

ANDREA CANDELA

Curriculum Vitae



CITIZENSHIP: *Italian*

ADDRESS: *Department of Theoretical and Applied Sciences, via O. Rossi n. 9 (Padiglione Rossi), 21100 Varese (VA), University of Insubria.*

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EMPLOYMENT

March 2021–current

Associate Professor in History of Science and Technology at the University of Insubria (Varese–Como, Italy), where he teaches “Environmental History” and “Scientific Storytelling”.

March 2018–February 2021

Assistant professor (RUTD-b, fixed-term researcher – tenure-track position) in History of Science at the University of Insubria (Varese–Como, Italy).

2019–2021

Lecturer in “Science and Society”, Bachelor’s degree in History (University of Insubria, Varese–Como, IT)

2018–2019

Lecturer in “History and Resources of the Mountains”, Bachelor’s degree in Natural Sciences (University of Insubria).

28 March 2017

Awarding of the National Academic Qualification (ASN) as Associate professor. Research field: 11/C2 – Logic, History and Philosophy of Science.

From September 2015 to December 2015

Postdoctoral research fellow (temporary full-time employee) at the Australian Academy of Science (Canberra, Australia).

Title of the research project: *Research on uranium: History, mining, technology, and environmental conflicts in the 20th century.*

From June 2015 to August 2015

Visiting scholar at the American Institute of Physics, Center for History of Physics (College Park, Maryland MD, USA).

Title of the research project: *Exploring radioactive resources. Nuclear energy, mining and technological transfer between Italy and the United States in the Atomic Age.*

From November 2008 to March 2014

Postdoctoral research fellow (temporary full-time employee) in History of Science at the Department of Theoretical and Applied Sciences, University of Insubria (Varese–Como, Italy).

2007–2014

Adjunct professor (temporary full-time employee) in Science Communication at the Faculty of Sciences, Bachelor's degree in Communication Sciences (University of Insubria, Varese–Como, IT).

2009–2013

Director and curator (appointment) of the Museum of Prealpine Rural Culture (Brinzio, Italy). The Museum collections are about the history of pre- and proto-industrial agriculture and craftsmanship, especially from the mountain environment.

http://www.beniculturali.it/mibac/opencms/MiBAC/sito-MiBAC/Luogo/MibacUnif/Luoghi-della-Cultura/visualizza_asset.html?id=153410&pagename=57

2006–2008

Research fellow in History of Science at the Department of Computer Science and Communication (University of Insubria, Varese–Como, IT).

From January 2003 to December 2004

Museum guide at the National Museum of Science and Technology “Leonardo da Vinci” (Milan, Italy).

2002–2003

Science writer and junior editor for the TV programme of science popularisation *Sfera* (Studiouno s.r.l., Milan), broadcast by the Italian broadcasting network LA7 (Milan, Italy).

MAIN FIELDS OF EXPERTISE

- Environmental history, environmental conflicts, and history of Earth sciences from the 18th to 20th century.
- History of nuclear energy and environmental issues.
- Science communication, laying emphasis on the scientific imaginary as well as on the relationship between science/environmental issues, literature, and the media.

ACADEMIC APPOINTMENTS

Since December 2020

Book review editor and member of the editorial board of *“Physis. Journal of the Italian Society for the History of Science”*.

2020–2021

Councilor of the *“History of Earth Sciences Society”* (USA), that publishes the international journal *“Earth Sciences History”*.

2020

Member of the Organizing Committee of the National Congress of the Italian Society for the History of Science (November – Catania, Italy).

2020

Secretary of the *“9th ESHS (European Society for the History of Science) Conference. Visual, Material and Sensory Cultures of Science”* (Bologna, 31 August – 3 September).

2019

Member of the Organizing Committee of the *44th INHIGEO SYMPOSIUM* (2–12 September, Varese–Como, Italy). Annual meeting of the International Commission on the History of Geological Sciences (Inhigeo).

2019

Co-convenor (together with E. Vaccari, M. Pantaloni, L. Vezzoli) of the Session on *“History of Stratigraphy”* (title: *“History of Stratigraphy in Italian environments, 17th-20th centuries”*) of the *3rd International Congress on Stratigraphy, STRATI* (2–5 July 2019, Milan).

2018

Member of the Organizing Committee of the International Congress, entitled: *History and Philosophy of Science: A new alliance?* (22–23 October, organized by the Centro Internazionale Insubrico *“Carlo Cattaneo”* e *“Giulio Preti”* per la Filosofia, l’Epistemologia, le Scienze Cognitive e la Storia della Scienza e delle Tecniche, University of Insubria).

2018

Member of the external Ph.D. dissertation reviewers of the Ph.D. school in “History, Cultures, and Civilization” (Alma Mater, University of Bologna).

2018–current

Member of the research centre in “Mass media and Society: history and critique of public opinion” (University of Insubria).

2018–current

Member of the “Research Centre for the History of the Mountains, Material Culture and Earth Sciences” (University of Insubria).

2016–current

Member of the editorial board of the Italian peer-reviewed history journal “Viaggiatori”.
Editor in chief: Fabio D’Angelo.

2016–current

Member of the executive board and Secretary of the Italian Society for the History of Science.

2013–current

Member of the scientific committee of the editorial series on science and communication “i-Poliedri”, published by Mimesis Edizioni (Milano–Udine, Italy). Editor in chief: Ezio Vaccari.

2008–current

Member of the International Commission on the History of Geological Sciences (INHIGEO).

2015–2021

External reviewer of the international peer-reviewed journals “Bulletin of Earthquake Engineering”, “Azimuth. International Journal of Philosophy”, “Nuncius. Journal of the Material and Visual History of Science”.

2011

Member of the Organizing Committee of the Varenna Fisica Festival. The International Physics Festival – held in Varenna and Lecco (Italy) – was organized by the International School of Physics “Enrico Fermi”, the European Physical Society (EPS), and the Italian Physical Society (SIF).

From 2007 to 2011

Member of the scientific committee of the “Fondazione Domenico Morino. Research centre on Material Culture and History of Technology” (Regional Park of Ticino, Italy).

2009

External reviewer of the monograph, entitled: *The making of the Geological Society of London*, edited by C. L. E. Lewis & S. Knell, Geological Society Publishing House, Bath 2009.

MEMBERSHIPS

2017–current: *fellow of the History of Earth Sciences Society.*

2016–current: *fellow of the Italian Society for the History of Science.*

2016–2019: *fellow of the Italian Geological Society.*

2013–2015: *fellow of the British Society for the History of science.*

GRANTS AND AWARDS

2015

Grant-in-Aid in the History of modern Physics and Allied Sciences, awarded by the American Institute of Physics (Maryland MD, USA).

2014–2015

Moran Award for the History of Science Research, awarded by the Australian Academy of Science (Canberra, AU).

June 2006

Travel grant for attending the International Summer School in History of Science, University of Uppsala (Sweden).

EDUCATION

2005–2008

Doctoral degree (PhD) in History of Science (University of Bari, Italy). Major in History of Earth sciences. Grade: very positive.

2004–2006

Postgraduate courses in: Biology, Zoology, Palaeontology, Geology, Biogeography, Evolutionary biology. Faculty of Sciences, University of Milan and University of Insubria (Italy).

2001–2002

1st level postgraduate Master's course in Science Communication (University of Milan, Italy).

1996–2001

Master of Arts in Philosophy (University of Milan, Italy). Major in History of Science. Grade: 110 out of 110 summa cum laude (top marks).

PUBLICATIONS

Books

[2017] *Storia ambientale dell'energia nucleare. Gli anni della contestazione*, Mimesis, Milano-Udine, 340 pp. [ISBN 978-88-5754-638-4].

[2013, 2015²] (Foreword by Giovanni CAPRARA) *Dal sogno degli alchimisti agli incubi di Frankenstein. La scienza e il suo immaginario nei mass media*. FrancoAngeli, Milano, 268 pp. [ISBN 978-88-204-4620-8].

[2013] (together with L.P. ARENA) *Cultura materiale e paesaggio montano. Oggetti e testimonianze dal Museo della Cultura Rurale Prealpina*. Aracne, Roma, 184 pp. [ISBN 978-88-548-6022-3].

[2009] *Alle origini della Terra. I vulcani, le Alpi e la Storia della Natura nell'età del viaggio scientifico*. Insubria University Press, Varese, 299 pp. [ISBN 978-88-95362-26-7].

[2003] (together with G. BUSI, A. MARIANI, P. ZUBIANI; foreword by Ignazio TABACCO) *Passato, presente e futuro del clima*. Anthelios, Garbagnate Milanese, 61 pp. [ISBN 88-8394-016-4].

Book chapters

[2022] *Vedere attraverso corpi e materia. Storia della Scienza e Fake news*. In: *Bufale, Fake news, Rumors e Post-verità. Discipline a confronto*, a cura di A.M. Orecchia e D.G. Preatoni, Mimesis, Milano-Udine, pp. 145-154.

[2017] *La corsa all'uranio e gli esordi negli usi pacifici dell'energia nucleare. Un'inchiesta attraverso le pagine del Notiziario del CNEN*. In: *Il prisma dei beni comuni tra diritto e scienze umane*, edited by A.M. Orecchia & C. Perini, Mimesis Edizioni, Milano-Udine, pp. 41-57.

[2015] *Il problema dell'Evoluzionismo nella riflessione (anche inedita) di Giulio Preti*. In: *Sul Bios Theoretikós di Giulio Preti*, edited by F. Minazzi, Mimesis Edizioni, Milano-Udine, vol. 1, pp. 649-718, 2vv.

[2014] *Biblical Deluge and Creationism in eighteenth-century Italy: an overview of the geological theory of Ermenegildo Pini (1739-1825)*. In: *INHIGEO ANNUAL RECORD*, edited by W. Myer, 46, pp. 67-72.

[2011] *History of uranium and nuclear policy in Italy (1946-1965)*. In: *History of Research in Mineral Resources*, edited by J. E. Ortiz, O. Puche, I. Rábano, L. F. Mazadiego, Cuadernos del Museo Geominero, Instituto Geológico y Minero de España, 13, pp. 331-336.

[2010] (together with E. VACCARI) *Scienziati in montagna tra Settecento e Ottocento. Un itinerario storico-geologico nelle Prealpi Varesine*. In: *Anguana. Museo dell'Uomo e della*

Montagna. *Modelli per la valorizzazione del patrimonio culturale montano*, edited by M. Diaco & G. Paoloni, Bardi, Roma, pp. 169-176.

[2009] *On the Earth's revolutions: floods and extinct volcanoes in Northern Italy at the end of the eighteenth century*. In: *Geology and Religion. A history of Harmony and Hostility*, edited by M. Kölbl-Ebert, The Geological Society, Special Publications, London, 310, pp. 89-93.

Edition of unpublished primary sources

[2017] *Il viaggio settecentesco di Paolo Sangiorgio in Valsassina*. In: *L'esilio come viaggio: categorie, pratiche ed esperienze*, edited by F. D'Angelo, VIAGGIATORI, CIRCOLAZIONI, SCAMBI ED ESILIO, 1(1), September, pp. 436-491.

Papers in academic journals

[2021] *Visualising the theory of the Alps: the first geological map of the Western Lombard Prealps by Christian Leopold von Buch (1829)*. *PHYSIS. RIVISTA INTERNAZIONALE DI STORIA DELLA SCIENZA*, LVI, Nuova Serie, fasc. 1-2, pp. 21-31.

[2019] *The early stages of uranium geology in post-WWII Italy*. *EARTH SCIENCES HISTORY*, 38(1), pp. 137-149.

[2018] *Nuclear Energy and the Sublime. A Visual History from the Early Italian Anti-Nuclear Movement (1975-1979)*. In: G. Rispoli, C. Rosol (eds.), *Technology and the Sublime*, *AZIMUTH. PHILOSOPHICAL COORDINATES IN MODERN AND CONTEMPORARY AGE*, VI, 12, pp. 45-58.

[2018] *Per una storia sperimentale delle Scienze della Terra: dal documento alla prova sul terreno*. In: *Tre secoli di Geologia in Italia*, edited by A. Argentieri, M. Pantaloni, M. Romano, G.B. Vai, *RENDICONTI ONLINE DELLA SOCIETÀ GEOLOGICA ITALIANA*, 44, pp. 37-44.

[2017] *Sorting out nuclear concerns: The Australian uranium debate from Jervis Bay to Ringwood's Synroc*. *EARTH SCIENCES HISTORY*, 36(1), pp. 116-141.

[2016] *La nascita della geologia nucleare in Italia*. *PHYSIS. RIVISTA INTERNAZIONALE DI STORIA DELLA SCIENZA*, LI(1-2), pp. 239-252.

[2016, online 2014] (together with F. PASQUARÈ MARIOTTO) *Italian news coverage of radiation in the early decades of the twentieth century: A qualitative and quantitative analysis*. *PUBLIC UNDERSTANDING OF SCIENCE*, 25(2), pp. 236-251.

[2016] *Bioetica della complessità: la riflessione etica di fronte alla sfida dei cambiamenti climatici*. *BIO-ETHOS*, 27, May-August, pp. 7-22 [guest Author].

- [2015] *The Radium Terrors: Science Fiction and Radioactivity before the Bomb*. NUNCIUS. JOURNAL OF THE MATERIAL AND VISUAL HISTORY OF SCIENCE, 30(2), pp. 320-344.
- [2015] *Storytelling e cambiamenti climatici nella rappresentazione mediatica delle previsioni meteorologiche*. STUDI CULTURALI, 12(3), pp. 373-390.
- [2014] *La corretta informazione: un antidoto contro la fragilità della cultura scientifica*. SCIENZA E TECNICA, LXXVII, NN. 524-526, pp. 4-5.
- [2013] *Corrispondenze e diversità culturali attraverso l'esperienza dell'ecomuseo della Cultura Rurale Prealpina*. RIVISTA DI STORIA DELL'AGRICOLTURA, LIII, 2, pp. 179-193.
- [2012] *Il contributo della riflessione ecologica negli studi di storia della cultura materiale. Considerazioni di sintesi*. SOCIETÀ E STORIA, 137, pp. 627-639
- [2012] *Smelting and technical knowledge in Northern Italy between the 18th and 19th centuries*. DE RE METALLICA, 18, pp. 1-5.
- [2010] *Scienze del clima e metodo scientifico tra comunicazione della scienza e sociologia della conoscenza*. EPISTEMOLOGIA, 33(2), pp. 235-256.
- [2010] *Nucleare e mass media in Italia*. PROBLEMI DELL'INFORMAZIONE, 35(1/2), pp. 177-192.
- [2009] *Tutela e valorizzazione del patrimonio geologico*. NUOVA MUSEOLOGIA, 20, pp. 7-11.
- [2008] *Ricerche di archeologia mineraria nell'area occidentale delle Prealpi Lombarde: scenari di conservazione e riqualificazione del "paesaggio culturale"*. ARCHEOLOGIA POSTMEDIEVALE. SOCIETÀ, AMBIENTE, PRODUZIONE, 12, pp. 67-95.
- [2007] *Problemi di storia geo-mineraria alpina. Il caso delle Prealpi Lombarde Occidentali*. RICERCHE STORICHE, 1, 37, pp. 175-198.
- [2006] *Risorse energetiche e conservazione della natura nella regione delle Prealpi Lombarde. Lo sviluppo delle scienze forestali nella politica ambientale dell'Italia sette-ottocentesca*. RIVISTA DI STORIA DELL'AGRICOLTURA, 1, 46, pp. 99-115.

Entries

- [2021] *Dante Pantanelli (Siena, 4 gennaio 1844 – Modena, 2 novembre 1913)*. In: Aa. Vv., *Presidenti della Società Geologica Italiana*, Società Geologica Italiana (sezione Storia della geoscienze), online.
- [2019] *Tellini, Achille (1866-1938)*. In: DIZIONARIO BIOGRAFICO DEGLI ITALIANI (DBI), Istituto della Enciclopedia Italiana, Treccani, Roma.

- [2016] *Recupero, Giuseppe (1720–1778)*. In: DBI, Istituto della Enciclopedia Italiana, Treccani, Roma, vol. 86 (Querenghi-Rensi).
- [2014] *Parona, Carlo Fabrizio (1855–1939)*. In: DBI, Istituto della Enciclopedia Italiana, Treccani, Roma, vol. 81, pp. 425-427.
- [2014] *Pantanelli, Dante (1844–1913)*. In: DBI, Istituto della Enciclopedia Italiana, Treccani, Roma, vol. 81, p. 24 (online).
- [2014] *Panichi, Ugo (1872–1966)*. In: DBI, Istituto della Enciclopedia Italiana, Treccani, Roma, vol. 80, pp. 765-767.
- [2013] *Onorato, Ettore (1899–1971)*. In: DBI, Istituto della Enciclopedia Italiana, Treccani, Roma, vol. 79, pp. 361-362.

Book reviews

- [2020] Simone TURCHETTI, *Greening the Alliance. The Diplomacy of NATO's Science and Environmental Initiatives*, The University of Chicago Press, Chicago-London 2018. In: NUNCIUS. JOURNAL OF THE MATERIAL AND VISUAL HISTORY OF SCIENCE, 35(1), pp. 183-185.
- [2015] Francesco Paolo DE CEGLIA (edited by), *Storia della definizione di morte*, FrancoAngeli, Milano 2014. In: LETTERATURE. SUPPLEMENTO DI SCIENZE E RICERCHE, 1(6), pp. 97–98.
- [2013] Francesco GERALI, *L'Opera e L'Archivio Spezzino di Giovanni Capellini. Un Geologo Dell'Ottocento*. Museo Geologico Giovanni Capellini, Bologna 2012. Luca CIANCIO, *Vulcan's Secret Forge: Explorations of the Verona area by British aristocrats and Veneto naturalists during the Eighteenth century*. Consorzio di Tutela Vini Soave e Recioto di Soave, Verona 2010. In: ISIS. JOURNAL OF THE HISTORY OF SCIENCE SOCIETY, 104(4), pp. 821–822.
- [2011] Luca CIANCIO (edited by), *Lettere di Alberto Fortis (1741-1803) a Giovanni Fabbroni (1752-1822)*. Il Leggio, Chioggia 2010 (Epistolario Veneto). In: QUADERNI PER LA STORIA DELL'UNIVERSITÀ DI PADOVA, 44, pp. 248–250.
- [2011] Luca CIANCIO (edited by), *Lettere di Alberto Fortis (1741-1803) a Giovanni Fabbroni (1752-1822)*. Il Leggio, Chioggia 2010 (Epistolario Veneto). In: STUDI VENEZIANI, LXII, pp. 632–634.
- [2009] Donata BRIANTA, *Europa mineraria. Circolazione delle élites e trasferimento tecnologico (secoli XVIII e XIX)*. FrancoAngeli, Milano 2007. In: NUNCIUS. JOURNAL OF THE HISTORY OF SCIENCE, 24, I, pp. 221–222.
- [2007] Guido CHIESURA, *Charles Darwin geologo*. Hevelius, Benevento 2002. In: NUNCIUS. JOURNAL OF THE HISTORY OF SCIENCE, 22, II, pp. 400–401.

MAIN LECTURES GIVEN AT INTERNATIONAL SYMPOSIA

October 3rd – 7th, 2006, Schwaz (Austria)

Title: *Environmental history and natural resources in the mountain landscape: Aosta Valley and Lombardy.*

Meeting: 8th International Erbe Symposium, Cultural Heritage in Mining, Metallurgy and Geosciences.

May 19th, 2007, Istituto Nazionale di Studi Liguri (Bordighera, Italy)

Title: *L'archeologia industriale e la valorizzazione storico-culturale del territorio.*

Meeting: *La valorizzazione culturale delle case di artista e del territorio. Un confronto tra esperienze europee.*

July 28th – August 5th, 2007, Eichstaett (Germany)

Title: *On the Earth's revolutions: floods and extinct volcanoes in northern Italy at the end of the eighteenth century*

INHIGEO meeting: *The historical relationship of geology and religion.*

May 27th – 30th, 2009, Istituto di Storia dell'Europa Mediterranea (Cagliari, Italy)

Title: *Environment and History: Mining, Natural Resources and Technical Knowledge in the Alps between the 18th and 19th centuries.*

Session: *Technical Knowledge and Technological Transfer.*

Meeting: XII International Meeting of the Mediterranean Studies Association.

July 5th – 10th, 2010, Madrid and Almaden (Spain)

Title: *History of uranium and nuclear policy in Italy (1946–1965).*

INHIGEO meeting: *History of research in mineral resources.*

October 28th – 29th, 2011, Varese (University of Insubria)

Title: *Il problema dell'evoluzionismo nella riflessione di Giulio Preti.*

Meeting: *Il Bios Theoretikós di Giulio Preti.*

July 22nd – 27th, 2013, Manchester (UK)

Title: *The Radium Terrors: popular science and science fiction on radioactive metals before the Bomb.*

Session: *Literary approaches in the history of science, technology and medicine.*

Meeting: 24th International Congress of History of Science, Technology and Medicine (ICHSTM).

September 16th – 18th, 2013, Pisa (Italy)

Title: *Mining history and geoparks: a case study in the Western area of the Lombard Prealps.*

Workshop: *Earth Science Communication at Museums: Strategies and Tools.*

Meeting: FIST Geitalia. IX Forum Italiano di Scienze della Terra.

September 10th –14th, 2014, Milan (Italy)

Workshop: *The Future of the Italian Geosciences.*

Congress of the Società Geologica Italiana and of the Società di Mineralogia.

September 7th – 9th, 2016, Naples (Italy)

Title: *Exploring mountains: The geological Travel of Paolo Sangiorgio in Italy (1770). Session: Three centuries of Geology in Italy.*

Meeting: 88° Congresso della Società Geologica Italiana.

September 15th – 17th, 2016, Sasso Marconi (Bologna, Italy)

Title: *L'uranio in Italia: minerali radioattivi e scienze della Terra negli scritti e nei periodici del Comitato Nazionale per l'Energia Nucleare.*

National meeting of the Italian Society for the History of Science (Società Italiana di Storia della Scienza).

October 25th – 26th, 2018, Varese (University of Insubria)

Title: *Geostoria e “questione ambientale”: prospettive di riflessione interdisciplinare tra storia della scienza, della tecnologia e delle idee.*

Meeting: *Storia e filosofia della scienza: una nuova alleanza? Convegno scientifico internazionale dedicato alla memoria di Ludovico Geymonat.*

November 2018, Mexico City

Title: *Searching for radioactive minerals in post-WWII Italy.*

Meeting: 43° INHIGEO International Symposium.

April 18th, 2019, Milan (Politecnico di Milano, Dipartimento di Architettura e Studi Urbani - DASTU, Dipartimento di Eccellenza sulle Fragilità Territoriali).

Title: *Fragilità territoriali e rischio sismico fra storia, percezione sociale e comunicazione.*

Workshop: *Verso un glossario delle fragilità: aspetti interdisciplinari.*

July 5th, 2019, Milan

Title: *Geohistory and history of stratigraphy in the Introduzione alla Geologia by the “Huttonian” geologist Scipione Breislak (1750-1826).*

Session: *History of Stratigraphy and Italian environments (17th-20th centuries).*

Meeting: STRATI 2019

September 6th, Somma Lombardo (Visconti Castle)

Title: *Visualizing the theory of the Alps: the first geological map of the Western Lombard Prealps by Christian Leopold von Buch (1829).*

Meeting: 44 INHIGEO SYMPOSIUM (Varese-Como)

August 31st – September 3rd 2020, Bologna. Discussant of the session: *“From technical practice to visual representation of the features of the Earth: travels, tools, fieldwork” (1-2)*

(Geology as a visual science). Meeting: 9th ESHS (European Society for the History of Science) Conference. *Visual, Material and Sensory Cultures of Science*.

September 14th – 16th 2021, Trieste. 90° Congress of the Italian Society of Geology.

Title: “The environment as a technological border: geology and nuclear power plants. A historical perspective”.

Workshop: “Through the Barricades: History of Boundaries in Geology”.

September 30th – October 1st 2021, Padova (Università degli Studi). Congress: “Storia ambientale in Italia: stato dell’arte e prospettive future” [Environmental history in Italy: state of the art and future perspectives]

Title: “Per una storia ambientale del nucleare civile: geologia e impianti nucleari nel tentativo di transizione energetica italiano degli anni Settanta” [For an environmental history of the civil nuclear power: geology and nuclear facilities in the 1970s energy transition effort”.

November 25th – 26th 2021, Varese (Università degli Studi dell’Insubria).

Title: “Approcci storici e narrativi al racconto della scienza”

Conference: *La storia: conoscenza o narrazione?*

Date: April 2022