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An industrial symbiosis knowledge model for the saline wastewater domain

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Abstract for Poster

A large number of process industries, included in the manufacturing sector, generate saline wastewater (brine). The H2020 ZERO BRINE project aims to facilitate the implementation of the Circular Economy in order to redesign the value and supply chains of minerals and water. In the framework of the ZERO BRINE project, an online tool named Online Brine Platform (OBP) was developed aiming to promote secondary raw materials flow, by linking the brine generators with the end-users of minerals and water recovered from brine.

Knowledge Modeling Ontologies are widely recognized and established as a means to model, represent and share domain knowledge in a formal way. For the needs of the OBP development a knowledge model was engineered in order to capture the knowledge in the Symbiotic Brine (SB) domain. More specifically, the SB domain Ontology is a semantic structure which plays the role of the backbone in the OBP development as it includes all the concepts, relations and axioms applicable for this specific domain.