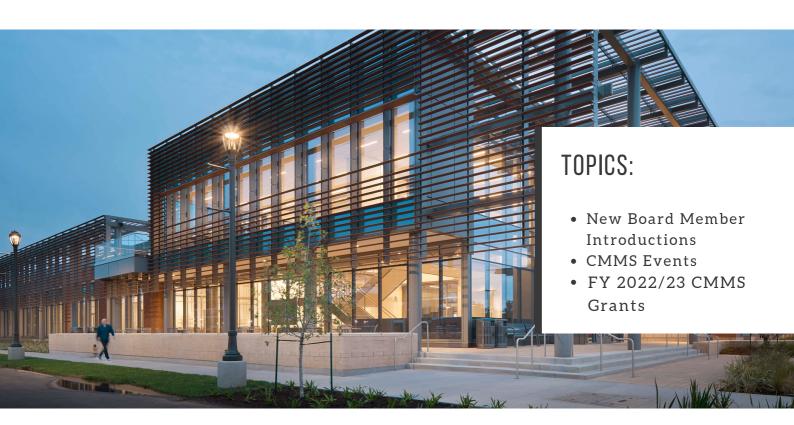


The Texas State University System



CMMS CURRENT EVENTS OVERVIEW

By: Thomas Kalb, Director

November 2022

The Midstream Center continues to fulfill its mission to build its value proposition and become a trusted partner with the midstream industry by developing industry and partner relationships and educating tomorrow's leaders.

Meet Our Newest Board Member

Quinn Holub



Quinn Holub knows the O&G business from top to bottom. He started off 20 years ago as a welder, inspector and field supervisor. After completing his bachelor's degree in business management, he transitioned to operations and general management at several different industrial service companies. In 2018 Quinn joined Gecko Robotics to help spearhead new inspection methods and technologies.

Drawing on his years of field experience dealing with complex tasks in hazardous environments, he has become a champion of robotics and automation that increase safety and efficiency. To that end, Quinn recently joined HUVRdata to help create a powerful ecosystem of solutions using the best technology, software and services available. Quinn is a member of Sprint Robotics, ASME and on the Mobile Unmanned Systems Committee. He provides go-to-market strategy, advises industrial technology startups and actively promotes youth involvement in "skilled trade" career paths.

2023 TOP TEN ISSUES FACING THE MIDSTREAM INDUSTRY

The Midstream Center conducted the second annual CMMS survey of its Industry Advisory Board and friends of the Center. This survey drew on opinions from senior industry people in midstream management, engineering, operations, consulting, and academia. To get more context, <u>click here!</u>

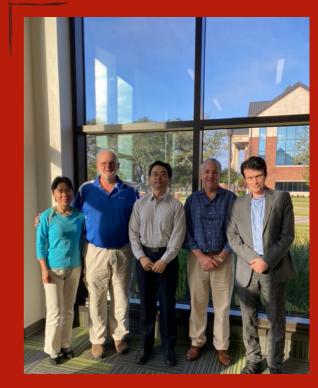
The top ten issues facing the midstream industry in 2023, forced ranked, are:

- 1. Attracting New Talent
- 2. Retiring Expertise
- 3. Aging Infrastructure
- 4. Regulatory/Permitting Burdens and Compliance
- 5. Supply Chain
- 6. Lack of Political Support for Project Investment
- 7. Capital Markets/Investment
- 8. Energy Transition
- 9. Cyber Security
- 10. Mega Rule Part 2

CMMS HOSTS DIRK VAN OOSTENDORP DAY 2.0

November | 2022

In his second appearance at LU to support CMMS funded midstream-centric research efforts by LU faculty and students, Dirk van Oostendorp, Director of Engineering and Technology at CorrPro, met with faculty and students to discuss the results of recently concluded projects funded by CMMS in 2021. Mr. van Oostendorp's decades of engineering, R&D, and technical experience in the midstream sector benefits LU research teams by helping them understand prospective industry interest in their work and whether or not to further pursue the research or at least identify lessons learned and effectively move on to the next research idea.



Dr. Helen Lou, Dirk van Oostendorp, Dr. Qiang Xu, Thomas Kalb, Dr. Timothy Roden



Dirk van Oostendorp, Dr. Timothy Roden, Dr. Daniel Chen, Thomas Kalb

CMMS ATTENDS PRCI ANNUAL CONVENTION IN PHOENIX, ARIZONA

October | 2022

Leadership of Pipeline Research Council International (PRCI) learned of the Midstream Center's research grant awards for FY2022/23 made September 1st and immediately asked for presentations on five of the projects that overlapped PRCI industry membership research interests. The initial presentation of these five projects led to PRCI requesting that three of them be presented at PRCI's Fall 2022 National Technical Committee Conference in Phoenix. Dr. Phil Cole, Dr. Reza Barzegaran, and Dr. Reda Amer presented their research projects in late October, as follows:



Gary Choquette, Thomas Kalb, Nikos Salmatanis, Dr. Reza Barzegaran

Dr. Phil Cole

Detection of Methane Leaks in Soils – Phase II Dr. Reza Barzegaran

Incipient
Leakage
Detection
through
embedded
sensors and
AI on
Drones

Dr. Reda Amer

Subsidence
Implications
on Pipeline
Infrastructure
in Southeast
Texas

EVENTS SPONSORED BY

HALLIBURTON CORPORATION

The Halliburton Foundation recently made a grant of \$10,000 to LU as part of its program to support education initiatives for science, technology, engineering, math (STEM) and business programs at U.S. colleges and universities. Funding from this grant was used to sponsor a Halliburton Networking Event for LU students and faculty, and Halliburton personnel, and a field trip for students and faculty to Halliburton's headquarters and research campus in Houston, TX. The LU campus event was kicked off by a meeting between Shannon Slocum, Senior Vice President - Business Development and Marketing, and a member of the Executive Committee, and President Jaime Taylor, followed by a campus tour for Mr. and Mrs. Slocum, led by President Taylor, and other Halliburton LU Alumni attending the event. President Taylor, Mr. Slocum, and Sean Wood, Training Manager - Multi-Chem, then gave prepared remarks while approximately 50 students and faculty listened and ate lunch, followed by a very productive networking event among LU and Halliburton people. Two weeks later, approximately 20 students and faculty went on a tour of Halliburton's Houston campus and research center where they heard from Dr. Sriram Srinivasan, Senior Vice President - Global Technology, Dr. Enrique Reyes, Scientific Advisor - Production Enhancement, and University Affairs/Recruiting Staff. This experience was an important bridge building opportunity for LU as Halliburton is one of the most important, technology driven energy companies in America, spends over \$350 million in R&D per year invests in cutting edge technology startups, and has relationships with over 30 universities where it partners in research and provides internships and permanent employment opportunities to university graduates.



Dr. Jaime Taylor, Dr. Helen Lou, Geoffrey Staten, Shannon Slocum, Thomas Kalb, Dr. Brian Craig



LU Faculty, Staff, & Students



Sean Wood educating students and faculty about the Multi-Chem Division within Halliburton and its career opportunities

CMMS LAUNCHES NEW PRCI RESULTS PATHFINDER

The Midstream Center has enhanced its Midstream Information Clearing House function by developing the PRCI Results Pathfinder portal in partnership with the Pipeline Research Council International (PRCI). This new portal, found on the CMMS website at lamar.edu/midstream/research, enables end-users to access and search over 2,600 midstream industry research project reports funded by midstream companies and managed by PRCI on behalf of its industry membership. Users of this portal can search PRCI's research library to find industry research projects of interest and then access PRCI's pay wall to purchase targeted reports. The Midstream Center and PRCI proudly serve the R&D needs of the midstream sector.











Applied research results for the safety & integrity of energy pipelines, covering:

- Compressors & Pump Stations
- Corrosion
- Design, Material & Construction
- Inspection & Integrity
- Measurement
- Subset
- Surveillance, Operations & Monitoring
- Underground Storage
- Emerging Fuels

ACCESS PRCI PATHFINDER

The Center for Midstream Management and Science awarded ten research grants to LU faculty members. These grants are seed capital to building the bridge between LU and the midstream industry. To read more about completed and underway research projects, click here!

CMMS AWARDS 10 RESEARCH GRANTS FOR FY2022/23

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