



Proceedings of the XVI Seminar on Ontology Research in Brazil  
(ONTOBRAS 2023) and VII Doctoral and Masters Consortium on  
Ontologies (WTDO 2023)

**Brasília, Brazil, August 28 - September 01, 2023**

**Proceedings**



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## Preface

Ontology is an interdisciplinary field that studies concepts and theories that provide the foundation for building shared domain conceptualizations. In recent years, we have noticed a growing interest in the application of ontologies to solve modeling and classification problems in several areas, such as Computer Science, Information Science, Philosophy, Artificial Intelligence, Linguistics, Knowledge Management, Semantic Web, and others.

The Seminar on Ontology Research in Brazil (ONTOBRAS) is a scientific venue for researchers and practitioners from Computer Science and Information Science to discuss theories, methodologies, languages, tools, and experiences related to ontology development and application. In addition, Master's and Ph.D. students whose research is focused on ontologies have in the Doctoral and Masters Consortium on Ontologies (WTDO) the opportunity to present their proposals and discuss them with experts in the field – a valuable opportunity to receive feedback on their research and network within the community.

In its 16th edition, ONTOBRAS 2023 is recognized by the Brazilian ontology community as a unique and highly qualified forum for the presentation and discussion of ontologies and application cases. The WTDO is in its 7th edition and has been consolidating itself as a rich space for discussion among researchers of different generations, contributing to the expansion and renewal of the community of ontology researchers in Brazil.

In the main track, seven papers were accepted as full papers (well-evaluated papers describing research with clearly demonstrated results), one as short paper (well-evaluated paper describing ongoing work), and two works were accepted as posters. In WTDO, four submissions describing ongoing master's project research were selected. All submissions were reviewed by at least three members of the program committee, which is composed of national and international experts in the field.



ONTOBRAS 2023 was held with the 14th International Conference on Biomedical Ontology (ICBO 2023). Besides technical sessions presenting the accepted papers, the program included five tutorials, a panel, and four keynote speakers: Mathias Brochhausen (“Improving Ontologies to foster AI in Biomedicine”), Barry Smith (“Use of AI in Medical Research and the Role of Ontology”), Maurício Barcellos (“A BFO-based Authority Framework for Healthcare Corporations”) and Renata Guizzardi (“Ethical Requirements for AI Systems”).

We thank the Organizing Committee for their commitment to the success of the event, the Program Committee for their hard work, the Steering Committee for their support, the authors for their submissions, the keynote speakers, panelists, and tutorialists for sharing knowledge, and the participants for the presence and participation.

## **September 2023**

**Monalessa Perini Barcellos  
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