Questioning the INES scale after the Fukushima Daiichi accident", *Ethics, policy and environment* 14(3), 2011, p. 279-283.

Monographs and edited volumes

- Kermisch C., *Le concept de risque. De l'épistémologie à l'éthique* (96 pages)*,* Paris, Lavoisier, 2011.
- Kermisch C., *Les paradigmes de la perception du risque* (248 p., Préface : Dominique Bourg), Paris, Lavoisier, 2010.
- Kermisch C. and Pinsart M.-G. (eds.), *Les nanotechnologies : vers un changement d'échelle éthique ?* (378 pages), Fernelmont, EME, 2012.
- Kermisch C. and Hottois G. (eds.), *Techniques et philosophies des risques* (254 pages), Paris, Vrin, 2007.

Chapters in edited volumes

- Kermisch C. and Depaus C., "Applying the optimisation principle to the choice of the host rock for geological disposal: Epistemological and ethical dimensions" in *Proceedings of the NEA IGSC Safety Case Safety Case Symposium*, forthcoming.
- Kermisch C. and Depaus C., "Radioactive waste and responsibility towards future generations", in Broadhead S. & Placani A. (eds.), *Risk and responsibility in context*, Routledge, 2024.
- Kermisch C., "Théorie culturelle", in Marchand D. *et al.* (eds.), *Dictionnaire de psychologie environnementale*, Paris, Dunod, 2022.
- Kermisch C., "Radioactive waste", in Brinkmann R. (ed.), *The Palgrave Global Handbook of Sustainability*, Palgrave Macmillan, https://doi.org/10.1007/978-3-030-38948-2_56-1, 2021.
- Kermisch C., "De l'éthique des technologies à la perception de leurs risques", in *AM Covéa. Histoires de mutualisme*, Paris, Le Cherche-Midi, 2019, p. 112-115.
- Kermisch C., "Quand l'artiste s'approprie la problématique de la mémoire des déchets radioactifs", in Massart C. (ed.) *Archives du futur pour une culture nucléaire*, Bruxelles, La Lettre volée, 2018, p. 31-32.
- Kermisch C., "Nanotechnologies et technologies convergentes" et "Risque" in Hottois G. *et al.* (eds.), *Humain, transhumain, posthumain. L'homme et ses préfixes*, Paris, Vrin, 2014.
- Kermisch C., "Perception, epistemics, and ethics: a triple perspective on the specificity of nanotechnologies and their risks", in Kermisch C. and Pinsart M.-G (eds.), *Les nanotechnologies : vers un changement d'échelle éthique ?*, Fernelmont, EME, 2012, p. 183-197.
- Kermisch C. and Labeau P.-E., "Théorie culturaliste et perception des risques : une analyse critique", in Kahn P. *et al*. (eds.), *Anticipation, innovation, perception : des défis pour la maîtrise des risques à l'horizon 2020*, Paris, Lavoisier, 2010, p. 253-266.
- Kermisch C., "Enhancement et perception des risques", in Missa J.-N. and Perbal L. (eds.), "*Enhancement*". *Ethique et philosophie de la médecine d'amélioration*, Paris, Vrin, 2009, p. 133-145.

C. Edition and referee work

- Member of the editorial board of the journal *Frontiers in nuclear engineering*.
- Referee for the following journals: *Fire safety journal*; *International social science journal*; *Science and engineering ethics; Journal of risk research; Ethics, policy and environment*; *Reliability, engineering & system safety; International Journal of risk assessment and management; Cahiers de droit européen.*

- 2010-2016: Creation and direction of the collection “Ethics in action” dedicated to applied ethics, Editions Modulaires Européennes, Fernelmont.

D. Selection of invited conferences

- Kermisch C., “Integrating ethics in the societal debate in Belgium (2023-2024)”, Seventh International Conference on Geological Repositories (ICGR- 7), Busan (South Korea), 29/05/2024.
- Kermisch C., “Nuclear waste, retrievability and future generations”, Karlsruhe Institute of Technology, Germany, 12/12/2023.
- Kermisch C., “L’éthique dans l’entreprise : pour le meilleur ou pour le pire ?”, Inaugural conference for *Les Entretiens du risque 2019* de l’Institut pour la Maîtrise Des Risques (IMDR), Paris, 03/12/2019.
- Kermisch C. and Depaus C., “Applying the optimisation principle to the choice of the host rock for geological disposal: ethical and epistemological dimensions”, NEA Integration Group for the Safety Case (IGSC) Symposium 2018, Rotterdam (The Netherlands), 10/10/2018.
- Kermisch C., “Perceptions des risques et ondes électromagnétiques”, Télécom ParisTech, Paris, 15/12/2016.
- Kermisch C., “Towards an ethical management of HLRW: challenging the notion of *future generations*”, RESET of U.S. Nuclear Waste Management Strategy and Policy, Stanford University, Stanford (USA), 27/10/2016.
- Kermisch C., “An ethical management of technologies? The usefulness of ethical matrixes”, 2016 IEEE International Symposium on Ethics in Engineering, Science and Technology, Vancouver (Canada), 14/05/2016.
- Kermisch C., “Is it relevant to refer to ‘future generations’ when analyzing HLRW management strategies?”, Keynote speaker for the conference “Ethics and Governance of Energy Technologies”, Eindhoven University of Technology, Eindhoven (The Netherlands), 15/01/2016.
- Kermisch C., “Quels statuts ontologique et épistémologique pour le risque ? ”, Retour sur la société du risque, Cerisy-La-Salle (France), 7/09/2011.