

Spring Meeting Poster Session and Networking Reception 2021

Held at the 2021 AIChE Spring Meeting and 17th Global
Congress on Process Safety

Online
18 - 23 April 2021

ISBN: 978-1-7138-5344-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2021) by AIChE
All rights reserved.

Printed with permission by Curran Associates, Inc. (2022)

For permission requests, please contact AIChE
at the address below.

AIChE
120 Wall Street, FL 23
New York, NY 10005-4020

Phone: (800) 242-4363
Fax: (203) 775-5177

www.aiche.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Crude Unit Heat Exchangers and Fouling: Engineered Solutions	1
<i>Andrew Sloley</i>	
Crude Oil Distillation: Unit Objectives	2
<i>Andrew Sloley</i>	
Experimental Extraction of Lignocellulosic Biomass Morphological Characteristics for Realistic Representation in Superquadratic Discrete Element Computational Models	3
<i>Ekramul Haque Ehte, Nourredine Abdoulmoumine</i>	
Choosing the Right Metallurgy in the Oil Refining and Chemical Industry	4
<i>Avinashkumar Karre</i>	
Multifaceted Biochar: Biofuel Source, Graphene Precursor and Methane-to-Hydrogen Catalyst	5
<i>Rahul Kundu, Hema Ramsurn</i>	
Wax Deposition of a High Wax Content Crude Oil in Cold Finger Apparatus and Its Comparison with Flow Loop	9
<i>Chuanshuo Wang, Hong Lu, Liangsheng Zhou, Pengcheng Li, Xiaohan Yan, Jiapeng Gu, Xiaopeng Yang, Jing Gong</i>	
What Is the Real Risk Reduction for 3 Sensors Using the Mid-Value for Control and 2oo3 Voting for Safety?	10
<i>Arthur Dowell III</i>	
Improving Tool Life Prediction Accuracy with Acoustics and Vibration	11
<i>Reece Goff, Amin Amirlatifi</i>	
Blockchain Technology and Agile Principles – Applications in Chemical Process Design.....	12
<i>Bahman Ghorashi</i>	
Improve Process Safety By Uncovering and Mitigating Relief System Design Deficiencies	14
<i>Shailesh Saraykar</i>	
"Are WE Really Learning"- EIO(EXCELLENCE IN OPERATION) Achieving in PSM Wide MIwcar(Management, Leadership, Workforce Commitment, Accountability and Responsibility)	15
<i>Tata Suryaprakash</i>	
Wettability Induced Preferential Bubble Nucleation of a Gas from a Multi-Gas Dissolved Liquid System	16
<i>Sushobhan Pradhan, Imran Khan Shaik, Prem Bikkina</i>	
Experimental Investigation of Fe ₃ O ₄ -SiO ₂ Magnetic Nanoparticles Performance in Demulsification of Oil/Water Emulsions Using the Glass Micromodel.....	17
<i>Wamda Elmobarak</i>	
Insights into the Structure Stability of CH ₄ -C ₂ H ₆ Hydrates Using Molecular Dynamic Simulation.....	18
<i>Ruyi Zheng, Xiaoli Li, Shahin Negahban</i>	

Author Index