Rohan Dighe

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EDUCATION

Purdue University – West Lafayette, IN   **GPA:** 3.79
B.S. in Chemical Engineering with Honors Designation   May 2020
Honors Thesis: "*Synthetic Routes to Prepare MEL Zeolite Catalysts with Different Active Site Content and Arrangement*"

RELEVANT PUBLICATIONS

- Horizons: Adding fire to e-fuels (*Wood Mackenzie Flagship Thought Leadership Series, June 2024*)
- The Edge: Can direct air capture rise to the challenge? (*Chief Analyst's Thought Leadership Spotlight, Jan 2024*)
- Towards direct air capture at scale, a trilogy (*Technology, economic, and strategy analysis for clients only, Nov 2024*)

RELEVANT WORK EXPERIENCE

Wood Mackenzie   *August 2023 – Present*
Research Analyst – Carbon Capture, Utilization, and Storage   *Houston, TX*
- Leading WoodMac's technical, policy, and market analysis of carbon dioxide removal technologies (DAC, BECCS, etc.) and CO_2 utilization pathways
- Analyzing North American CCUS and CDR economics by developing asset-level valuations for over 50 projects and generalized models for levelized costs of capture, transport, storage, and utilization
- Writing client-facing content (250 – 2,500 words) on CCUS/CDR markets, technologies, policy, and economics
- Advising clients (bulge bracket banks, oil majors, chemical companies, etc.) across the US regarding CCUS/CDR technology, policy, trends, and economics
- Tracking US CCUS activity in Wood Mackenzie's database of 1,000+ global CCUS projects

Chevron Phillips Chemical Company – Cedar Bayou Plant   *June 2020 – July 2023*
Optimization Engineer (Ethylene Cracker), Production Engineer (Polyethylene Reactors)   *Baytown, TX*
- Achieved all-time production record by making daily optimization recommendations based on process data
- Commissioned new LP Optimization Model for ethylene unit feedslate and production optimization
- Applied statistical process control with linear/nonlinear modeling tools (scikit-learn, etc.) to optimize production
- Performed daily, hands-on unit troubleshooting with plant operators and maintenance to ensure stable and safe operation of 3 different polyethylene production units.

Chevron Phillips Chemical Company, LyondellBasell, Honeywell UOP   *May 2018 – August 2019*
Various internships and co-op terms (10 months total)   *Sweeny, TX, La Porte, TX, McCook, IL*

LEADERSHIP EXPERIENCE

Chevron Phillips Chemical Company, Cedar Bayou Plant   *June 2020 – July 2023*
Plant Digital Transformation Liason, New Hire Board Member, and Recruiting Team Member   *Baytown, TX*
- Implemented new, digital project management and operations optimization workflows at the plant and corporate levels
- Moderated a panel on data analytics in chemical manufacturing at an industry summit (60+ attendees)

OTHER INVOLVEMENT

- Purdue American Institute of Chemical Engineers (AIChE) Alumni Mentor, *Aug 2020 – Present*
- Chevron Phillips Innovation and Improvement Champion, *Apr 2021 – July 2023*
- DR Delicacy (Truffle and Fine Foods Importer in Houston, TX) Product Developer, *Sep 2021 – June 2022*

COLLEGE HONORS, AWARDS, AND INVOLVEMENT

- Dean's List/Semester Honors, *2016 – 2020*   • Various University and National Scholarships, *2016 – 2020*
- Purdue AIChE Vice President, Treasurer, Technical Coordinator, *2016 – 2020*

SKILLS & TECHNICAL COMPETENCIES

- Experienced in Aspen Plus, Seeq, Power BI, Python
- Proficient in Power Automate, C, HTML/CSS, MATLAB