

Andrew McKinney

Process Engineer

Have you ever flown in a jet before? If you have, then you have used our products from Arconic Engines. Andrew McKinney is the Process Engineer and Owner of the *thermoset ceramic* production process at Arconic, responsible for manufacturing the bulk materials used in allowing planes to fly more efficiently and drive down ticket prices for consumers. Drew specializes in statistical automation and lateral innovation. Drew is seeking opportunities that offer growth in research, automation, and machine learning.



Experience

Process Engineer

Arconic Engines – *Morristown, TN*

- Led plant specification and integration of PI Vision, Historian, and other digital fingerprint infrastructure for manufacturing and plant systems
- Oversaw startup and managed integration / optimization of transfer and new thermoset compounding production processes to new facility – *\$16M+ CapEx*
- Developed new product criteria and production process in collaboration with downstream process owners and business unit R&D
- Responsible for autonomous process management practices such as documentation control, Statistical Process Control (SPC), inventory management, process improvements, etc.

EHS & Process Engineer, Jr.

BASF – *Chattanooga, TN*

- Led Six Sigma Yellow Belt Certification for waste minimization - *\$15K+ Annual*
- Reviewed, Updated, and Created EHS, Operations, and LOTO Procedures
- Assisted Engineering in a variety of maintenance PM, lab, and process improvement projects
- Conducted program development work for various EHS programs and oversaw Environmental portion of internal EHS / PSM audit

Education

University of Tennessee at Chattanooga

Degree: B.S. Chemical Engineering

Notable Courses: Probability & Statistics for Engineers, Engineering Economy, Engineering Computations, Unit Operations, Engineering Design

UTC Projects & Affiliations

- Chem-E-Car Research and Development Co-Captain/Team Member
- Order of The Engineer Chattanooga Chapter Member
- AIChE Chattanooga Chapter Member

Academic R&D Projects:

Butadiene Recovery & Purification Systems R&D - *Capstone*
Biofuel Recovery Research

Cell Culture Growth and Permeability Research
Efficiency Testing for Hydrogen Production Research
Special Tomato Chair Compatible Table Design

Cumene Production Process Design
 NO_2 Air Pollution Control Design

Ethanol-Gasoline Processing Cost Projection Evaluation

Volunteer Experience

- Founding Member & Secretary of ΑΦΩ Service Fraternity Petition Group – *UTC*
- Flood Reconstruction Volunteer – *Pegram, TN*
- Family Recreation Day Volunteer – *Nemak, Inc*

Personal Information

Location

Knoxville, TN 37918

Website

<https://armck-hub.github.io/index.html>

Email

andrewryanmckinney@gmail.com

LinkedIn

<https://www.linkedin.com/in/andrew-mckinney-92a8a4118/>

Industry Skills

- AS9001 / ISO9001
- Six-Sigma
- Kaizen
- Kanban
- OSHA/EPA Standards
- Research & Development
- New Process Startup
- Project Management
- Automation
- Digitization
- Lab Work

Software Skills

- ChemCAD
- JMP
- Minitab
- MS Office Suite
- PI Vision, DL, & AF
- Power BI
- SolidWorks
- Tableau

Languages

- HTML
- JavaScript
- Python
- SQL
- Visual Basic