

Christopher A. Preece

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website: www.atomicuniverse.org

EDUCATION:

GRADUATE STUDIES:

- 2016 - Present University of Kentucky: STEM Education Graduate School, Lexington, Kentucky
Ph.D. Candidate (All But Dissertation)
Ph.D. Research - Chemical Literacy Through Comic Books: Examining the Impacts of Learning Through Narrative and Sequential Art in a High School Chemistry Classroom
- 2011 – 2012 Morehead State University, Morehead, Kentucky: Master of Arts in Teaching
- 2007 - 2009 University of Kentucky: Chemistry Graduate School, Lexington, Kentucky

UNDERGRADUATE STUDIES:

- 2004 - 2007 Morehead State University, Morehead, Kentucky: B.S. Chemistry

EMPLOYMENT:

- 2016 – Present **Atomic Universe LLC: Owner**
- 2019 – Present **S.T.E.M. Curiosity, Inc.: Executive Director**
- 2019 – Present **Northern Kentucky University: Adjunct Instructor for EDMT 543: Middle/Secondary Science Methods**
- 2015 – Present **Berea High School: Integrated Science and Chemistry Teacher**
- Teaching 3 classes of College-Prep Chemistry
 - Teaching 2 class of AP Integrated Science
 - After school tutoring for chemistry
 - Developed and implemented curricula for authentic student research projects
 - Developed and organized a community S.T.E.M. night to showcase student work
- 2013 – 2015 **Mahwah High School: AP Chemistry and Chemistry Teacher**
- Teaching 3 classes of College-Prep Chemistry
 - Teaching 1 class of AP Chemistry
 - After school tutoring for chemistry
- 2012 – 2013 **Elliott County High School: Integrated Science and Chemistry Teacher**
- Teaching 5 classes of Integrated Science
 - Teaching 1 class of Introduction to Chemistry with Earth and Space Science
 - Teaching 1 class of Science Study Skills
 - After school tutoring for science and math
- 2011 – 2012 **Montgomery County High School: Chemistry Teacher**
- Teaching four classes of Chemistry 1
 - Teaching two classes Pre-AP Chemistry
 - Assistant Academic Coach: Team achieved 1st place in region and 18th in state
- 2010 – 2011 **Acculab Inc.: Lab Technician**
- Analyzed metals on Flame AA
 - Analyzed Mercury on CVAA
 - Maintained instrumentation
- 2010 **Martin County Board of Education: Substitute Teacher, all grade levels**
- Enforced all school rules
 - Ensured the students do the work assigned
- 2007 - 2009 **UNIVERSITY OF KENTUCKY: Teaching assistant and research assistant**
- Assisted undergraduates through learning and understanding key concepts
 - Graded course assignments such as worksheets, lab reports, and lab practicals
 - Assisted in mentoring new graduate students
 - Substituted for professors when needed
 - Assisted undergraduates in inorganic laboratory experiments
 - Directed the research of undergraduates
 - Determined chemically bonded versus physically adsorbed Hg in B9 and Hg mixture
 - Investigated the thermal stability of B9

2004 - 2007 **MOREHEAD STATE UNIVERSITY: Tutor**

- Helped students understand basic concepts in chemistry, math and other courses
- Related material in unique ways to foster the learning of each student

PUBLICATIONS:

2017, CheMystery, ThunderStone Books

SKILLS AND ABILITIES:

Experienced in Excel, PowerPoint, Word, and Weebly. I do well with collaborating with others, being supportive, diligently follow instructions, being creative, knowing content knowledge, maximizing instructional time, developing curriculum, and engaging students.

PRESENTATIONS AND WORKSHOPS:

2015 Lexington Comic & Toy Con: The Science of Superheroes with Bob Hall and Kody Chamberlain
2015 Awesome Con: The Science of Superheroes with Duncan Rouleau and Tom King
2015 Baltimore Comic Con: The Science of Superheroes with Mark Waid and Ramon Fradon
2016 Lexington Comic & Toy Con: The Science of Superheroes with Matt Hawkins and Nathan Fox
2016 Indiana Comic Con: The Science of Superheroes with Neal Adams
2017 Lexington Comic & Toy Con: Science in Comics
2017 Heroes Con: Science in Comics with Josh Reynolds, Matt Brady, and Shari Brady
2017 KSTA Conference: Using Science Comics in the Classroom with Josh Woodward
2017 Derby City Comic Con: The Science of Superheroes with Megan Scholar
2018 LTUE: The Science of Superheroes
2018 Lexington Comic & Toy Con: The Science of Superheroes with Jim Shooter and Erica Shultz
2018 ConGlomeration: Science in Comics
2018 Indy Pop Con: Science in Comics
2018 Indy Pop Con: Kids Science Workshop
2018 Cincinnati Comic Expo: Science in Comics
2018 Denver Comic Con: STEM Education - Science in Comics
2018 KAEE Conference: Student Driven Authentic Science Research
2019 Lexington Comic & Toy Con: Kids Science Workshop (Light and Colors, Sound, Making Simple Motors, and Making Slime).
2019 Indiana Comic Con: Kids Science Workshop (Building Catapults, Making Simple Motors, and Making Slime).
2019 Chicago Comic Con Revolution: (Building Catapults, Making Simple Motors, and Making Slime).
2019 Fall Fan Fest: In Booth Kids Science Activities

GRANTS:

2019 ACS-Hach Chemistry Teacher Professional Development Grant
Amount \$1,300
2019 James S. Brown Graduate Student Award for Research on Appalachia
Amount \$1,000

RESEARCH PROJECTS:

Developing Chemistry Mental Models About Solutions
Secondary Chemical Literacy Through Text, Narrative, and Visuals.

RESEARCH INTERESTS:

Chemical Literacy, Multimodal Literacy, Science Inquiry, Developing Science Curriculum, Developing Mental Models

REFERENCES:

Advisor
Jennifer Wilhelm, Ph.D. (859) 257-1291 jennifer.wilhelm@uky.edu
Ph.D. Committee Member
Rebecca Krall, Ph.D. (859) 257-2176 rebecca.krall@uky.edu
Colleague
Travis Blankenship (276) 312-2791 travis.blankenship@berea.kyschools.us

