ONTOTRANS
NEWSLETTER

Issue 2   August 2021

The H2020 project **OntoTrans** - „Ontology driven Open Translation Environment" started on April 1, 2020 for a period of 4 years.

It is coordinated by TU Wien, Austria and the OntoTrans Consortium is constituted of 11 participants (6 companies and 5 research institutions) from 7 EU countries (AT, DE, UK, IT, BE, ES, NO) who provide all necessary background knowledge and expertise to achieve the ambitious objectives of the **OntoTrans** project.

OntoTrans is developing an ontology-based Open Translation Environment which provides smart targeted guidance through the whole translation process, namely from the initial innovation case specification to actual materials modelling workflows and resulting data analysis.

Its Artificial Intelligence approach enables end users to represent in a standard ontological form their manufacturing process challenges and to connect them with relevant information sources and materials modelling solutions, capable to support optimal materials and process design.

Contents

OntoTrans

**Ontology driven
Open Translation Environment**

H2020-NMBP-TO-IND-2019

Coordinator

Nadja Adamovic, TU Wien (AT)
nadja.adamovic@tuwien.ac.at

Technical Manager

Gerhard Goldbeck, GCL (UK)
gerhard@goldbeck-consulting.com

Project acronym

OntoTrans

EC-Grant agreement

862136

Start / End

01.04.2020 - 31.03.2024

Web

https://ontotrans.eu

OntoTrans Innovation Challenges

The work comprised the definition of the innovation challenge posed by the four applications considering a common scheme for all steps of translation processes outlined by the EMMC - the European Materials Modelling Council - which comprises understanding both the business and the technological industrial case, identifying workflows and eligible models, and establishing validation criteria as well as requirements to be met for interpretation and analysis of findings from measurements or simulations.

INNOVATION CASE	INNOVATION CHALLENGE	INDUSTRY/PARTNER
POST-LAUNCH ANALYSIS OF POUCH DETERGENTS	Rapid monitoring of in-market initiative success and of factors driving sales	Consumer Goods/PGBS
DETERGENT POUCH SYSTEMS	Agile response to product, market and regulatory requirements	Consumer Goods/PGBS
COMPOSITE PREPREG	Overcoming bioresin processing challenge (water during cure)	Composites/COMPEVO
SECTION MILL	Master the process parameters - properties relationships	Steels/AMIII

*Innovation Challenges considered in the frame of OntoTrans project
and the respective OntoTrans industry partners providing Innovation Cases*

For each of the four OntoTrans industrial applications, the Innovation Challenge Definition has been elaborated by describing the details of the Innovation Challenge, Innovation Case, Properties of materials and processes, Workflows, and Knowledge Sources.

OntoTrans' innovation case "Composite prepregs"

OntoTrans industrial partner Composites Evolution Ltd. presents OntoTrans and the innovation case "Composite Prepregs".

Market, regulatory and safety requirements drive the transition towards non-toxic, low environmental impact solutions for composite prepregs (fabrics pre-impregnated with resin). Bioresin (polyfurfuryl alcohol) prepregs provide a potential solution.
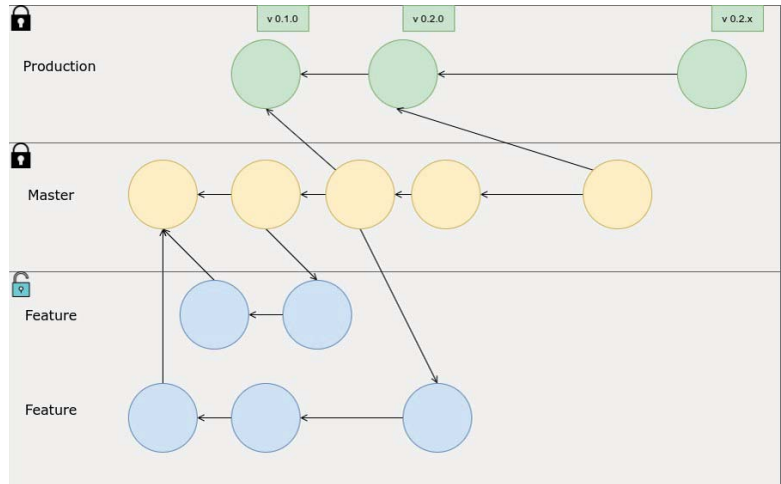
The aim is to achieve improved understanding and ultimately control of the process in order to reduce time and costs in development and manufacturing of high-quality end products and achieve a more model-based approach for a wide range of future product developments.

Watch the video...

Composites Evolution | OntoTrans

OntoTrans General Coding Guidelines

OntoTrans project partners have provided general coding guidelines (e.g. coding style, best practices, versioning) and coding standards to facilitate software development collaboration and ensure compliance with relevant laws and regulations (e.g. GDPR). To coordinate and support good communication between the different development activities, it is essential to have a common set of guidelines. These guidelines and recommendations will be revised during the project lifetime.

Innovation Challenges considered in the frame of OntoTrans project and the respective OntoTrans industry partners providing innovation cases

In addition, an agile code collaboration environment has been set up and made available. This code environment consists of continuous integration and continuous deployment (CI/CD) tools, enabling improvements to be continuously implemented, integrated and deployed in small gradual iterations.

OntoTrans at ECCOMAS Congress 2020

The 14th WCCM & ECCOMAS Congress was organised as a virtual event from January 11-15, 2021.

Our partners Goldbeck Consulting and SINTEF presented OntoTrans within the ECCOMAS Minisymposium MS216: Ontology Based Materials Modelling, Optimization and Design Applied to Modelling Translation Services and Business Decision Support Systems.

Read more...

OntoTrans at EMMC 2021 International Workshop

The 3rd EMMC International Workshop (EMMC 2021) took place as an online event from March 2-4, 2021.

OntoTrans was represented in the poster session, so participants could learn more about the project. The event was well attended with 250 sign-ups from all over Europe, the US, Canada, Japan and Israel.

The European Materials Modelling Council's International Workshop 2021 was a great success and an important opportunity for OntoTrans, as the event retained its key element of extended discussion sessions covering the EMMC Focus Areas, Modelling development, Interoperability, Digitalisation, Software, Impact in Industry and Policy.

Read more...

OntoTrans on Zenodo

An OntoTrans Community has been created on Zenodo to ensure efficient dissemination and the greatest possible benefit for our colleagues and the public from our project. On Zenodo we continuously publish public reports generated by the project to guarantee open access, metadata annotations and long-term availability.

Additionally, our reports will also be published via the European Materials Modelling Council community on Zenodo, as OntoTrans is a related project to the EMMC ASBL.

Do not miss any new publication! Visit us on Zenodo!

OntoTrans Community - EMMC Community

OntoTrans Social Media Channels

To keep yourselves up to date on the activities of the OntoTrans project we suggest following our various social media channels. Our channels are regularly updated and contain interesting information, opportunities and event announcements for our followers.

OntoTrans Consortium Meetings
M1 Kick-off Meeting / Online / April 21, 22 & 24, 2020
M6 Consortium Meeting / Online / October 7-8, 2020
M12 Consortium Meeting / Online/ March 17-18 & 24, 2021

OntoTrans Consortium