

#### MTSR 2025 CONFERENCE PROGRAMME

19th International Conference on Metadata and Semantics Research

December 16–19, 2025

Thessaloniki, Greece — APEC Amphitheater of Perrotis College

- Yenue: APEC Amphitheater of Perrotis College / American Farm School
- Address: Marinou Antypa 54, Thessaloniki 57001, Greece
- Maps: <a href="https://maps.app.goo.gl/QMmC5gyALJrRJB9w5">https://maps.app.goo.gl/QMmC5gyALJrRJB9w5</a>

A conference-arranged bus service will collect participants from designated pick-up points in Thessaloniki city centre from Wednesday 17 to Friday 19 in the morning, and will return them to the same points in the afternoon at the end of each conference day.



### Tuesday, 16 December 2025

#### **Special Session – MTSR 2025**

Metadata, Ontologies, and AI for GLAM Institutions: Innovation in Art, Museum, and Music Collections, Cultural Heritage Preservation, and Libraries as Data Spaces

Venue: Dimitris and Aliki Perrotis Library

Arrival
followed by Welcome Coffee
Welcome by
Emmanouel Garoufallou, International Hellenic University
Damiana Koutsomiha, Perrotis College / American Farm School
Short tour in the Main Library and Archive
Short tour in the Main Library and Archive
Chaired by Georgia Zafeiriou
The American Farm School and Perrotis College Libraries: A GLAM example of
innovation
Damiana Koutsomiha
Libraries: dynamic cultural and educational ecosystems based on structured
knowledge
Ioana Cornelia Cristina Crihana
Implementing a metadata schema for interoperable oral history collections through
mappings to Dublin Core
Andreas Vlachidis
Language Model-Driven Approach for Metadata Extraction from Scientific
Publications
Muhammad Asif Suryani, Yousef Younes, Brigitte Mathiak
Development of an Ontology-based Decision Support System for Bulgarian Traditional
Medicine with Herbals
Sonya Chimpireva, <b>Maria Nisheva-Pavlova</b>
Developing Open-Source Solutions for GLAM Institutions, School Libraries, and the
Humanities: The Reasonable Graph Platform
Nikos Papazis, Emmanouel Garoufallou, Pantelis Brattis, Georgia Zafeiriou, Eleni Fili,
Iasonas Spanopoulos, Aliki Soultani, Chrysanthi Theodoridou
Discussion and closing

## Wednesday, 17 December 2025

9:00 – 10:00	Arrival and Registration followed by Welcome Coffee
10:00 – 10:30	Day Conference Welcome by
	Emmanouel Garoufallou, International Hellenic University Miguel-Ángel Sicilia, University of Alcalá, General Chairs of MTSR 2025
	Christos Ritzoulis, Vice President for Academic Affairs, American Farm School Kyriaki Zinoviadou, Dean of Perrotis College
	Zafeiriou Georgia, International Hellenic University Rania Siatri, General Hospital of Agios Nikolaos Chairs of MTSR 2025
	General Information Announcements Kostouda Maria, Administrative and Resources Coordinator, Perrotis College
	Semantic Interoperability and Research Infrastructures - CIDOC CRM, Provenance and Ontological Modelling - Open repositories Chaired by Jane Greenberg
10:30 – 10:50	Knowledge Graphs for Research Data Management: Use Cases in Germany's National Research Data Infrastructure  Fidan Limani, Lozana Rossenova, Carsten Fortmann-Grote, Benjamin Zapilko, Atif Latif, Anja Gerber, Heike Fliegl
10:50 – 11:10	Leveraging LLMs to Build Text Narratives from CIDOC CRM Sofia Stamou, Eleftherios Kalogeros, Matthew Damigos, Manolis Gergatsoulis
11:10 – 11:30	A CIDOC CRM Based Data Model for Watermarks Documentation Ilektra Karageorgou, Eleftherios Kalogeros, Manolis Gergatsoulis, Matthew Damigos, Ilias Chrysostomidis
11:30 – 11:50	BERD@NFDI: Metadata Schema Specification  Atif Latif, Fidan Limani, Klaus Tochtermann
11:50 – 12:10	Al Tools for Text Archive Document Management: Current State and Future Perspectives for Al Literacy Development Yasena Chantova, Marina Encheva, Veselin Chantov
12:10 – 12:30	Representing Meta-Information in CIDOC CRM: A Case Study on Provenance Interpretation in Archaeology Matthew Damigos, Manolis Gergatsoulis, Eleftherios Kalogeros, Georgios Papaioannou

12:30 – 13:30	Lunch at the foyer of the APEC Amphitheater of Perrotis College
	Agriculture, Food and Environment Chaired by Kyriaki Zinoviadou
13:30-13:50	FAIR Metadata in Global Water Data: Insights from a Small-Scale Review of IHP-WINS Robert Bierck, Robert Sammarco
13:50-14:10	Multi-Temporal, Multi-Resolution, Multispectral UAV Datasets for Sunflower Development Monitoring and Early-Stage Density Estimation Pavel Genevski, Kalinka Kaloyanova, Radoslav Stefanov
14:10-14:30	A Data Model to Analyse Heterogeneous Data on Used Drinking Water: Case Study of Haute Matsiatra, Madagascar  Jacques Aimé Razafindragy, Vincent Armant, Lalaina Fanomezantsoa, Pierre  Andrianajoro, Felipe Vargas-Rojas, Eric Delaitre, Desconnets Jean-Christophe, Aimé Richard Hajalalaina
	Digital Humanities, Cultural Semantics and Surveillance Systems  Chaired by Fidan Limani
14:30 - 14:50	Digital Repositories for STEAM Educators in an AI- and Data-Driven Educational Landscape (Agricultural Education Relevance)  Konstantina Maidatsi, Georgios Papaioannou
14:50 – 15:10	Ontology Alignment for ESG Data Interoperability: A Case Study  Giulio Macilenti, Manuel Fiorelli, Armando Stellato
15:30	End of the first day  participants will gather in the foyer of the APEC Amphitheater at Perrotis College and then return to their hotels using the conference-arranged bus service



























## Thursday, 18 December 2025

8:00 - 09:00	Arrival and Registration
	AI, LLMs and Semantic Technologies - Applied Metadata,  Decision Support and Repositories  Chaired by Maria Claudia Cavalcanti
09:00 – 09:20	Machine Learning with Graphs for Incident Classification  Kristina Arnaoudova, Maria Nisheva-Pavlova
09:20 – 09:40	SIMONE: Semantic Representation of Model Outputs for Scientific Knowledge Graph Enrichment  Felipe Vargas-Rojas, Vincent Armant, Isabelle Mougenot
09:40 – 10:00	Semantic Query Expansion for Job Recommendation: A RAG Approach with LLMs and ESCO Ontology  Hakim Mokeddem
10:00 – 10:20	Exploiting Metadata Features of Hugging Face Models to Uncover Insights and Opportunities for Open Research  Muhammad Asif Suryani, Saurav Karmakar, Kanishka Silva, Brigitte Mathiak
10:20 – 10:40	Additive Manufacturing Data Integration to Enable Artificial Intelligence Based Closed-loop Control Antonios Kontsos and Ahmed Ben Sidhom
10:40 - 11:00	Coffee Break
	AI, LLMs and Semantic Technologies - Applied Metadata, Decision Support and Repositories Chaired by Antonios Kontsos
11:00 – 11:20	Metadata and 3D Shape Similarity: Establishing a Ground Truth Dataset Bahareh Shakibajahromi, Edward Kim, Jane Greenberg and David Breen
11:20-11:40	Insights into the Mapping Structure of the Human Phenotype Ontology and SNOMED CT for Deep Phenotyping  Miguel-Angel Sicilia, Elena Garcia-Barriocanal, Marçal Mora-Cantallops, Alberto  Nogales, Alberto Ballesteros, Luis Usero
11:40 – 12:00	ODQA: A Starting Point for Agentic Open Data Question Answering  Lisa Wenige, Lena Tohoff, Doreen Strass
12:00 – 12:20	A Contextually Comprehensive Metadata Model: Bridging Simplicity and Expressiveness for GenAI-based Metadata Generation  Burak Toptas, Richard Lenz and Rainer Groß
12:20 – 12:40	Metadata and metrics for cybersecurity dataset evaluation Thaísa S. Hernandez, Caroline D. Gandolfi, Luiz Olavo B. S. Santos, Anderson F. P. dos Santos and Maria Claudia Cavalcanti
12:40 – 13:00	Serving Data Right: A Data Steward's Guide to RDM Tool Evaluation  Hajira Jabeen

13:00 – 14:00	Lunch Break Walk to the Aliki Perrotis Residence Hall Restaurant
14:00 – 15.30	Guided Tour of AFS Schools, Libraries, Museum and Archive Coffee in the Library Commons
	AI, LLMs and Semantic Technologies - Applied Metadata, Decision Support and Repositories Chaired by Hakim Mokeddem
15:30 – 15:50	Combining LLMs-based Conversational Agents and Ontologies for Open Data Research Antoine Dupuy, Nathalie Aussenac-Gilles, Christophe Baehr, Cassia Trojahn
15:50 – 16:10	Defining Axioms to Address the Cultural Snapshot Phenomenon: Introducing the Spatiotemporal States Reference Model (SStaRM)  Spiridon Mousouris, Evangelia Kavakli, Konstantinos Kotis
16:10 – 16:30	LLM-Enhanced Sub-Ontology Development for Improved Interdisciplinary Discoverability in Scientific Investigation Methods and Tooling Nina Gialoussi, Maria Ioanna Maratsi, Yannis Charalabidis and Charalampos Alexopoulos
16:45	End of the second day  participants will gather in the foyer of the APEC Amphitheater at Perrotis College and then return to their hotels using the conference-arranged bus service

	Gala Dinner Venue
20:30-22:30	Les Zazous
	All Day Seafront Bar Restaurant
	Themistoklis Sofoulis 118, Kalamaria, Thessaloniki, Greece
	Les Zazous is an all-day seafront bar restaurant located in Kalamaria, offering a relaxed atmosphere with views of the Thermaic Gulf. It is a popular venue combining Mediterranean cuisine with a modern setting.
	Instagram: <a href="https://www.instagram.com/les.zazous/">https://www.instagram.com/les.zazous/</a> Google Maps: <a href="https://maps.app.goo.gl/vdRFVRdLGvr6H1yi6">https://maps.app.goo.gl/vdRFVRdLGvr6H1yi6</a>

## Friday, 19 December 2025

9:30 – 10:00	Arrival
	Digital Libraries, Knowledge Extraction and Open Data Chaired by Miguel-Angel Sicilia
10:00 – 10:20	An Extensible Ontology for Describing Time Series Data in an Industrial Setting  Alexander Ebner, Tobias Schwarzinger, Gernot Steindl
10:20 – 10:40	ChemDCAT-AP: Enabling Semantic Interoperability with a Contextual Extension of DCAT-AP  Philip Strömert, Hendrik Borgelt, David Linke, Mark Doerr, Bhavin Katabathuni, Oliver Koepler, Norbert Kockmann
10:40 - 11:00	Creating Access through Digital Objects: Links Between Digital Collections and Archival Finding Aids Ann Abney
11:00 – 11:20	Human-in-the-Loop and AI: Crowdsourcing Metadata Vocabulary for Materials Science  Jane Greenberg, Scott McClellan, Addy Ireland, Robert Sammarco, Colton Gerber,  Christopher B. Rauch, Mat Kelly, John Kunze, Yuan An and Eric Toberer
11:20 – 12:00	Coffee Break
12:00 – 12:45	KEYNOTE SESSION  Keynote Speaker:
	Nikos Manouselis
	Founder and CEO of Agroknow
	"My 20-Year Journey in Metadata and Semantics"
	Moderators: Miguel-Ángel Sicilia, University of Alcalá, Spain Emmanouel Garoufallou, International Hellenic University, Greece

13:00 – 14:15	ROUNDTABLE
	on Applying Metadata and Semantics in Viticulture
	(see MTSR2025 website for more information)
	Panelists
	The panel will feature leading experts in viticulture, wine science, and agri-food innovation:
	<b>Stefanos Koundouras  </b> Associate Professor of Vineyard Natural Environment, School of Agriculture, Aristotle University of Thessaloniki
	Maritina Stavrakaki   Assistant Professor of Viticulture, Department of Crop Science,
	Agricultural University of Athens

	Kiki Zinoviadou   Dean of Perrotis College, American Farm School Michalis Boutaris   Vice President of Kir-Yianni Winery, responsible for viticulture, sustainability, investments, and innovation Ilias Kalfas   Senior Researcher, The Hub, American Farm School  Moderator: Nikos Manouselis, CEO of Agroknow  Discussion Topics  - Challenges of organizing and standardizing specialized information on vines and wines  - Metadata schemas and ontologies suitable for viticulture and oenological data  - Managing diverse scientific, historical, geographic, sensory, and cultural information sources  - Linking data on vineyards, grape varieties, and wine products through semantic technologies  - The role of digital libraries, archives, and museums in preserving wine heritage  - Interoperability and integration with broader agricultural and cultural heritage repositories  This roundtable aims to highlight how metadata and semantics can enhance innovation in viticulture, support sustainable wine production, facilitate research, and preserve the cultural and scientific knowledge embedded in wine-related collections. It will provide a unique interdisciplinary bridge between information science and the world of viticulture, enriching the thematic landscape of MTSR and offering participants practical insights into a rapidly evolving field.
14:15 – 14:30	Best Paper and Best Student Paper Awards Ceremony Sponsored by EuroCRIS: The International Organisation for Research Information
	Final remarks – Closing ceremony Closing Ceremony and Announcement of MTSR 2026 Chaired by Emmanouel Garoufallou, International Hellenic University Georgia Zafeirou, International Hellenic University
14.30	Lunch
	at the foyer of the APEC Amphitheater of Perrotis College & Farewell
15:30	End of the third day participants will gather in the foyer of the APEC Amphitheater at Perrotis College and then return to their hotels using the conference-arranged bus service

#### Saturday 20 December 2025

# One-Day Excursion Saturday 20 December 2025

08:00 - 17:00

The one-day excursion offers participants an immersive cultural and educational experience, highlighting the rich historical, intellectual, and viticultural heritage of Northern Greece.

The program includes guided visits to:

- Public Library of Veria An internationally recognized library known for its innovative services, exceptional community engagement, and award-winning programs. The library is a recipient of the Bill & Melinda Gates Foundation Access to Learning Award, reflecting its global impact and leadership in modern library practices.
- **Vergina (Aigai)** The ancient capital of the Macedonian kingdom and burial site of Philip II, father of Alexander the Great. The recently opened Archaeological Museum of Aigai is considered one of the most impressive museums in Greece, featuring the royal tombs and priceless treasures that illuminate the grandeur of the Macedonian dynasty.
- **Kir-Yianni Winery in Naoussa** One of Greece's most renowned wineries, situated on the slopes of Mount Vermion. Participants will enjoy a guided tour of the vineyards and wine cellars, followed by a curated wine-tasting session and a traditional Macedonian lunch at the winery's restaurant.

At the end of the day, participants will return to their hotels using the conference-arranged bus service.

