Really Cool Chemical Engineering Homework

Andrew Hoetker

February 29, 2020

1 Showing off some features

Let's see some useful tricks! To start, I love the `siunitx` package, but it doesn't always have the US engineering units I need! With the custom units defined in my packages, I can now state with confidence that 1 $\mathrm{ft}^3/\mathrm{min}$ is equal to 0.471 947 L/s.

2 Adding some citations

One of the best features of the LaTeX document system is citation management. By citing some irrelevant heat transfer papers[1,2], we can see how our citations and bibliography are styled[3].

References

1. Bohnet, M. Fouling of Heat Transfer Surfaces. *Chemical Engineering & Technology - CET* **10,** 113–125. ISSN: 0930-7516. http://doi.wiley.com/10.1002/ceat.270100115 (1987).
2. Prabhanjan, D., Raghavan, G. & Rennie, T. Comparison of Heat Transfer Rates between a Straight Tube Heat Exchanger and a Helically Coiled Heat Exchanger. *International Communications in Heat and Mass Transfer* **29,** 185–191. ISSN: 07351933. http://linkinghub.elsevier.com/retrieve/pii/S0735193302003093 (Feb. 2002).
3. Wong, K.-L., Ke, M.-T. & Ku, S.-S. The Log Mean Heat Transfer Rate Method of Heat Exchanger Considering the Influence of Heat Radiation. *Energy Conversion and Management* **50,** 2693–2698. ISSN: 01968904. https://linkinghub.elsevier.com/retrieve/pii/S0196890409001988 (Nov. 2009).