

EMPLOYMENT

Marie Skłodowska-Curie Post-Doctoral Fellow, Project 'CREACAL: Chemical reactions as Causes and Laws', University of Athens	7/2023- 6/2025
Post-Doctoral Research Associate in the NoMoS project, PI: Stathis Psillos, University of Athens	07/2022- 6/2023
Teaching Fellow, Dep. of History and Philosophy of Science, University of Athens	10/2021-09/2022
Post-Doctoral Research Associate in the ERC-funded 'The Metaphysical Unity of Science' project, University of Bristol	07/2019- 09/2021
Hourly-paid Teacher, University of Bristol	2015- 2021

EDUCATION

PhD in Philosophy, University of Bristol Thesis title: A Philosophical Analysis of the Relation between Chemistry and Quantum Mechanics: the case of a single inert molecule Supervisor: James Ladyman Examiners: Samir Okasha, Robin Hendry	2014- 2019
MSc Philosophy of Science, LSE Courses: Rationality & Choice, Set Theory & Logic, Philosophy of Science Dissertation: On the universality and ambiguity of the 2nd law of thermodynamics Supervisor: Miklos Redei	2012- 2013
MEng Chemical Engineering, National Technical University of Athens Grade: GPA 2:1 (7.66/10) Dissertation: Energy-saving measures on buildings: Financial and Cost-Benefit Analysis Supervisor: Danae Diakoulaki	2006- 2012

RESEARCH INTERESTS

General issues in Philosophy of Science: Reduction, Emergence, Scientific Realism, Models & Idealisations, Feminist Philosophy of Science

Metaphysics of Science: Laws, Causation, Natural kinds, Metaphysics of relations

History and Philosophy of Chemistry: Chemical bonds, Quantum chemistry, Molecular structure

PUBLICATIONS

Books

The Metaphysics of Chemistry, Elements in Metaphysics Series (Cambridge: Cambridge University Press) (signed contract- to be published in 2023)

Peer-reviewed articles

- Seifert, V. (2022). The Chemical Bond is a Real Pattern. *Philosophy of Science*, 1-47. doi:10.1017/
- Franklin, A. and Seifert, V. (2024) 'The Problem of Molecular Structure Just Is the Measurement Problem', *British Journal for the Philosophy of Science*, 75 doi: doi.org/10.1086/715148.
- Seifert, V.A. (2022). Do Molecules Have Structure in Isolation? How Models Can Provide the Answer. In: Lombardi, O., Martínez González, J.C., Fortin, S. (eds) *Philosophical Perspectives in Quantum Chemistry*. Synthese Library, vol 461. Springer, Cham. https://doi.org/10.1007/978-3-030-98373-4_6
- Seifert, V. A. (2020) 'The strong emergence of molecular structure', *European Journal for Philosophy of Science*, 10(3), 1-25. <https://doi.org/10.1007/s13194-020-00308-7>

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- 5 Seifert, V., Ladyman, J., & Blumenthal, G. (2020) 'Referring to chemical elements and compounds: Colourless airs in late-eighteenth-century chemical practice', In *What is a chemical element? A collection of essays by chemists, philosophers, historians, and educators*, ed. by E. Scerri, E. Ghibaudi (Oxford: Oxford University press)
- 6 Seifert, V. A. (2020) 'The role of idealisations in describing an isolated molecule. *Foundations of chemistry*, 22(1), 15-29. <https://doi.org/10.1007/s10698-019-09342-7>
- 7 Seifert, V. (2019) 'Reduction and Emergence in Chemistry', *Internet Encyclopedia of Philosophy* <<https://iep.utm.edu/red-chem/>>
- 8 Seifert, V. A. (2017) 'An alternative approach to unifying chemistry with quantum mechanics.' *Foundations of Chemistry*, 19(3), 209-222.

Book reviews, Press & Online sources

- 1 Seifert, V.A. (2023) 'Chemistry's history through the feminist lens', *Chemistry World*, Royal Society of Chemistry
- 2 Seifert, V.A. (2023) 'Let's promote a feminist philosophy of chemistry!', *Jargonium*
- 3 Seifert, V.A. (2023) 'Is water H₂O? Is gold Au?', *Chemistry World*, Royal Society of Chemistry
- 4 Seifert, V.A. (2023) 'Does the periodic table reveal laws of nature?', *Chemistry World*, Royal Society of Chemistry
- 5 Seifert, V.A. (2022) In search of the elements. *Metascience* (Book Review)
- 6 Seifert, V.A. (2022) 'How do we know that we know', *Chemistry World*, Royal Society of Chemistry
- 7 Seifert, V.A. (2022) 'Are plants alive?', *Chemistry World*, Royal Society of Chemistry
- 8 Ladyman, J. & Seifert, V.A. (2022) 'The contributions of Geoffrey Blumenthal: From Copernicus's astronomy to Lavoisier's chemistry', *Jargonium*
- 9 Seifert, V.A. (2022) 'In search of the chemical bond', *Chemistry World*, Royal Society of Chemistry
- 10 Seifert, V.A. (2022) 'Philosophical mysteries around chemical reactions', *Chemistry World*, Royal Society of Chemistry
- 11 Seifert, V.A. Open questions on emergence in chemistry. *Commun Chem* 5, 49 (2022).
- 12 Seifert, V.A. (2022) 'The different shades of sexist science', *Chemistry World*, Royal Society of Chemistry
- 13 Seifert, V.A. (2021) 'Rethinking our relationship to nature', *Chemistry World*, Royal Society of Chemistry
- 14 Seifert, V.A. (2021) 'Science as a product of culture', *Chemistry World*, Royal Society of Chemistry
- 15 Franklin, A., and Seifert, V. A. (2021) 'Going Quantum with Chemistry's Structures', *BJPS Short Reads*
- 16 Seifert, V.A. (2021) 'What's Revolutionary about the Chemical Revolution', *Chemistry World*, Royal Society of Chemistry
- 17 Seifert, V.A. (2021) 'Great expectations: How values influence decisions in Chemistry', *Chemistry World*, Royal Society of Chemistry
- 18 Seifert, V.A. (2021) 'Puzzles in Chemistry and how philosophy helps solve them', *Chemistry World*, Royal Society of Chemistry
- 19 Seifert, V.A. (2021) 'Idealisations to the Rescue', *Chemistry World*, Royal Society of Chemistry
- 20 Seifert, V.A. (2020) 'Are chemical entities real?', *Chemistry World*, Royal Society of Chemistry
- 21 Seifert, V.A. (2020) 'Strong Emergence in Chemistry', *Jargonium*
- 22 Seifert, V.A. (2020) 'Why do we still do chemistry?', *Chemistry World*, Royal Society of Chemistry
- 23 Seifert, V.A. (2020) 'Philosophy of Chemistry- is that a thing?!', *Jargonium*

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- 24 Seifert, V.A. (2020) 'From quarks to quails- can the different sciences be unified?', *The Conversation*
- 25 Seifert, V.A. (2016) 'The philosophy of chemistry ... and what it can tell us about life, the universe and everything', *The Conversation*
- 26 Seifert, V. A. (2016) 'Essays in the Philosophy of Chemistry.' *International Studies in the Philosophy of Science*, 30:4, 415-417, 2016 (Book review)

CONFERENCES, WORKSHOPS, SYMPOSIA

Invited Talks

- Helsinki Philosophy (TINT): Perspectives on Science seminar, University of Helsinki 2023
- Cardiff Philosophy Visiting Speakers, Cardiff University 2022
- Emergence and Reduction in Science and Metaphysics, University of Lisbon 2022
- Seminar on Metaphysics of Science (CEFISES), UC Louvain* 2022
- The Nature of Quantum Objects, Dep. of Philosophy, Un. of Geneva 2022
- Harvard Foundations of Physics Mini-workshop on the Quantum Measurement Problem* 2021
Incl. Panel Discussion with Lev Vaidman, David Chalmers and Kelvin McQueen
- Meeting of the Strathclyde Computational and Theoretical Chemistry Hub, Un. of Strathclyde 2021
- Department of Chemistry Weekly Seminar, Ben-Gurion University of the Negev 2021
- Forum for Philosophy, London School of Economics* 2021
Panel discussion: A theory of everything?, with Philip Ball and Jessica Wilson
- Wochenendseminar zur Philosophie der Physik, University of Bremen 2020
- ADHOC Association for the Discussion of the History of Chemistry, University of Cambridge 2020
- FraMEPhys- MetaScience Workshop, Oxford 2019
- IV POND Conference: Science and Objectivity, University of Barcelona 2019
- PHASE-chimie Philosophie, Histoire, Anthropologie, Sociologie et Epistémologie de la Chimie, University Paris 7 2019
- Real Patterns Workshop, University of Bristol 2018
- Structure, Mechanism and Explanation in the Sciences, Durham University 2018
- Association for the Discussion of the History of Chemistry, HPS, University of Cambridge 2018

Participation in conferences

- 7th Panhellenic Conference in Philosophy of Science, University of Athens 2022
- 6th Italian Conference in Analytic Metaphysics and Ontology, University of L' Aquila 2022
- 27th Biennial Meeting of the Philosophy of Science Association (PSA), Baltimore 2021
- The 95th Joint Session of the Aristotelian Society and Mind Association* 2021
- 24th Conference of the International Society for the Philosophy of Chemistry Conference, Buenos Aires (w/ A. Franklin)* 2021
- Departmental Seminar, Philosophy Dep., University of Bristol 2021
- 23rd Conference of the International Society for the Philosophy of Chemistry, University of Torino 2019
- Emergence: conceptual and philosophical aspects, Dutch Institute for Emergent Phenomena 2019
- Formal Methods and Science in Philosophy III, Inter-University Centre Dubrovnik 2019
- XX Taller d'Investigació en Filosofia, University of Valencia 2019

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5th Panhellenic Conference in Philosophy of Science, University of Athens	2018
26th Biennial Meeting of the Philosophy of Science Association (PSA), Seattle	2018
22nd Conference of the International Society for the Philosophy of Chemistry, University of Bristol	2018
Ninth European Congress of Analytic Philosophy, LMU	2017
21st Conference of the International Society for the Philosophy of Chemistry, Paris	2017
International IHPS Forum Leeds, University of Leeds	2017
Second London Philosophy of Science Graduate Conference, UCL	2016
20th Conference of the International Society for the Philosophy of Chemistry, Florida	2016
Philosophy of Science in a Forest (PSF 2016), Kaap Doorn, The Netherlands	2016
Workshop in the History and Philosophy of Chemistry, University of Bristol	2016

Symposia participations

28th Biennial Meeting of the Philosophy of Science Association (PSA), Pittsburgh	2022
8th Biennial European Philosophy of Science Association (EPSA) Conference, Un. of Torino	2021
British Society for the Philosophy of Science Annual (BSPS) Conference, University of Kent	2021
6th Panhellenic Conference in Philosophy of Science, University of Athens	2020
7th Biennial European Philosophy of Science Association (EPSA) Conference, Un. of Geneva	2019
British Society for the Philosophy of Science Annual (BSPS) Conference, Durham University	2019

**Recordings of these talks can be found on Youtube*

TEACHING

University of Athens	2021-present
1. Feminist Philosophy of Science (Undergraduate)	
2. Philosophy of Science (Dept. of Chemistry- Postgraduate)	
3. 17th-18th century philosophy (Undergraduate)	
4. Special issues in Philosophy of Science (Undergraduate)	
5. History of the Natural Sciences (Dept. of Chemistry- Undergraduate-)	
6. History and Philosophy of Chemistry (Dept. of Chemistry)	
University of Bristol	2015- 2021
1. Introduction to Philosophy A (Undergraduate)	
2. Introduction to Metaphysics (Undergraduate)	
3. Realism and Normativity (Undergraduate)	
4. Introduction to Philosophy B (Undergraduate)	
5. Philosophy of Physics (Undergraduate- postgraduate)	

REVIEWS, OUTREACH & OTHER ACTIVITIES

Reviewer for *Perspectives on Science, Foundations of Chemistry, Studies in History and Philosophy of Modern Physics, Analysis, Ergo, Journal for General Philosophy of Science, Chemistry-a European Journal, European Journal for the Philosophy of Science, Journal of Chemical Education, Synthese, Philosophical Studies, Interdisciplinary Science Reviews, Philosophy of Science*

Writer of the column 'Thought Experiments' of *Chemistry World* magazine, published by the Royal Society of Chemistry

Co-creator, co-editor & Writer of *Jargonium*, a website that brings the humanities closer to chemistry

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Interview in Chem Magazine, published by the <i>American Chemical Society</i>	2022
Interview in <i>Physics World</i> < https://physicsworld.com/a/physics-joins-the-fight-against-the-coronavirus-philosophical-differences-of-physics-and-chemistry-escape-to-an-exotic-exoplanet/ >	2020
Member of the organising committee of the 7th Panhellenic Conference on Philosophy of Science, University of Athens	2022
Member of the program committee of the Society for the Metaphysics of Science (SMS) 2022 conference	2022
Co-host of the International Society for the Philosophy of Chemistry Annual Conference, Bristol	2018
Co-organiser of the Workshop on the History and Philosophy of Chemistry, Philosophy Department, University of Bristol	2016
Assistant content producer of the Centre of Science and Philosophy, University of Bristol	2015

GRANTS/FUNDS

Marie Skłodowska-Curie Post-Doctoral Fellow, Project 'CREACAL: Chemical reactions as Causes and Laws'	awarded 2022
SHAC Award 2022 (Subject Development award from the Society for the History of Alchemy and Chemistry) for the further development of <i>Jargonium</i>	2022
PSA2018 Travel Grant, Philosophy of Science Association, USA	2018
Jacobsen Studentship, The Royal Institute of Philosophy	2017- 2018
Darwin Trust of Edinburgh Postgraduate Studentship	2014- 2017