

Doctoral student publishes research on petroleum supply chain

December 8 2015

Two papers on modeling the petroleum supply chain written by NDSU transportation and logistics doctoral student Yasaman Kazemi were recently published in transportation journals.

Kazemi's first paper, "An Optimization Model for Downstream Petroleum Supply Chain Incorporating Geographic Information System (GIS)", was selected for publication in the International Journal of Integrated Supply Management. The paper examines the complex and advanced supply chains within the petroleum industry. The paper also proposes a deterministic mixed integer linear programming model to determine the optimal location of distribution centers, capacities and allocation of the products in the downstream petroleum supply chain by considering demand, capacity and flow balance constraints. Joseph Szmerekovsky, professor of management and marketing, co-wrote the paper.

The International Journal of Integrated Supply Management publishes empirical and theoretical manuscripts from academics in all disciplines and professionals regarding supply management issues.

Kazemi's second paper, "Modeling the Downstream Petroleum Supply Chain: the Importance of Multi-mode Transportation to Strategic Planning" was published in Transportation Research Part E: Logistics and Transportation Review. The <u>paper</u> proposes a deterministic mixed integer linear programming model for downstream petroleum supply chain network to determine the optimal distribution center locations,



capacities, transportation modes and transfer volumes.

More information: Yasaman Kazemi et al. Modeling downstream petroleum supply chain: The importance of multi-mode transportation to strategic planning, *Transportation Research Part E: Logistics and Transportation Review* (2015). DOI: 10.1016/j.tre.2015.09.004

Provided by North Dakota State University

Citation: Doctoral student publishes research on petroleum supply chain (2015, December 8) retrieved 24 April 2024 from

https://phys.org/news/2015-12-doctoral-student-publishes-petroleum-chain.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.