



The University of Texas at Austin  
Environmental Science Institute

*Hot Science - Cool Talk # 112*

# ***Sleuthing, The Avengers & Chemistry***

**Dr. Raychelle Burks**  
**March 23, 2018**

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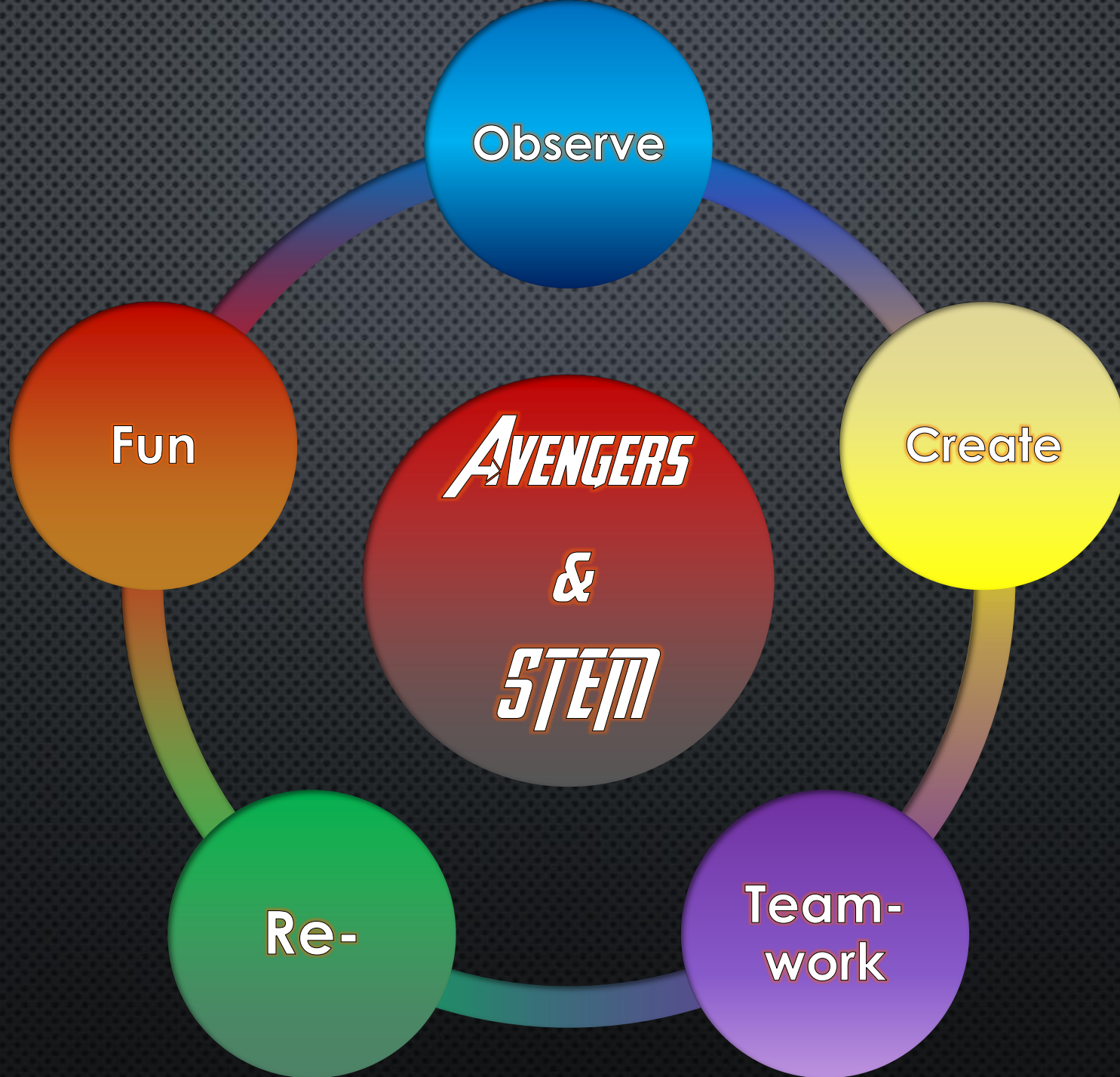
Sleuthing, *AVENGERS*, & Chemistry

DR. RAYCHELLE BURKS

ASSISTANT PROFESSOR OF CHEMISTRY

PROFESSIONAL NERD

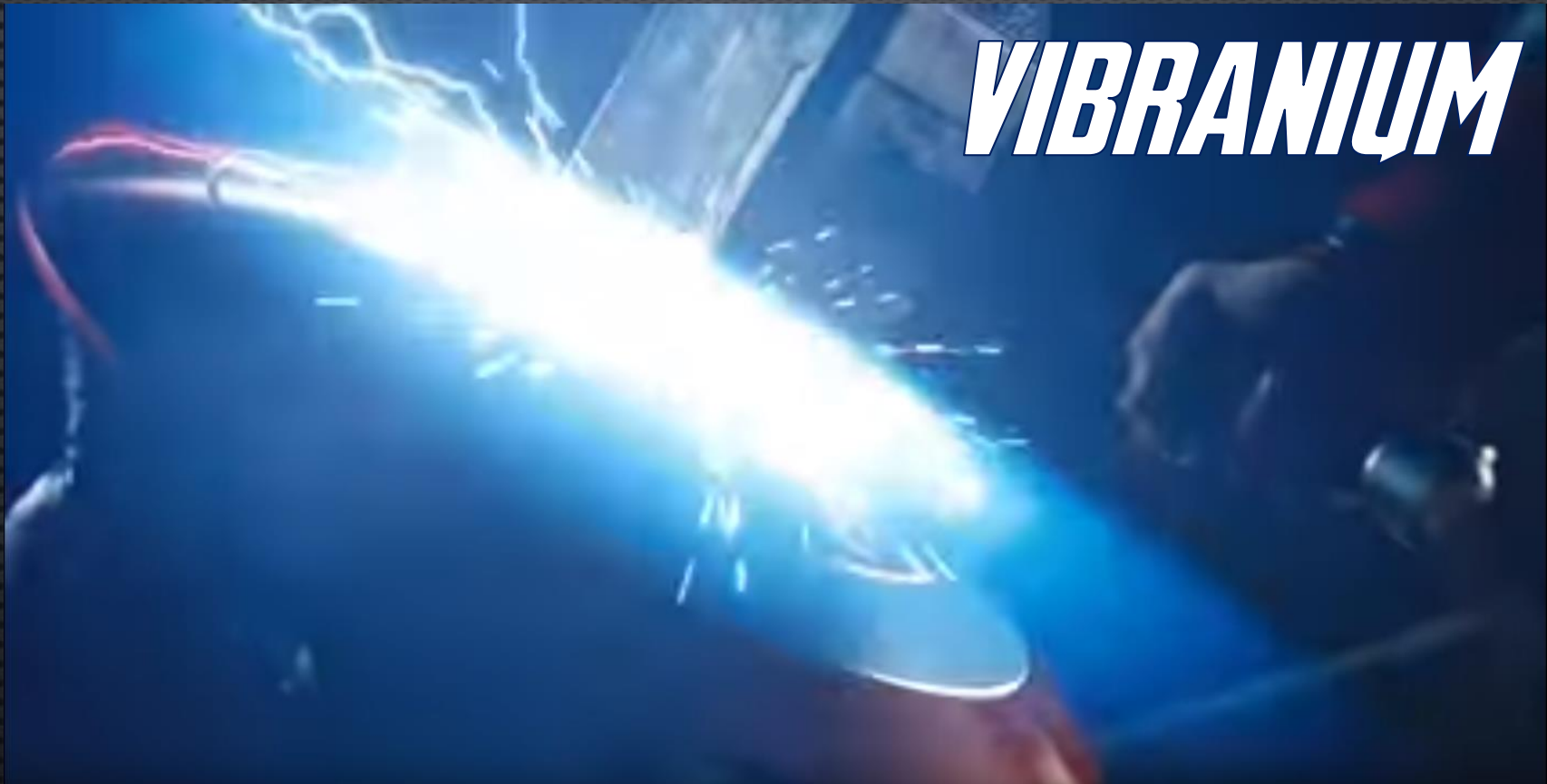
ST. EDWARD'S UNIVERSITY





## Important science video

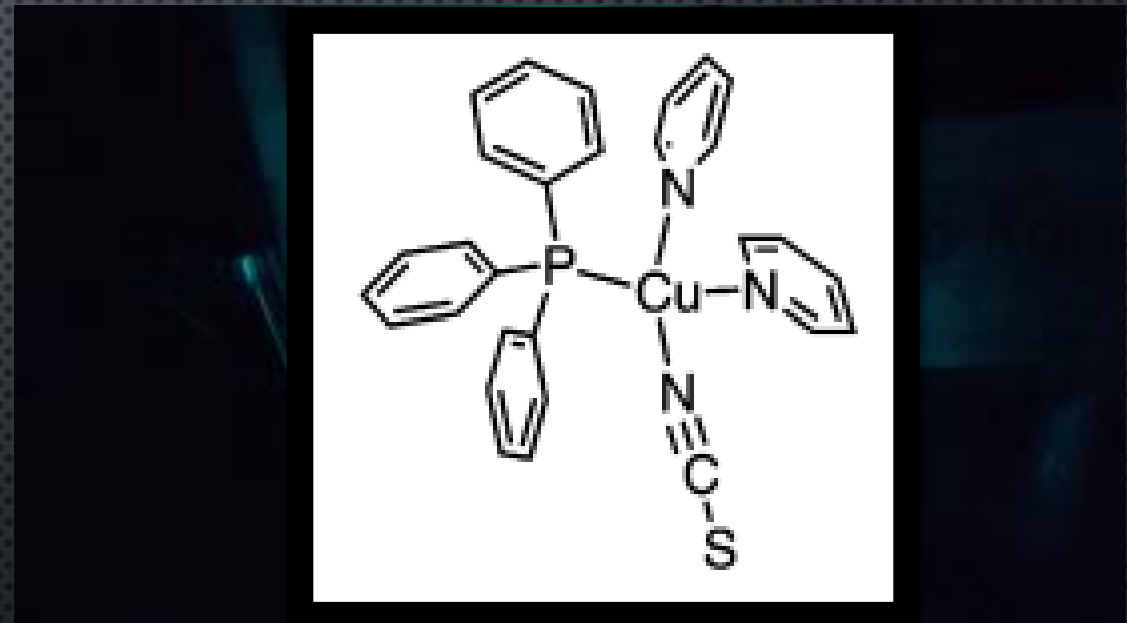
Observe



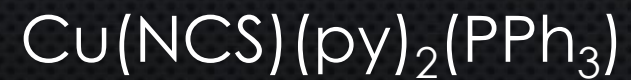
Observe



**VIBRANIUM ALLOY**



**COPPER COMPLEX**



Observe



Observe

# WHERE TO SHOP?



**VIBRANIUM ALLOY**





# WAKANDA



Marvel ([Chicago Sun Times](#))

Create



Create

Team-work



Marvel (source: [HerCampus](#))



Marvel (source: [The Mary Sue](#))

Team-work



Marvel (source: [The Mary Sue](#))



Marvel (source: [tumblr](#))

Team-work



**MONICA RAMBEAU**



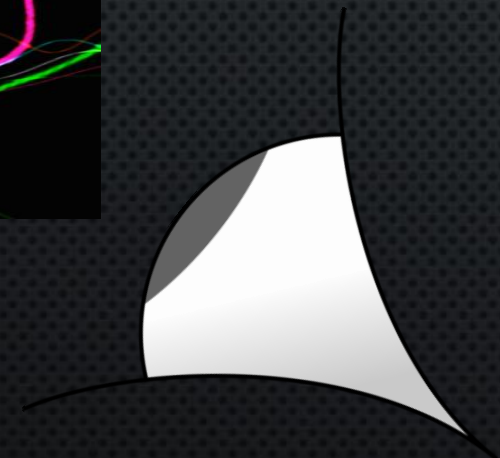
**CAROL DANVERS**

Team-work



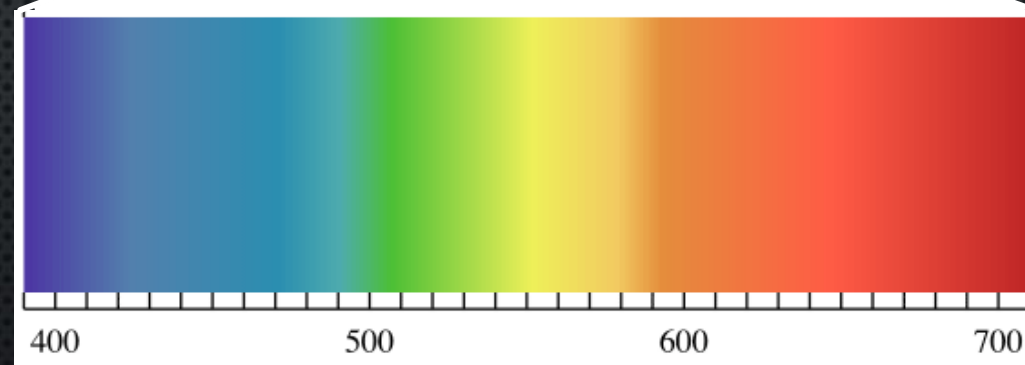
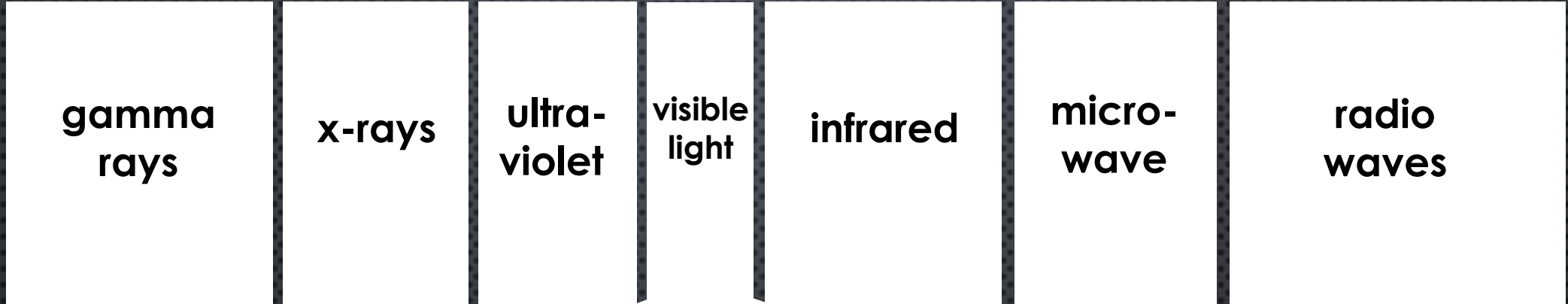
**MONICA RAMBEAU**

Marvel & Gizmodo



← increasing frequency

increasing wavelength →



**Visible light spectrum**



Team-work

Re-



**MONICA RAMBEAU**  
**CAPTAIN MARVEL**  
**PHOTON**  
**PULSAR**  
**SPECTRUM**



Re-

**RESEARCH**

**REDO**

**REVISE**

**REINVENT**



Re-



Re-



**If you fail, never give up  
because F.A.I.L. means  
“first attempt In learning”.**



**End is not the end, in fact E.N.D.  
means “effort never dies”**

APJ Abdul Kalam  
Aerospace scientist  
*President of India, 25 July 2002 – 25 July 2007*

Re-

Fun



Fun



# SUPERHERO HACKATHON

22 NOVEMBER 2017, LONDON

JOIN FORCES TO DESIGN THE ULTIMATE SUPERHERO



ROYAL SOCIETY OF CHEMISTRY



# *HOMWORK*

Observe

Fun



Let's go!

Re-

Team-  
work

***YOUR  
SUPERHERO  
HERE***





