

CHRISTOPHER LEWIS

A chemist turned data-enthusiast. 9+ years of experience in chemistry research and development. Co-inventor on 9 patents. Currently seeking to advance my skills and career in data analysis and technology.



EDUCATION

2011
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2006



B.S., Chemistry

Kansas State University

📍 Manhattan, KS



INDUSTRY EXPERIENCE

current
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2021



Research Analyst

Kansas Department of Labor

📍 Topeka, KS - Hybrid Remote

- Utilized R and Python to automate reporting and develop visualizations
- Wrote ad-hoc queries for public requests, federal organizations and media agencies
- Wrote requirements for modifications to the agency's main workers compensation application, as well as identify and report bugs/ bug testing

2021
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2015



Technologist II

Halliburton Energy Services

📍 Houston, TX

- Developed a 3d printed slot-flow device and image analysis method for modeling and characterizing dynamic proppant settling
- Helped Design and construct automated core food testing equipment
- Provided guidance to technicians and associates on process and safety as well as equipment training

2015
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2013



Scientist - Chemist

Halliburton Energy Services

📍 Houston, TX

- Developed new products for stimulation of oil wells. Principal developer in foamed crosslinked polymer sealant.
- Organized and instructed laboratory class for field engineers and sales employees
- Resolved technical questions related to product application and QA for conformance product line

2013
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2011



Associate Scientist

Halliburton Energy Services

📍 Duncan, OK - Houston, TX

- Performed testing as directed and data analysis of results
- Maintained laboratory equipment and inventory
- Helped team to plan and implement move of entire laboratory to new facility

CONTACT

✉ c.lewis1087@gmail.com

📞 (785) 640-5404

🐙 github.com/ChrLew/

in [linkedin.com/in/chr-lewis](https://www.linkedin.com/in/chr-lewis)

SKILLS

💻 **Programming:** R (RStudio, R Markdown, Shiny), SQL, Python, HTML, CSS, Git

🔧 **Tools:** Jira, Confluence, JMP, Tableau, Excel

💡 **Other:** data analysis, data visualization, statistics, experimental design, science writing

ONLINE COURSES

Coursera: Python for Everybody, UMich;

Made with the R package [pagedown](#).

The source code is available [on github.com/ChrLew/cv](https://github.com/ChrLew/cv).

Last updated on 2023-02-27.



RESEARCH EXPERIENCE

- 2011
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2010
- **Undergraduate Research Assistant**
Chikan Laboratory 📍 Kansas State University
 - Assisted with research in doped Cd/Se quantum-dot synthesis & growth/etching characteristics
 - Collaborated with Univ. of Kansas in image analysis, utilizing EDS for TEM instrument
 - Research contributed to and resulted in co-authored paper



PUBLICATIONS

- 2017
- **An Investigation into Proppant Dynamics in Hydraulic Fracturing**
Ray, B., Lewis, C., Martysevich, V., Shetty, D. A., Walters, H. G., Bai, J., & Ma, J. Society of Petroleum Engineers. [doi:10.2118/184829-MS](#)
- 2015
- **Long Interval Foamed Diversion Treatment: A Mid- Scale Multizone Diversion Treatment Study**
Parton, C., Singh, D., Khamatnurova, T., Lewis, C., & Vo, L. K. Society of Petroleum Engineers. [doi:10.2118/174247-MS](#)
- 2015
- **Impact of indium and gallium doping on the photovoltaic performance of CdSe quantum dot hybrid solar cells**
Scott R, Kirkeminde A, Gong M, Totlebena J, Ren S, Tuinenga C, Lewis C, Luob H, Higgins D, Chikan V. Ecs Transactions. 66: 1-8. DOI: 10.1149/06615.0001ecst
- 2014
- **Development of a Polymer Gel System for Improved Sweep Efficiency and Injection Profile Modification of IOR/EOR Treatments**
Crespo, F., Reddy, B. R., Eoff, L., Lewis, C., & Pascarella, N. International Petroleum Technology Conference. [doi:10.2523/IPTC-17226-MS](#)
- 2014
- **Water and Gas Control in Naturally Fractured Carbonate Reservoirs: Development of a Novel Polymer Gel System with Foaming Properties. Society of Petroleum Engineers**
Vasquez, J. E., Lewis, C. A., & Eoff, L. S. Society of Petroleum Engineers. [doi:10.2118/171883-MS](#)
- 2013
- **Recent Advances in Organically Crosslinked Conformance Polymer Systems**
Crespo, F., Reddy, B. R., Lewis, C. A., & Eoff, L. S. Society of Petroleum Engineers. [doi:10.2118/164115-MS](#)



PATENTS

- 2020
- **Methods for Enhancing Propped fracture Conductivity**
Nguyen, et al. U.S. Patent #10,647,910
- 2019
- **Encapsulated Scale Inhibitor for Downhole Applications in Subterranean Formations**
Vo, et al. U.S. Patent #10,421,893
- 2018
- **Sealant Compositions for Use in Subterranean Formation Operations**
Reddy, et al. U.S. Patent #9,969,923

- 2018 ● **Wellbore Servicing Materials and Methods of Making and using Same**
Reddy, et al. U.S. Patent #10,077,397
- 2017 ● **Sulfonated Relative Permeability Modifiers for Reducing Subterranean Formation Water Permeability**
Recio, III, et al. U.S. Patent #9,598,631
- 2017 ● **Reaction Products of Acrylamide Polymers and Methods for Use Thereof as Relative Permeability Modifiers**
Recio, III et al. U.S. Patent #9,644,130
- 2017 ● **Selective Deactivation and Reactivation of HPT-1 Type of Relative Permeability Modifiers**
Reddy, et al. U.S. Patent #9,840,659
- 2016 ● **Wellbore Servicing Materials and Methods of Making and Using Same**
Reddy, et al. U.S. Patent #9,441,151
- 2015 ● **Hydration Acceleration Surfactants in Conjunction with High Molecular Weight Polymers, And Methods and Compositions Relating Thereto**
Reddy, et al. U.S. Patent #9,051,506