1st International Workshop on "Terminological Neologism Management" (NeoTerm 2025)

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Foreword to the NeoTerm 2025 Proceedings

The European Network on Lexical Innovation (ENEOLI, COST Action 22126)[1] organized the first edition of the International Workshop on Terminological Neologism Management (NeoTerm 2025)[2], held on June 18th, 2025, in Thessaloniki, Greece. The event took place at the Aristotle University Research Dissemination Center and was co-located with the 4th International Conference on Multilingual Digital Terminology Today (MDTT 2025)[3], which followed on June 19-20. The workshop brought together researchers and professionals from a wide range of disciplines – terminology, linguistics, artificial intelligence, and information science – fostering an interdisciplinary dialogue around one of the most dynamic aspects of language: the creation and management of new terms. The central aim of NeoTerm 2025 was to explore the challenges and opportunities involved in collecting, describing, processing, and representing newly coined terms in language resources. The workshop welcomed a number of different perspectives, encouraging contributions that addressed both practical applications and theoretical reflections on neology. Specific areas of focus included:

- (Semi-)automatic extraction techniques for neologisms, which involved the investigation of methodologies and tools used to identify and extract new terms from sources such as social media, academic literature, and technical documentation. The workshop placed particular emphasis on evaluating both fully automated and semi-automated approaches.
- Integration of neologisms into terminology databases, which involved the discussion of effective strategies for incorporating new terms into established terminological frameworks. Key concerns included ensuring terminological accuracy, accessibility, and long-term sustainability within these systems.
- Use of Linked Open Data (LLOD) and ISO standards, with an emphasis on how these frameworks can support the structured and interoperable representation of neologisms across multilingual and multidisciplinary resources.
- Application of Artificial Intelligence (AI) and Large Language Models (LLMs), a particularly timely topic to explore how emerging technologies can improve the extraction, validation, and management of neologisms.
- Conceptual foundations in neology, which provided a theoretical lens through which to understand and contextualize metaterminological aspects of neology.

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[1]https://eneoli.eu
[2]https://eneoli.eu/event/neoterm-2025/
[3]https://mdtt2025.web.auth.gr/en/

Reflecting the principles of Open Science, NeoTerm 2025 adopted a free and open access publication model hosted by the CEUR Workshop Proceedings platform (CEUR-WS.org). All submitted papers underwent a rigorous double-blind peer-review process, with each contribution evaluated by at least two members of the international scientific committee. The diversity of the authors' geographical affiliations – ranging from Austria, Croatia, Greece, Italy, Lithuania, Luxembourg, Poland and Slovakia – underscores the international scope of the event and the broad relevance of terminological innovation across linguistic and cultural contexts.

The program featured eight presentations across three thematic sessions, offering a multifaceted exploration of neologism management, and an invited talk delivered by Silvia Piccini (CNR-ILC, Pisa, Italy). Her talk, entitled *"And Yet It Moves": The Formal Modeling of Lexical Innovation in Saussure's Terminology*, offered an inspiring reflection on how scientific and technical vocabularies evolve in response to cognitive and conceptual transformations. Drawing on the manuscripts of Ferdinand de Saussure, Piccini illustrated how terminological creativity serves as both a mirror and a catalyst of paradigm shifts in scientific thought. Her proposal of a model for representing lexical innovation through Semantic Web technologies, supported by advanced visualization tools, opened new directions for tracing large-scale patterns in the evolution of specialized language.

The papers collected in this volume are the camera-ready version of the contributions presented during the workshop. Malamatenia Panagiotou, Konstantinos Gkatzionis, and Efstathios Kaloudis (University of the Aegean, Greece), in their paper Food Neologisms and Word Formation Trends Identified on Social Media Posts using LLMs for Hashtag Collection, examined the emergence of food-related neologisms in social media, with a focus on traditional foods from the North Aegean region. By leveraging generative AI to collect and analyze Instagram content, their study identified word-formation patterns and conceptual trends through hashtag co-occurrence and sentiment analysis, showing how user-generated content can enrich lexicographic, cultural, and terminological research.

Nina Hosseini-Kivanani (University of Luxembourg), in the paper *Neologism Validation with Large Language Models and Lexical Graphs*, proposed a hybrid approach to neologism validation. This model combines LLM-based semantic similarity with graph-based contextual verification using resources such as WordNet and Wikipedia. The method shows increased precision and recall compared to frequency- or rule-based techniques and discusses persistent issues like polysemy, domain bias, and limited lexical coverage.

Rossella Resi (University of Innsbruck, Austria), with her contribution *Representing Terminological Chains for Well-Formed Neologisms*, focused on the concept of terminological chains — sequences of related terms used in specialized discourse. The paper argues that these chains support the creation and understanding of new terms and emphasizes their proper representation in databases to ensure consistent translation and avoid misclassification.

Martina Pavić (Institute for the Croatian Language, Croatia), in her paper *Prevalence of Croatian Muscle Terms in University Textbooks*, analyzed the presence of Croatian equivalents for Latin anatomical terminology in educational texts. The work contributes to national efforts toward standardized medical terminology and opens discussion on the tension between linguistic tradition and innovation in biomedical lexicons.

Michaela Hroteková (Comenius University in Bratislava, Slovakia), with the paper *Exploring and Reevaluating Neologization Processes in the Online Spaces*, examined the emergence of neologisms in digital environments. Drawing on data from emojis, voice messages, and AI-generated texts, she explored how these new forms challenge conventional models of neology. The study highlights patterns like respelling, substitution, and sound-based creativity, calling for a revision of existing categories.

Jurgita Mikelionienė (Kaunas University of Technology, Lithuania), in her work *Neonyms in the Database of Lithuanian Neologisms: Probability and Reality*, assessed the role of this national database in documenting both general neologisms and neonyms — terms coined deliberately for technical use. The study finds a prevalence of native morphological elements alongside hybrid and blended forms and underscores the tool's significance despite some technical constraints.

Finally, Giorgio Di Nunzio (University of Padua, Italy), in *Benchmarking Automatic Tools for Neologisms Extraction: Issues and Challenges*, addressed the methodological and practical obstacles in evaluating

neologism extraction systems. The paper outlines difficulties in defining neologisms, constructing representative datasets, and achieving annotation consistency, and proposes future directions for developing robust benchmarking protocols.

To conclude, the contributions presented at NeoTerm 2025 reflect the richness and complexity of contemporary neological research, showcasing a range of methodological innovations, theoretical perspectives, and practical applications. Beyond their academic value, these papers also inspire optimism about the future of research within the ENEOLI COST Action, highlighting the vitality and collaborative potential of our scholarly community.[4]

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The Organizing Committee

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