

ER 2026

Companion Proceedings of ER 2026:
Posters and Demos, Tutorials, Doctoral Symposium

St. John's, Canada, 5-8 October, 2026

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Chairs

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Posters and Demos

Tutorials

Doctoral Symposium

<https://er2026.org>

PREFACE

These proceedings bring together the papers and extended abstracts presented across the Posters and Demos, Tutorials, and Doctoral Symposium tracks at the 45th International Conference on Conceptual Modeling (ER 2026). As the premier international venue dedicated to the foundations, methods, and applications of conceptual modeling, ER marked its 45th anniversary by focusing on the timely theme of “Conceptual Modeling and Sustainability.”

This focus reflects a critical contemporary reality. In an age defined by constrained resources and mounting environmental impacts, conceptual modeling has never been more vital. As individuals, organizations, and nations encounter unexpected ecological and societal shifts, software architectures and data systems must be developed to actively cope with and help resolve these pressures. Conceptual modeling offers the rigorous abstractions needed to articulate, analyze, and address sustainability requirements across diverse domains.

ER 2026 was hosted at the Core Science Facility of Memorial University in the culturally vibrant city of St. John’s, Canada. We trust that this volume will stand as an enduring reference for the ideas presented and the dedicated community that gathered in St. John’s.

Acknowledgements

We would like to thank all authors and speakers for their contributions, and the programme committee members and additional reviewers for their timely reviewing. We would also like to extend our gratitude to the local organizers at the [Memorial University Core Science Facility \(CSF\)](#).

Posters and Demos

Track Chairs

Roman Lukyanenko	University of Virginia, USA
Anna Wiedemann	Bern University of Applied Sciences, Switzerland

Programme Committee

Mara Abel	Universidade Federal do Rio Grande do Sul, Brazil
Jacky Akoka	CEDRIC-CNAM, France
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Binny Samuel	University of Cincinnati, USA
Monique Snoek	Research Center for Information Systems Engineering, KU Leuven, Belgium
Daniel Staegemann	Otto-von-Guericke University Magdeburg, Germany
Hasan Yasar	Carnegie Mellon University, USA

As part of the 45th International Conference on Conceptual Modeling, the ER 2026 Posters and Demos track is aimed at showcasing emerging research ideas and work-in-progress as well as demonstrating novel methods and tools in any area related to conceptual modeling. We received ten submissions. Each submission was reviewed by members of the program committee and, in some cases, by additional reviewers. Based on the reviews received, all ten papers were accepted for presentation at the conference. The papers cover a range of topics that are both timely and relevant to the field of conceptual modeling. Each paper addresses emerging problems or explores traditional themes in novel ways. The posters and demos accepted for this track help to understand the future research directions in conceptual modeling as well as discuss the practical applications of tools and prototypes. Themes that emerge from the accepted papers include large language models, ontological modeling, robotics, virtual reality, process modeling, storytelling with data, knowledge management, and database design.

The Posters and Demos track required significant effort by many people. We would like to thank the authors of all submitted papers, program committee members, reviewers, the ER 2026 general chairs, program chairs, and the local organizing committee.

Tutorials

Track Chairs

Isabelle Comyn-Wattiau
Stephen W. Liddle

ESSEC Business School, France
Brigham Young University, USA

This year's tutorial program features three tutorials addressing important and foundational developments in conceptual modeling.

The first tutorial, titled “Building Executable Entity-Relationship Models”, is presented by Joshua Send. It explores how Entity-Relationship models can be executed directly using TypeDB and TypeQL, preserving constructs such as relationship identity, subtypes, roles, and participation constraints. Participants develop a sustainable supply-chain model and learn how to turn an ER diagram into a running, schema-validated database.

The second tutorial, titled “Integrating Data and Processes - Integrated Statics & Dynamics”, is presented by Bert de Brock. It examines the interdependence between the structural and behavioral aspects of information systems and shows how statics, dynamics, and their mutual constraints can be modeled in an integrated way, treating both states and actions as first-class citizens.

The third tutorial, titled “An Overview of Process Modelling Languages and their Interrelationships”, is presented by Sander Leemans. It surveys current and earlier process modeling formalisms, comparing their purposes, commonalities, and differences, and considers their growing importance for automation and Artificial Intelligence.

Doctoral Symposium

Programme Chairs

Sotirios Liaskos	York University, Canada
Jolita Ralyte	University of Geneva, Switzerland

Mentors of the Doctoral Symposium

Isabelle Comyn-Wattiau	ESSEC Business School, France
Stephen W. Liddle	Brigham Young University, USA
Oscar Pastor	Universidad Politécnica de Valencia, Spain
Monique Snoeck	KU Leuven, Belgium
Maribel Yasmina Santos	University of Minho, Portugal
Veda C. Storey	Georgia State University, USA

The ER 2026 Doctoral Symposium invited early-career doctoral students who had defined their research objective in the field of conceptual modelling. This symposium offered them an opportunity to present their work and receive valuable feedback from mentors who are recognized researchers and experts in the field. This volume brings together four articles from this symposium, addressing current and relevant topics, including data governance, LLM-assisted domain modeling, modeling for AI-assisted systems, and meta-modeling for representing indirect measures in information systems.

We hope that the event was a constructive experience for students and that readers will enjoy discovering their work.