

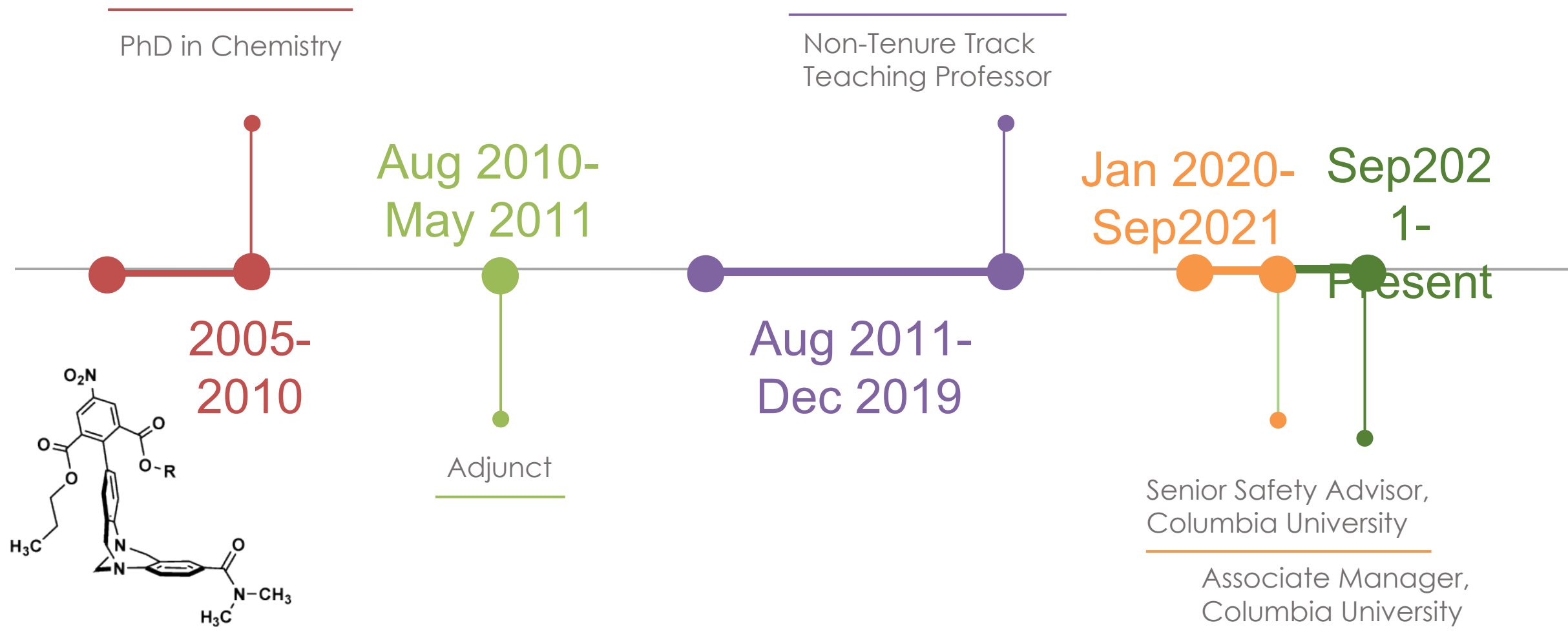


# Case studies and chemical safety improvements

Dr. Sandra Keyser  
Columbia University

Presented at the 2022 ACS National Meeting, 8/22/22

# Personal background (NOT TO SCALE)



# The appeal of storytelling

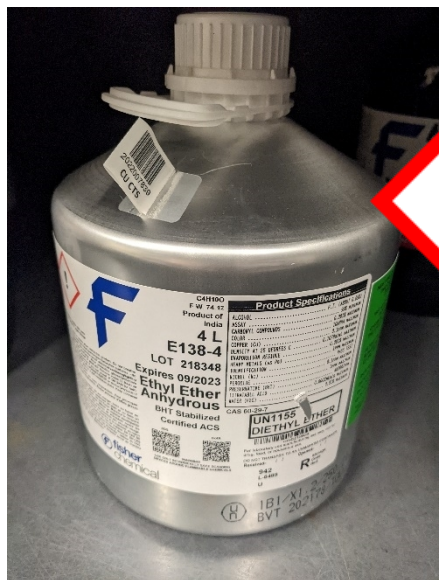
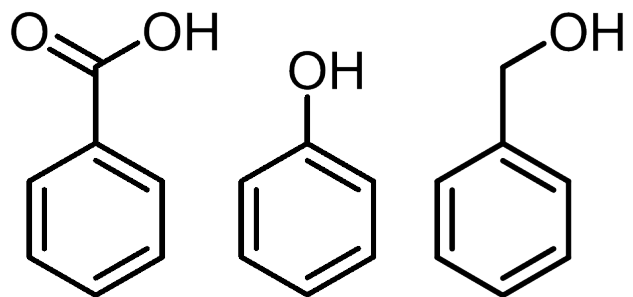
- Transmit information & show humanity
  - Train others and communicate obligations
  - Communicate organizational schemas
  - Allows for reflection
- 
- Effective stories:
    - Authentic
    - Conventional
    - Client-oriented

Polletta, F.; Chen, P.C.B.; Gardner, B.G.; Motes, A. *Annu. Rev. Sociol.* **2011**, 37, 109-30.

Folino, D.A. *J. Chem. Educ.* **2001**, 78, 1615-1618.

Fivizzani, K.P. *ACS Chem. Health Saf.* **2004**, 11, 9.

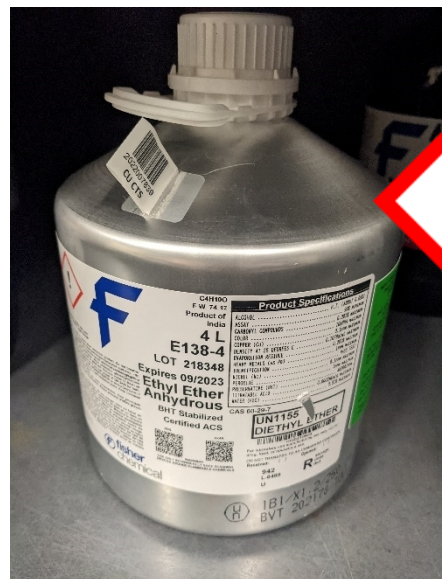
# As a Teaching Assistant: Personal exposures



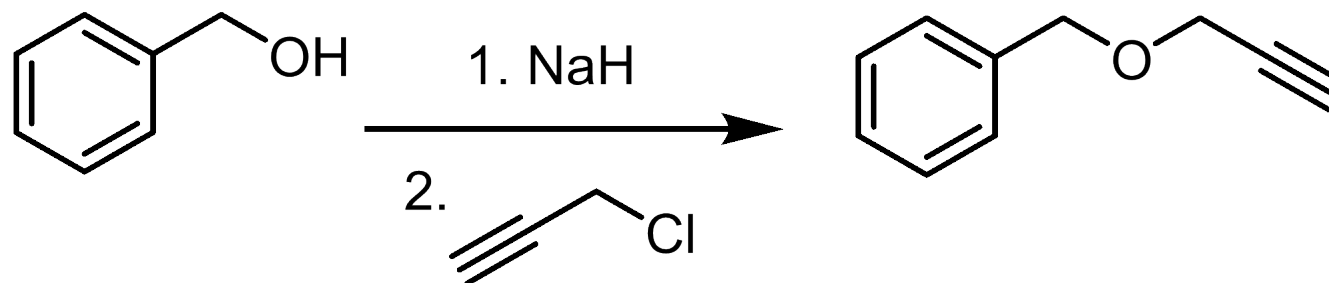
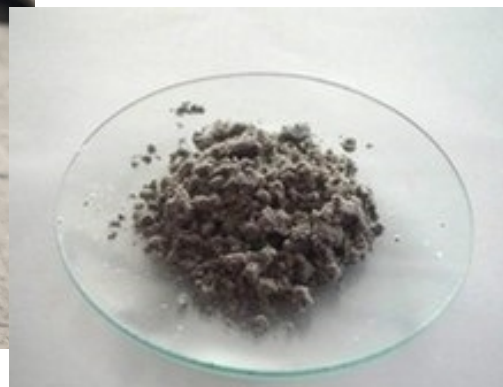
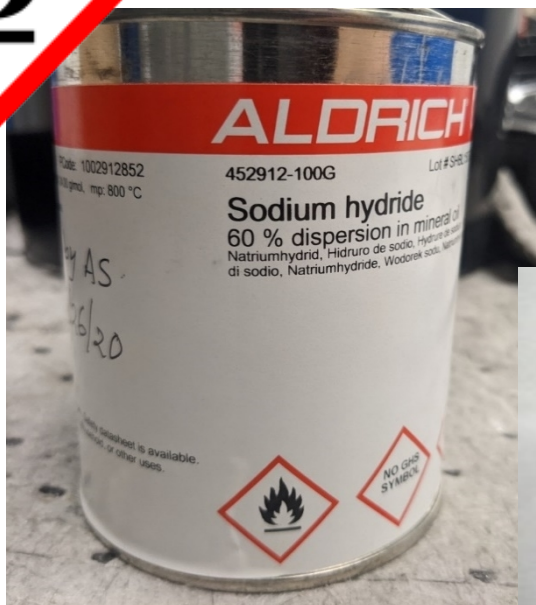
# As a Teaching Assistant: Personal exposures



RAMP

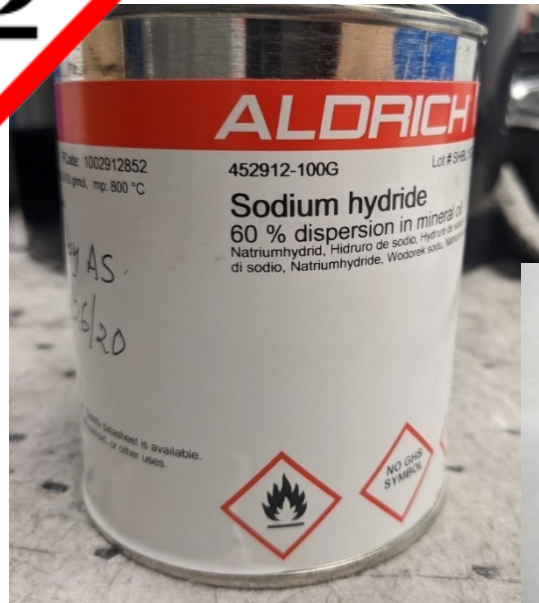


# As a Graduate Student: Fires





# As a Graduate Student: Fires



RAMP



# Lessons Learned

## As a Teaching Professor

- Stronger safety culture
  - Empowerment
  - Communication
  - Training & education with storytelling
- Building safety into the curriculum
- Routinization of controls



- Stronger safety culture
  - Non-punitive communication about incidents
    - Santayana reports (stories)
- Thoughtful planning that can include EH&S

## As a Safety Professional



# Acknowledgements

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Drew University

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- NaOH pellets
- Eyewash shower by [Atlantic Training](#)