Final programme of the ISPC 2019 conference

The conference will be held in the **main Hall (AULA MAGNA)** of the department of Chemistry, University of Torino (Via Giuria 7, Torino, Italy).

Parallel sessions on Wednesday July 17th will be held in the **AULA MAGNA** and **AULA DIAGONALE**, located in the same building.

Lecturing time (other than for keynote lectures) will be approximately 20 minutes + 10 min for questions.

Posters (80 x 120 cm max) will be on display for the whole duration of the meeting. A **poster session** is scheduled on Monday July 15th after lunch time.

Monday July 15th

8.30	Opening of registration desk	
9.00	Welcome by the Head of the chemistry department of the University of Torino	
	Chair: **Ghibaudi**	**Session I - Mendeleev and the 150th anniversary of the publication of his Periodic Table**
9.15-10.15	Eric Scerri (**keynote**)	The 150th anniversary of Mendeleev's 1869 article and the work of some lesser known contributors to this discovery
10.15-10.45	1 - Sereno	Prediction, Accommodation, and the Periodic Table: A reappraisal
10.45-11.00		*Coffee break*
	Chair: **Ghibaudi**	**Session II - Primo Levi chemist and writer in the 100th anniversary of his birth**
11.00-11.45	Centro studi Primo Levi - Pollyanna Zamburlin (**keynote**)	Primo Levi's Primary Elements
11.45-12.15	2 - Giacobbe	Short Film by Paolo Giacobbe inspired to the chapter 'Iron' of Levi's *Periodic System*, presented by the author.
12.15-12.45	3 - Cerruti	Epistemology in Context: a Linguistic Approach to Primo Levi's *Periodic Table*
12.45-13.45		*Lunch break*
13.45-14.15		*POSTER SESSION*

	Chair: **Scerri**	**Session III – The Periodic System: underlying issues**
14.15-14.45	4 - Hijmans and Llored	How to Investigate the Underpinnings of Sciences? The Case of the Element Chlorine
14.45-15.15	5 - Restrepo	Open questions on periodic systems
15.15-15.45	6 - Van Tiggelen	A Tale of Resilience: the Periodic System after Radioactivity and the Discovery of the Neutron
15.45-16.00		*Coffee break*
16.00-16.30	7 - Drago	The four ways of reasoning within Chemistry: Mendeleev's building his table, chemist's multiverse logical habit and a specific geometry
16.30-17.00	8 - Chandler	Organic Mathematics. Atomic Numbers as the Natural Pre-order for Integer Applications of Peirce-Tarski-Lesniewski Logics to Natural Sorts and Kinds
17.00		*ISPC business meeting*

Tuesday July 16th

	Chair: **Headley**	**Session IV – Pluralism in chemistry**
9.00-9.30	9 - Blumenthal	The electrolysis of water and its implications about pluralism in chemistry
9.30-10.00	10 - Ladyman	Pluralism and Practice in Chemistry
10.00-10.30	11 - Ruthenberg and Mets	Plurality and pluralism of the concepts of element
10.30-11.00	12 - Lõhkivi	Two kinds of pluralism about the Chemical Revolution: an attempt to reconcile active realism with practical realism
11.00-11.15		*Coffee break*
	Chair: **Schummer**	**Session V – Complexity in chemistry and related issues**
11.15-11.45	13 - Gentili	The Complexity Challenges and the role of the Philosophy of Chemistry

11.45-12.15	14 - Vancik	Hierarchies, Complexity, and the Problem of Identity
12.15-12.45	15 - Sukumar	Ontological Status of Time in Chemistry
12.45-13.45		*Lunch break*
	Chair: Cerruti	**Session VI - Ethics and chemistry**
13.45-14.30	Joachim Schummer (**keynote**)	Ethics of Chemistry
14.30-15.00	16 - Banchetti Robino	Nanotechnology as a Type of Hermeneutic Technics: Phenomenological Epistemology and the Manipulation of Nanomaterials
15.00-15.15		*Coffee break*
15.15-16.00	Gianluca Cuozzo (**keynote**)	Wastes 4.0. Perceptual Alterations of Space and Time
16.00-16.30		Overall discussion
	Chair: **Banchetti-Robino**	**Session VII – Philosophical perspectives on chemistry**
16.30-17.00	17 - Mahootian	Aristotle's Mixt Debt to Plato
17.00-17.30	18 - Headley	Philosophy and the (Mis)use of Chemical Examples: Intimacy vs. Integrity as Orientations Towards Chemical Practice
17.30-18.00	19 - Penchev	From the principle of least action to the conservation of quantum information in chemistry. Can one generalize the periodic table?

Wednesday July 17th

	Chair: **Fortin**	**Session VIII – AULA MAGNA Molecular structure and QSAR**	Chair: **Santos**	**Session IX – AULA DIAGONALE Philosophy of chemistry vs. philosophy of biology**
9.00-9.30	20 - Ochiai	Understanding molecular structure requires constructive realism	24 - Santos, Vallejos and Vecchi	A mechanistic-emergentist view on the relationship between protein composition, structure and function
9.30-10.00	21 - Villani	Molecular structure: a systemic concept	25 - Vallejos	The *in-vitro*/*in-vivo* problem. Extrapolating chemical knowledge from the laboratory to the biological world
10.00-10.30	22 - Todeschini	Quantitative-Structure Activity Relationships (QSAR):Some historical notes and epistemological considerations	26 - Nam	Phage display: a reductionist approach on the protein-protein interaction
10.30-11.00	23 - Gini	The QSAR similarity principle in the deep learning era: confirmation or revision?		
11.00-11.15		*Coffee break*		
	Chair: **Ruthenberg**	**Session X – AULA MAGNA Lab practices in chemistry: points of view**	Chair: **Van Tiggelen**	**Session XI - AULA DIAGONALE Chemistry through its history**
11.15-11.45	27 - Gerontas	From chemical to physical-chemical ways of perceiving matter-reality: the case of chromatography in the analytical practice	30 - Martinez Gonzalez	The identity of chemistry through the development of physical chemistry
11.45-12.15	28 - Tobin	Precipitation Kinetics at the Physics-Chemistry Interface: The Case of Hydrolysis Species of Post-Transition Metal Compounds	31 - Siderer	Sources for Appropriation of Chemistry into Japan by Udagawa Youan (1798-1846)
12.15-12.45	29 - Zambon	Framing chemical reactivity in reciprocal action	32 - Sahin	Dervish Pasha Who Introduce Chemistry to the Ottoman Empire and His Chemistry Book ‘’Usûl-i Kimyâ’’

12.45-13.45		*Lunch break*		
	Chair: **Villani**	**Session XII - AULA MAGNA** **Quantum chemistry**	Chair: **Mahootian**	**Session XIII - AULA DIAGONALE** **Realism, anti-realism in chemistry**
13.45-14.15	33 - Accorinti, Lombardi and Herrera	Quantum chemistry and the representationalist view of scientific models	36 – Garcia Zerecero	Molecular Models and Scientific Realism
14.15-14.45	34 - Fortin and Jaimes Arriaga	Towards an own ontology for quantum chemistry	37 - Seifert	The Chemical Bond as a Real Pattern
14.45-15.15	35 - Bristol	Philosophical Foundations of Chemistry from a Quantum Thermodynamic Engineering Perspective	38 - Ghibaudi	Molecular shape: one, no one, one hundred thousand?
15.15-15.30		*Coffee break*		
	Chair: **Restrepo**	**Session XIV – Languages, semiosis, modes of explanation in chemistry**		
15.30-16.00	39 - Schwartz and Li	Convincing or Correct, Explanations in Chemistry		
16.00-16.30	40 - Araujo Neto	How iconic can be a chemical symbol? A brief semiotic analysis of the images in the lectures of August von Hoffman		
16.30-17.00	41 - Friend	Logic, Formal Languages, Conceptual Analysis and Chemistry		
19.30	*Conference dinner*			