Richard Dylan Hayenga

427A Center Street Winona, MN, 55987 | rhayenga15@winona.edu | 507-380-4014 | www.linkedin.com/in/dylan-hayenga

EDUCATION

Winona State University – *Winona, MN*
Bachelor of Science in Composite Materials Engineering — Expected: May 2021
Minors: Polymer Chemistry and Mathematics — GPA: 3.62 / 4.0

TECHNICAL SKILLS

Software: Microsoft Office, Excel, SolidWorks, CAD, MoldFlow, Delta, TA Analysis, SweetHome, Mathematica
Materials Testing: ASTM and ISO Standards, Tensile, Flexural, Compression, Shear, Impact, Fiber Burn-Off
Characterization: Microscopy, SEM, TGA, DSC, TMA, DMA, GCMS, FTIR, ^{1}H and ^{13}C NMR Spectroscopy
Manufacturing: LEAN, 5S, Filament Winding, Pultrusion, Extrusion, Injection Molding, Continuous Improvement

INTERNSHIP / RESEARCH EXPERIENCE

Materials Engineering Intern – *Avient / PolyOne Corporation* **May 2020 – August 2020**
- Designed a 3D sunglasses model on SolidWorks from sketch to assembly, and conducted FEA analyses
- Collaborated with R&D to determine control limits for materials using statistical analysis and additive properties
- Worked in pellet production and collaborated with engineering team on implementing process improvements
- Operated molding machines to create working parts, determine product failures, and improve current process
- Conducted proper mechanical testing of the processed materials according to ASTM and ISO standards
- Collaborated with interns across other areas of business on projects as a part of the internship program

Polymer Chemistry Research – *Winona State University* **September 2019 – Current**
- Lead independent project: Synthesis of 3-Vinylthiophene as a Precursor in Solar-Cell Applications
- Performed microwave synthesis, and characterized samples using FTIR, ^{1}H NMR, and GCMS
- Proposed new synthetic methods based on experimental results for improvements in polymer processing

Engineering Intern – *Miken Sports / Rawlings* **May 2019 – August 2019**
- Implemented problem-solving and critical thinking skills to help improve upon manufacturing processes
- Executed projects efficiently by working with computer software such as SolidWorks, Excel, and SweetHome
- Utilized hands-on skills to build various manufacturing applications such as carts, mounts, and shelves
- Practiced lean manufacturing and utilized 5S knowledge to further improve on processes and safety

RELATED EXPERIENCE

Teaching / Lab Assistant – *Winona State University* **August 2017 – Current**
- Worked in a laboratory setting to help the students properly conduct their scientific experiments
- Responsible for mastering class material; grading all assignments and reports within the given deadline
- Tutored students during personal office hours and assisted the professor with any other given duties

Mentor – *Winona State University, College of Science and Engineering* **August 2019 – Current**
- Served as a mentor to four freshman engineering students by acting as a role-model and student contact

Engineering Student-Orientation Leader – *Winona State University* **August 2017 – March 2020**
- Taught incoming students how to adjust to college life through experiences and hardships they might face
- Individually led a classroom, trained first-year leaders, and helped conduct interviews for hiring process

Catering Assistant – *Najwa's Catering, North Mankato* **June 2014** – **December 2018**
- Assisted with catering needs such as serving food, cleaning tables, and washing dishes during events

AWARDS and ACHIEVEMENTS

- Three-time recipient of the Industry for the Advancement of WSU's CME Scholarship
- Recipient of WSU's Vernon "Vern" Kallenborn Scholarship
- Scored in the 98th percentile on the ACS National Organic Chemistry 2 Exam
- Dean's List participation (7 semesters)

Notable Courses: Composites Manufacturing, Advanced Microscopic Techniques, Polymer Processing, Organic Chemistry 1 and 2, Polymer Science, Composite Materials, Materials Synthesis & Characterization, Polymer Chemistry, Mechanics of Composites, Design Project, Thermodynamics, Fluid Mechanics, and Electrical Circuits.