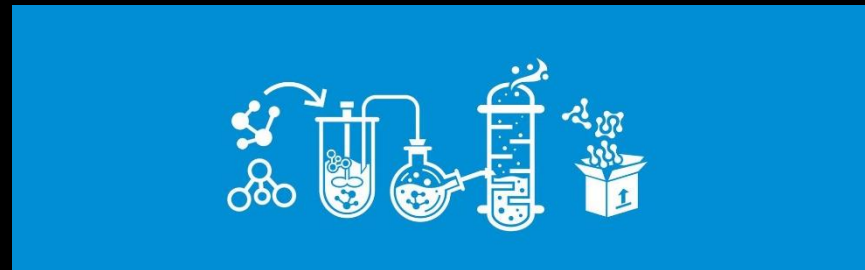


# ETHICS IN RESEARCH AND INTEGRITY OF SCIENTIFIC KNOWLEDGE



Luis Adriano Oliveira



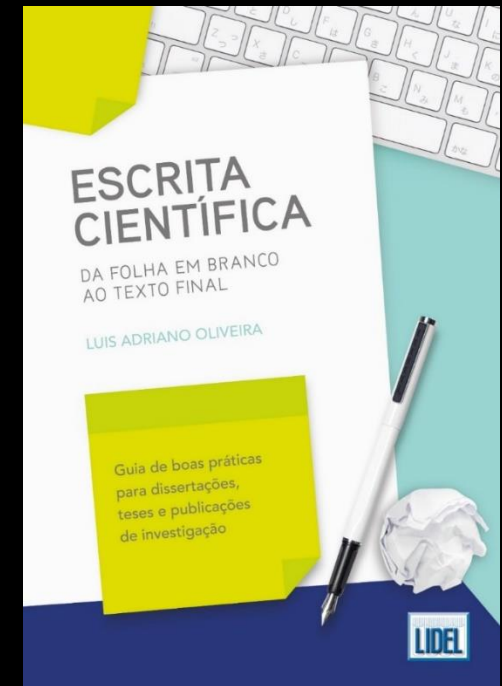
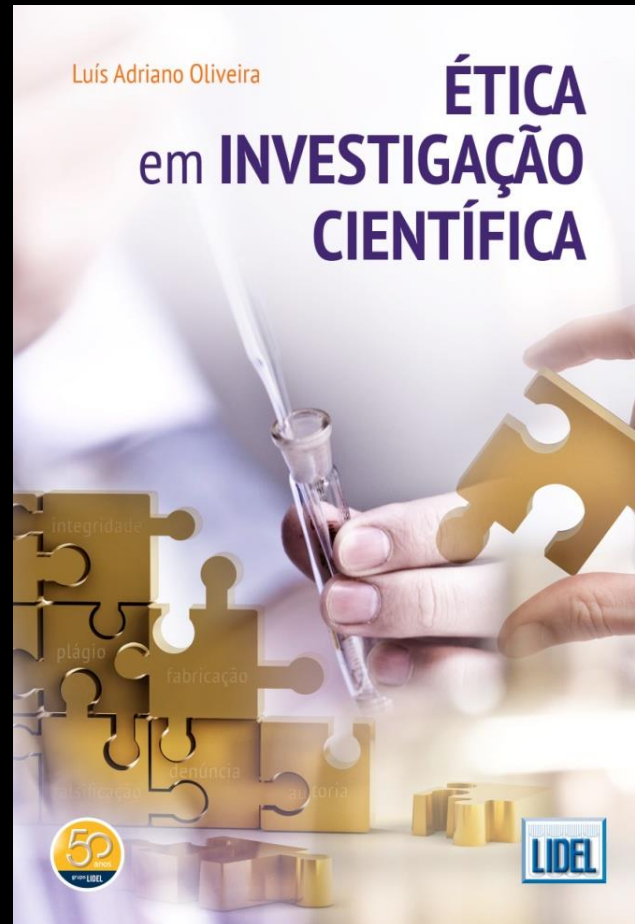
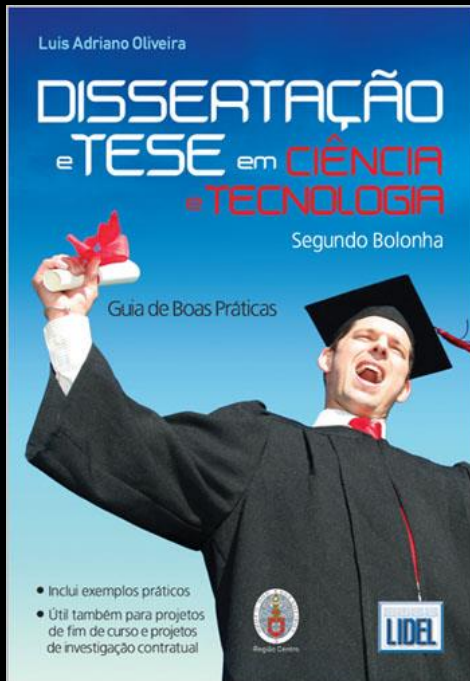
University of Coimbra, Portugal  
Department of Chemical Engineering (Doctoral Program)  
2022-01-14

# Summary

- ❑ Motivation, companion books and further reading
- ❑ Preliminary question: who can be a researcher?
- ❑ Scientific innovation: objectives, phases, key players
- ❑ Morality, ethics, deontology
- ❑ Ethics in science: values and risks
- ❑ The role of error in science
- ❑ Social responsibility in scientific innovation
- ❑ Concluding remarks



# Companion books (in Portuguese)



- OLIVEIRA, L. A. (2014) - "Dissertação e Tese em Ciência e Tecnologia" (3.<sup>a</sup> ed.), *Lidel*.
- OLIVEIRA, L. A. (2013) - "Ética em Investigação Científica", *Lidel*.
- OLIVEIRA, L. A. (2018) - "Escrita Científica: da Folha em Branco ao Texto final", *Lidel*.



# Further Reading

- ANDERSON, M. & KLEINERT, S. (2013), “Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations”. *Third World Conference on Research Integrity*. Montreal, Canada, May 5-8, 2013.
- ASHBY, M. (2005), “How to Write a Paper” (6.<sup>th</sup> ed.). *Cambridge U.P.*
- GASTEL, B. & DAY, R. (2019), “How to Write and Publish a Scientific Paper” (8.<sup>th</sup> ed.). *Greenwood*. USA.
- LAUREL, B. & LUNENFELD, P. (2003), “Design Research: Methods and Perspectives”. *MIT Press*.
- LEVIN, P. (2006), “Excellent Dissertations”. *Open University Press, McGraw-Hill*.
- MARSHALL, S. & GREEN, N. (2007), “Your PhD Companion” (2.<sup>nd</sup> ed.). *How To Books, Oxford*.
- NAS – National Academy of Sciences (1995), “On Being a Scientist: Responsible Conduct in Research” (2.<sup>nd</sup> ed.). *National Academy Press, Washington D.C.*



# Further Reading (cont.)

- POEL, I. & ROYAKKERS, L. (2011), “Ethics, Technology, and Engineering : An Introduction”. *John Wiley & Sons, Ltd.*
- STEWART JR., C. N. (2011), “Research Ethics for Scientists” . *Wiley-Blackwell.*
- SWETNAM, D. & SWETNAM, R. (2010), “Writing Your Dissertation” (3.<sup>th</sup> ed.). *How To Books, Oxford.*
- THIEL, D. V. (2014), “Research Methods for Engineers” . *Cambridge University Press.*
- TURABIAN, K. L. (2013), “A Manual for Writers of Research Papers, Theses and Dissertations” (8.<sup>th</sup> ed.). *The University of Chicago Press.*
- WINSTANLEY, C. (2009), “Writing a Dissertation for Dummies” . *John Wiley & Sons, Ltd.*
- WISKER, G. (2001), “The Postgraduate Research Handbook” . *Palgrave Macmillan.*