2015 MnTAP Summer Internship: ECO Finishing Company, Fridley, MN
Water conservation and process optimization project

The Minnesota Technical Assistance Program (MnTAP) is seeking junior or senior college students to work on a water conservation and process optimization project at ECO Finishing Company, a contract electroplating and anodizing shop. Water consumption for rinsing and bath make-up and F006 waste generation from wastewater treatment have significant costs as well as regulatory and environmental impacts. This project will identify factors contributing to water use and F006 waste generation, and seek ways to make reductions and justify those changes.

JOB DUTIES:
As part of this project, you will be asked to complete the following tasks:
1. Examine company records and identify which processes historically generate the largest amounts of F006 waste, and determine the best candidates for optimizing treatment.
2. Map waste streams and determine which streams can be treated together.
3. Investigate closed loop systems and feasibility of conserving water and chemistry by returning effluents to process line.
4. Investigate F006 waste treatment chemistry, and optimize system to conserve water and chemistry.
5. Understand solid content of other waste streams in house, and determine alternate methods of treatment.
6. Continue investigation and expand use of conductivity control of rinse water.
7. Innovate other methods of reducing waste generation at the source.
8. Develop economic and feasibility justifications and implementation plans for changes with the highest benefits to the company and present them for approval; as appropriate initiate approved changes and system upgrades, and measure or estimate the performance of upgraded systems.
9. Summarize findings in a detailed report, including recommended procedures and system configuration along with an economic analysis and justification of installation(s).
10. Present findings to the company and at MnTAP-hosted public presentation events.

As an intern, you will work at the company and report back to MnTAP. The position is full time, 40 hours per week, for three months to start after the conclusion of spring semester or quarter. Pay is $13/hour, with a lump sum stipend of $1,000 upon completion of the project deliverables: a final report and presentations. Cumulatively, this equates to $15.00/hour when averaged over the project.

QUALIFICATIONS:
- Cumulative GPA of at least 3.0
- Good oral & written communication skills
- A technical academic background
- Troubleshooting skills
- Appropriate majors: Chemical engineering, chemistry, and others as applicable

TO APPLY:
Apply online at www.mntap.umn.edu/intern/student_apply.htm
Remember to submit your application form, cover letter, resume, and unofficial transcript.
Applications can be addressed to: Linda Maleitzke, Intern Coordinator
200 Oak Street SE, Suite 350
Minneapolis, MN 55455 • lmaleitz@umn.edu

MNTAP IS THE HIRING BODY: DO NOT CONTACT THE COMPANY.