



# Carbon Capture and Utilization: Independent Research and Development

2020 Internship Showcase

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# RTI International's Carbon Capture Program

- Goal is to economically address CO<sub>2</sub> emissions by
  - Using a solvent-based system
  - Using hybrid technologies for pre- and post-combustion CO<sub>2</sub> capture in many fields
  - Investigating methods to switch to plastic from metal





# Packing Rapid Investigation System for Mass transfer (PRISM)

- Goal of the system is to perform separation efficiency comparison tests
- Commercial and 3D-printed packing will be tested

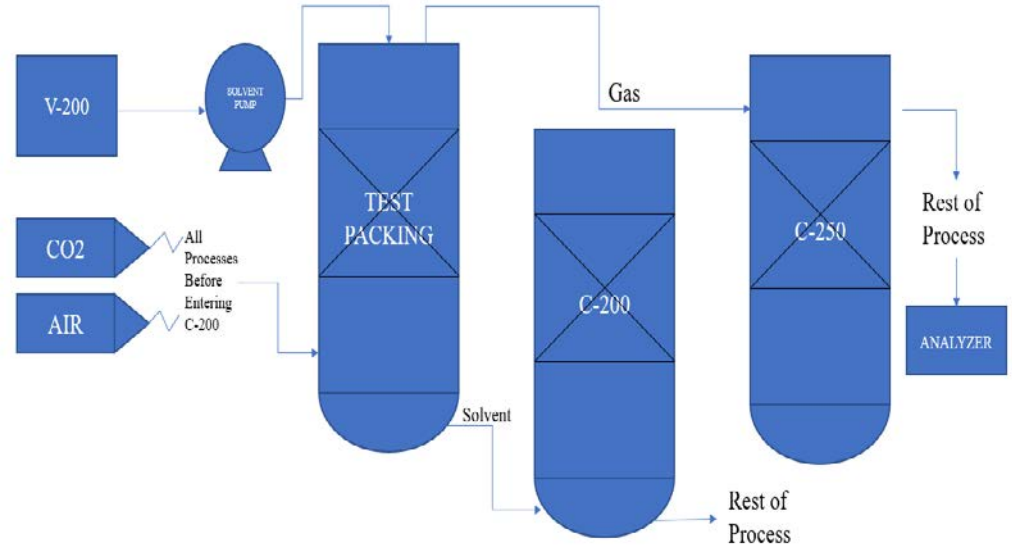


Diagram of PRISM system



# Modeling of PRISM systems



Test packing unit



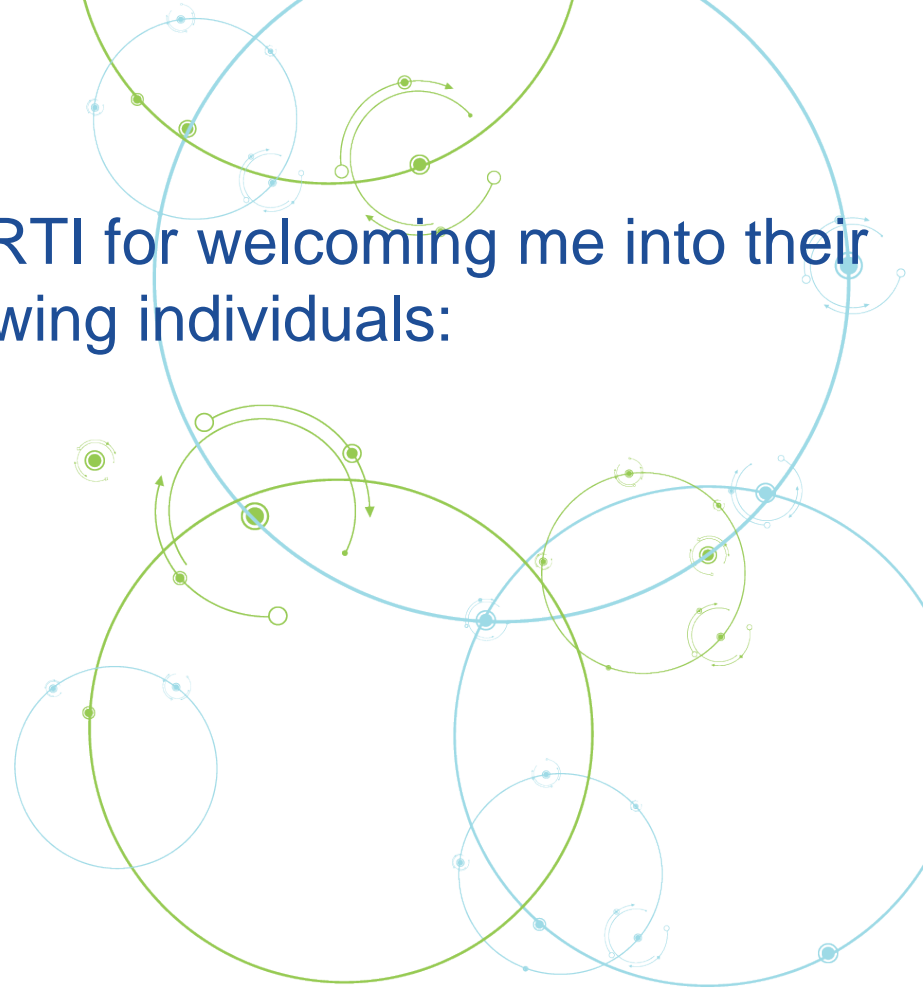
Commercial packing (Mellapak 250)



# Acknowledgments

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- Dr. Paul Mobley
- Dr. Jak Tanthana
- Dr. Marty Lail
- Lucas Cody
- BriAnna Walker



# References

- <https://www.gettyimages.com/detail/photo/currency-royalty-free-image/1156963726?adppopup=true>

“Saving Money” Image 1

- All other images were taken by me or members of the Carbon Capture team.



# Thank you

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