

Industrial Ontology Foundry (IOF)
Creating semantic content for industry

April 23-24, 2018

National Institute of Standard and Technology, Gaithersburg, MD USA

Agenda

IOF Session Chairs: Dr. Dimitris Kiritsis, EPFL, Mr. Evan Wallace, NIST

Day 1 – Monday, 23 March 2018

Walker/Whetstone room

Plenary Session

9:00 – 9:15 *Welcome*

9:15 - *Keynotes and other session talks (see [main agenda on website](#) for details)*

...

12:30 – 2:00 *IOF Working Lunch (grab lunch and meet in Goshen B)*

- Review charter. Does it need to be revised or extended?
 - does the TOB need to make their own charter to cover their concerns?
- Discuss potential new Domain Boards
- Work on roadmap
- Discuss dinner plans

2:00 *Presentations and other session talks (see [main agenda on website](#) for details)*

...

4:30 – 5:00 *The Industrial Ontology Foundry state of play*

- Governance Board (Jim Wilson, OAGi)
- Technical Oversight Board (Michael Gruninger, University of Toronto)

5:00 – 5:30 *Other session talk*

5:30 *Adjourn*

6:00 - ?:00 *IOF Social Dinner (not sponsored) – Location to be determined*

Day 2 – Tuesday, 24 March 2018

Washingtonian room

IOF Session break out

8:30 – 9:10 *Keynote – Model-Based for Manufacturing in Airbus (Fernando Mas, Airbus Senior Expert - remote)*

- **Presentation (30 min)**
- **Discussion (10 min)**

9:10 – 9:20 *Overview of IOF Session*

Case Studies

9:20 – 9:50 *Standards for smart manufacturing: using ontologies to landscape standards into knowledge graphs (Irlan Grangel-González, Fraunhofer IAIS)*

9:50 – 10:05 *BREAK*

10:05 – 10:35 *Use Case: End of Life Processing (Richard Sharpe, Loughborough University)*

Introductions

10:35 – 10:45 *ST4SE - Semantic Technologies for Systems Engineering (Dr. Todd Schneider, Engineering Semantics)*

10:45 – 10:55 *Development of Ontology based decision support system for Manufacturing Process Planning (Dusan Sormaz [presenter], Professor, Arkopaul Sarkar, PhD Student; Department of Industrial and Systems Engineering Ohio University)*

10:55 – 11:10 *Towards a Unified Database for the Norwegian Manufacturing Research Laboratory (Oleksandr Semeniuta, Norwegian University of Science and Technology)*

Experiences applying the IOF-like approach in industry 1

11:10 – 11:40 *The [Product Life Cycle Ontologies](#) and the IOF: Cases, Lessons, Best Practices (J. Neil Otte, Department of Philosophy, University at Buffalo (SUNY))*

11:40 – 11:50 *BREAK*

Early efforts of the IOF

11:50 – 12:30 *Using BFO to categorize and define IOF proof-of-concept terms (Top-down approach) (Hyunmin Cheong, Research Scientist, Autodesk)*

12:30 -1:30 *LUNCH*

Experiences applying the IOF-like approach in industry 2

1:30 – 2:00 *Modular Ontologies for Engineering Design and Decision Making (Thomas Hagedorn, UMass Amherst)*

Tools and experiences for managing, sharing, and using semantic content

2:00 – 2:20 *Using Ontology for Model-driven User Experience (Sam Chance, Managing Director of Solution Engineering; Cambridge Semantics)*

2:20 – 3:00 *Tools and Infrastructure for continuous integration: FIBO case study (Dean Allemang, Working Ontologist, LLC; EDM council - remote)*

3:00 – 3:30 *Mobi: A Shared Collaboration Environment for Semantic Content (Stephen Kahmann, Technical Lead, Special Programs; Inovex Corp.)*

3:30 – 4:00 *BREAK*

Epilogue

Walker/Whetstone room

Plenary Session

4:00 – 5:30 *Joint Panel*

5:30 *Workshop end*

Description:

Industrial Ontology Foundry: Chairs – [Dr. Dimitris Kiritsis \(link sends e-mail\)](#), EPFL, [Mr. Evan Wallace, NIST \(link sends e-mail\)](#). The session focuses on the formation of an Industrial Ontologies Foundry (IOF), a new effort for converging existing semantic representations from the industrial and manufacturing domain. The primary purpose of the IOF is to develop a collaborative framework and platform for supporting the development, submitting, validating, and sharing ontologies for the industrial and manufacturing domains. In this way, the knowledge can be captured in a common semantic form and shared to facilitate smart manufacturing and other industrial practices and resources along the lifecycle of a manufactured product. This year's session will review the structure of this new organization, what we've learned from an initial proof-of-concept effort, and the principles and processes that should be used to by the IOF to deliver value to the manufacturing industry.