

Bringing Chemistry to Life

a podcast series

Season 5, Episode 7

The life-altering impact of one chemist's sabbatical



Episode Abstract

Anyone that's followed this podcast will know that Paolo's final question to each guest is, "What advice would you like to share with younger scientists just starting their career?" Here, our guest, Dr. Monte Helm, professor of chemistry at Metropolitan Community College in Kansas City, shares advice that he clearly lives by, which is, "... be flexible in your career and follow what you think you'll be passionate about."

While Monte's academic training is in inorganic chemistry, he'll tell you he's always cared about teaching as much as the subject itself. Join us to meet this lifelong learner and teacher, that's parlayed his passion for phosphine chemistry and teaching into roles as a postdoctoral researcher, a professor at an undergraduate research institution, a deputy director at a national laboratory, and now a teaching-focused role at a community college. A set of roles that definitely demonstrates flexibility!

In addition to learning about the fundamental research Dr. Helm has done in crown-phosphine and phosphine ligand synthesis, we learn about his unconventional career path and the important role that mentors and sabbatical opportunities played in its development. He talks openly about the joys and challenges of each role, about his motivations for each career change, and his current love of teaching at a community college where he's able to focus solely on teaching to students that may not have had positive primary educational experiences in science.

About Our Guest

Monte Helm, PhD

Professor of Chemistry Metropolitan Community College, Kansas City

Monte's Recent Publications:

- A Synthetic Nickel Electrocatalyst with a Turnover Frequency Above 100,000 s(-1) for H-2 Production
- Iron Complexes for the Electrocatalytic Oxidation of Hydrogen: Tuning Primary and Secondary Coordination Spheres
- Synthesis of 1,4,7-Triphenyl-1,4,7-triphosphacyclononane:
 The First Metal-Free Synthesis of a [9]-aneP(3)R(3) Ring
- Group 9 half-sandwich complexes containing the unique P, P'-diphenyl-1,4-diphospha-cyclohexane ligand: Synthesis, X-ray structure analyses and spectroscopic studies

Monte's Content Recommendations:

- Philosophize This!, an educational podcast about philosophy
- Atlas Obscura, a guide to exploring the world
- Wings of Desire, Monte's favorite movie
- Twin Peaks, Monte's favorite television show
- <u>Dr. Phos' GenChem Helper</u>, an app developed by Monte to help introductory chemistry students

This podcast series is available via the following links











