

# PoEM Companion 2025

Companion Proceedings of the 18<sup>th</sup> IFIP WG 8.1 Working Conference on the Practice of Enterprise Modeling Forum, Business Case & Tool Forum, Doctoral Consortium, and Session on Advancing Enterprise Modeling co-located with PoEM 2025, Geneva, Switzerland, December 3-5, 2025

Edited by

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This proceedings volume includes papers from:  
PoEM 2025 Forum, Business Case & Tool Forum,  
Doctoral Consortium and the session on Advancing Enterprise Modeling

<https://poem2025.unige.ch>

## Preface

The 18th edition of the IFIP WG 8.1 working conference on the Practice of Enterprise Modelling took place in Geneva, Switzerland, from December 3 to 5, 2025. It was held as a physical event at the University of Geneva, Battelle campus in Carouge, a municipality of Geneva.

The PoEM conference series, together with collocated events, are dedicated to advancing the understanding of Enterprise Modeling (EM) practices by fostering a dynamic exchange between academic researchers and practitioners from industry and the public sector. The edition of PoEM 2025 focused on Enterprise Modeling for Sustainable Reindustrialization. The contributors and attendees were invited to explore novel EM methods, techniques, and tools enabling enterprises to support the reindustrialization of society through the sustainable integration of advanced technologies such as digital twins, robotics, artificial intelligence, and cyber-physical systems.

Following its tradition, the first day of PoEM 2025 accommodated several highly interactive related events:

- the Forum for presenting research in progress and discussing emerging ideas, challenges, methods, techniques, and tools relevant for Enterprise Modeling,
- the Business Case & Tool forum inviting practitioners to share their best Enterprise Modeling practices and tool experiences,
- the Doctoral Consortium allowing young researchers to receive feedback on their doctoral research projects from experts and to share their experience with peers, and
- an exploratory workshop on Enterprise Modelling for Context Engineering.

Following the call for workshops, the workshop chairs received three workshop proposals, which were accepted:

- The 3<sup>rd</sup> International Workshop on the Foundations and Applications of Capabilities in Enterprises, and Transformations and ESG Initiatives (FACETE) was organized by Geert Poels and Jonas Van Riel. Unfortunately, this workshop did not receive submissions and was cancelled.
- The 2<sup>nd</sup> workshop on Advancing Enterprise Modelling through Digital Transformation, FAIR Data Management, and Blockchain Integration was organized by Markus Helfert, Mansoor Ahmed and Shahid Hussain. This workshop received 5 submissions, from which 4 were accepted (one of them was finally withdrawn). Since none of the organizers could attend the conference, the workshop was cancelled but the three accepted papers were presented in a special session called Advancing Enterprise Modelling chaired by Saïd Assar, the Workshops Chair.
- The Enterprise Modelling for Context Engineering Workshop was organized by Stijn Hoppenbrouwers, Henderik Proper and Vincent Wiegel. This workshop did not solicit proposals but rather took place in the form of a brainstorming session.

This volume brings together all the papers accepted at the related events mentioned above. All papers were peer-reviewed by members of the program committee of the corresponding event and received three reviews, with the exception of the Doctoral Consortium papers, which received two reviews each. The PoEM 2025 Forum received 11 submissions out of which 8 have been accepted. Additionally, 11 papers from the main research track have been accepted to the Forum. The Business Case & Tool Forum received 5 submissions out of which 2 have been accepted. The Doctoral Consortium received 7 submissions and accepted 6.

We express our gratitude to the conference organizing team for their hard work which made this event possible, as well as to all the participants for sharing their ideas, achievements and practical expertise, and for the friendly atmosphere and positive energy that prevailed throughout the conference.

January 2026

Jolita Ralyté  
Jelena Zdravkovic  
Saïd Assar  
Georgios Koutsopoulos

# Conference Organization

## General Chairs

Jolita Ralyté	University of Geneva, Switzerland
Jelena Zdravkovic	Stockholm University, Sweden

## Program Chairs

Hans-Georg Fill	University of Fribourg, Switzerland
Yves Wautelet	KU Leuven, Belgium

## Forum Chairs

Marcela Ruiz	ZHAW, Zurich, Switzerland
Estefanía Serral Asensio	KU Leuven, Belgium

## Business Case & Tool Forum Chairs

Felix Härer	University of Fribourg, Switzerland
Eva Polini	IIBA Geneva, Switzerland

## Doctoral Consortium Chairs

Anne Gutschmidt	University of Rostock, Germany
Irina Rychkova	Université Paris 1 Panthéon-Sorbonne, France
Janis Stirna	Stockholm University, Sweden

## Workshop Chairs

Saïd Assar	Institut Mines-Telecom Business School, France
Georgios Koutsopoulos	Stockholm University, Sweden

## Steering Committee Chairs

Jolita Ralyté	University of Geneva, Switzerland
Kurt Sandkuhl	University of Rostock, Germany
Janis Stirna	Stockholm University, Sweden

## Webmaster

Alexandre Vavasseur	University of Geneva, Switzerland
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## PoEM 2025 Forum

The PoEM 2025 Forum provides a highly interactive platform for discussing emerging ideas, challenges, methods, techniques, and tools in the field of Enterprise Modeling. It welcomed contributions that explore foundations of enterprise modeling, enterprise modeling for software development, modeling languages and ontologies, human factors, enterprise engineering, resilience and sustainability, and empirical studies.

Two types of submissions were encouraged: visionary papers, presenting innovative research projects at an early stage, and evaluation papers, reporting empirical results such as end-user feedback, proof of concepts, or evidence-based hypotheses requiring novel modeling solutions.

These proceedings include 19 papers accepted for the Forum. Eight papers were selected by the Program Committee after a rigorous review process, where each submission was evaluated by three reviewers and discussed by the Forum Chairs. Eleven additional papers were invited from the main research track, having already undergone peer review.

The accepted papers cover a wide range of topics, including modelling languages, sustainability considerations, AI-driven enterprise solutions, and innovative modeling applications. Together, they reflect the Forum's mission to foster dialogue between researchers and practitioners and to advance the state of the art in enterprise modeling. Specially, this year PoEM featured an interactive session with focus groups for the analysis of research challenges and practical trends in Enterprise modelling.

We sincerely thank the Program Committee members for their high-quality reviews and their contribution to the success of the Forum, as well as the authors for their valuable research contributions, engagement and constructive participation.

December 2025

Marcela Ruiz  
Estefanía Serral Asensio

## Forum Chairs

Marcela Ruiz	ZHAW, Zurich, Switzerland
Estefanía Serral Asensio	KU Leuven, Belgium

## Forum Program Committee

Dominik Bork	TU Wien, Austria
Jānis Grabis	Riga Technical University, Latvia
Simon Hacks	Stockholm University, Sweden
Audrone Lupeikiene	Vilnius University Institute of Mathematics and Informatics, Lithuania
Beatriz Marín	Universidad Politécnica de Valencia, Spain
Raimundas Matulevicius	University of Tartu, Estonia
David Mosquera	ZHAW, Zurich, Switzerland
Robert Pergl	Czech Technical University in Prague, Czechia
Thomas Polacsek	ONERA, France
Ben Roelens	Open Universiteit, Ghent University, The Netherlands
Peteris Rudzajs	Riga Technical University, Latvia
Janis Stirna	Stockholm University, Sweden
Thorsten Weyer	Technische Hochschule Mittelhessen, Germany

# PoEM 2025 Business Case & Tool Forum

The Business Case & Tool Forum highlights practical implementations and tool-supported innovations that advance the field of Enterprise Modeling. Research on software, services, and operational methods plays a crucial role in transforming modeling ideas into usable solutions, enabling modeling languages, methods, and conceptual innovations to be applied effectively in real contexts. Together, the contributions illustrate the diversity of approaches used to operationalize modeling concepts and reflect the evolving landscape of tool support in Enterprise Modeling practice.

We thank all authors, the program committee, and participants for their engagement and the high quality of the work presented. Their efforts contribute to strengthening the dialogue between research and practice and to showcasing how Enterprise Modeling continues to evolve through concrete implementations and technological innovation. We also express our gratitude to the PoEM 2025 organizers for their support in gathering this Forum.

December 2025

Felix Härer  
Eva Polini

## Business Case & Tool Forum Chairs

Felix Härer	University of Fribourg, Switzerland
Eva Polini	IIBA Geneva, Switzerland

## Program Committee

Dominik Bork	TU Wien, Austria
Ilia Bider	Stockholm University, Sweden / Tartu University, Estonia
Sarah Bouraga	EM Normandie Business School, France
Felix Cammaerts	KU Leuven, Belgium
Simon Curty	University of Fribourg, Switzerland
Istvan David	McMaster University, Canada
Simon Hacks	Stockholm University, Sweden
Andreas Martin	FHNW, Switzerland
Hans Mulder	Universiteit Antwerpen, Belgium
Iris Mulder	University of Applied Sciences Utrecht, Netherlands
Gil Regev	École Polytechnique Fédérale de Lausanne, Switzerland
Kristina Rosenthal	Hochschule Niederrhein University of Applied Sciences, Germany

## PoEM 2025 Doctoral Consortium

This volume of CEUR-WS proceedings includes papers of the Doctoral Consortium (DC) held in conjunction with the 18th IFIP WG 8.1 Working Conference on the Practice of Enterprise Modelling – PoEM 2025. The Doctoral Consortium took place on December 3, 2025 in Geneva, Switzerland.

PoEM is an annual meeting place and a discussion forum for the enterprise modelling and information systems community. It gathers academic researchers and practitioners aiming to share their achievements, knowledge and experiences on various topics related to enterprise modelling: enterprise modelling theory, practice, tools and frameworks, enterprise architecture, human aspects and quality issues in enterprise modelling, etc.

The aim of the Doctoral Consortium at PoEM 2025 was to increase the involvement of PhD students working on foundations, methods, tools and applications of enterprise modelling. This year the DC was labeled as working doctoral consortium to emphasize that it was an interactive meeting place for PhD students from the enterprise modelling and information systems community, to offer them the opportunity to present and discuss their research with other academics and to get feedback and advice on their research studies. The theme of the DC was verification, validation, and evaluation (VVE) of enterprise modeling research. This meant that in addition to the more traditional early-stage contributions presenting a PhD thesis project, the DC also solicited contributions on research designs of the VVE activities of PhD students.

The Doctoral Consortium received 7 submissions coming from Germany, Morocco, Romania, Sweden, and Switzerland. It accepted 6 submissions based on quality of the submission and relevance to PoEM. Each paper was evaluated by two senior researchers – members of the Program Committee, and received detailed and constructive comments for improving the paper before including it in the proceedings. Three reviewers also played the role of mentor during the DC and provided additional comments and recommendations to the students for their further advancement in their doctoral research project. The DC also included a joint working session where PhD students worked together with mentors on integrational aspects of their research.

We would like to express our gratitude to the Program Committee members and Mentors of the Doctoral Consortium, for their efforts in providing very thorough evaluations of the submitted doctoral papers. We also wish to thank the PhD students who accepted to share with us their research ideas and progress.

Finally, we owe special thanks to the General Chairs and the local organization of PoEM 2025 for their support.

November 2025

Anne Gutschmidt  
Irina Rychkova  
Janis Stirna

## Doctoral Consortium Chairs

Anne Gutschmidt	University of Rostock, Germany
Irina Rychkova	Université Paris 1 Panthéon-Sorbonne, France
Janis Stirna	Stockholm University, Sweden

## Program Committee

Robert Andrei Buchmann	Babeş-Bolyai University of Cluj Napoca, Romania
Xavier Franch	Universitat Politècnica de Catalunya, Sweden
Hans-Georg Fill	University of Fribourg, Switzerland
Ana-Maria Ghiran	Babes-Bolyai University of Cluj-Napoca, Romania
Anne Gutschmidt	University of Rostock, Germany

Simon Hacks	Stockholm University, Sweden
Marite Kirikova	Riga Technical University, Latvia
Evangelia Kavakli	University of the Aegean, Greece
John Krogstie	Norwegian University of Science and Technology, Norway
Henderik A. Proper	TU Wien, Vienna, Austria
Jolita Ralyté	University of Geneva, Switzerland
Irina Rychkova	Université Paris 1 - Panthéon – Sorbonne, France
Estefanía Serral Asensio	KU Leuven, Belgium
Janis Stirna	Stockholm University, Sweden
Jelena Zdravkovic	Stockholm University, Sweden

## Session on Advancing Enterprise Modeling

The papers presented in this session were originally submitted to the 2<sup>nd</sup> Workshop on Advancing Enterprise Modelling through Digital Transformation, FAIR Data Management, and Blockchain Integration. The aim of the workshop was to explore Enterprise Modeling through digital transformation, FAIR data management, and blockchain integration. The workshop received 5 submissions out of which 4 have been accepted. However, the workshop was finally canceled due to the unavailability of the workshop organizers to attend the conference and to organize the workshop activities. The organizers also withdrew their own paper.

To treat the authors of accepted papers fairly, we decided to open a special session for the three remaining papers. The PoEM 2025 Workshops Chair Saïd Assar kindly accepted to play the role of this session chair.

January 2026

Jolita Ralyté

## Workshop Chairs

Mansoor Ahmed	Maynooth University, Ireland
Muhammad Irfan Khalid	University of Agder, Norway
Markus Helfert	Maynooth University, Ireland

## Workshop Program Committee

Tehreem Ashfaq	City St George's, University of London, United Kingdom
Saif Ur Rehman Malik	Trinity College Dublin, Ireland
Nadeem Yaqub	Beijing University of Technology, China
Umair Yousuf	University of Calabria, Italy
Ibtisam Ehsan	University of Chinese academy of Sciences, Beijing, China