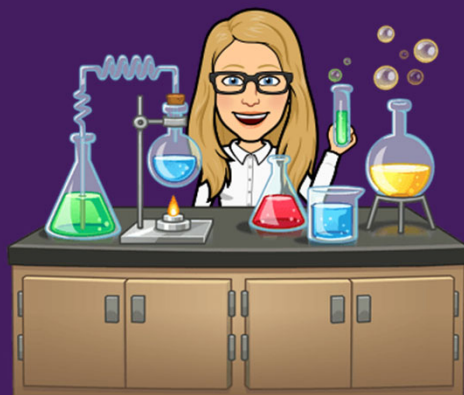


For voting, go to: <https://pollev.com/lauriestarke263>
or text LAURIESTARKE263 to 37607 to join poll



Dr. Laurie S. Starkey
Cal Poly Pomona



CHM 3140 Organic Chemistry I
Announcements 5/2/24

Today's Topic: Synthesis of Alkynes (Ch. 9)

Canvas Module
Week 14, Ch. 9

- ✓ Watch
- ✓ Read
- ✓ Practice

Step 2:

- Watch [Alkynes - Part 2](#) (37 minutes, pages 9-4 to 9-6)
- Read Klein Chapter 9 (sections 9.3, 9.10, 9.11), and work through **SkillBuilders 9.2, 9.5, 9.6**
- Practice by working on [Chapter 9 EOC problems](#) for 5 points course credit - on WileyPLUS (auto-graded) or on paper (self grade, using Solutions Manual).



Week 14 - Chapter 9 ✓ A↓

Reactions of Alkynes

Educator Lecture

Alkyne Synthesis		36:17
Method 1: Alkyne Synthesis By Dehydrohalogenation	Synthesis	36:19
Alkyne Synthesis		39:06
Example: Transform		39:07
Alkyne Synthesis		41:21
Method 2 & Acidity of Alkynes		41:22
Conjugate Bases		43:06
Preparation of Acetylide Anions		49:55
Preparation of Acetylide Anions		49:57
Alkyne Synthesis		53:40
Synthesis Using Acetylide Anions		53:41
Example 1: Transform		57:04
Example 2: Transform		61:07
Example 3: Transform		66:22

Chapter 9 Assignments

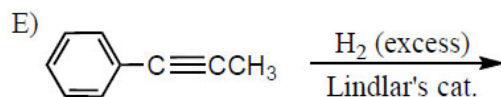
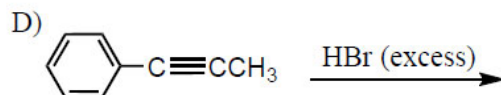
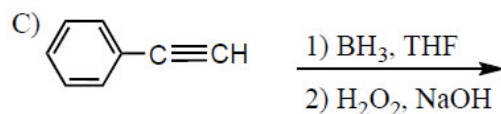
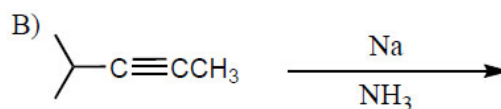
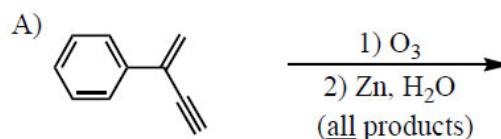
Suggested Ch. 9 problems: *Mechanisms and **Synthesis (good to work on by

32a-f	43	54
33a-c	44ab*	55
34	45	56
35ab	46	57a-d
36a-f	47	58
37	48a-f**	59
38a-e	49	60
39ab	50	61
40	51	62
41a-d	52a-c**	63
42	53	64

CHM 3140 Organic Chemistry I, Dr. Laurie S. Starkey, Cal Poly Pomona
Alkene/Alkyne Predict the Products Homework, Part II




Name: _____

Predict the major product(s) expected for each of the following reactions. **Remember to indicate stereochemistry, when appropriate.** If no reaction is expected, write NR.



Chapter 9 - Alkynes	
	Introduction & Reduction of Alkynes (Conc. Chkpt 9-12) Due May 18 at 11:59pm 6 pts
	Alkyne Synthesis by E2 (conc. Chkpt 9.7) Due May 18 at 11:59pm 2 pts
	Reduction of Alkynes (Conc. Chpt 9-12) Due May 18 at 11:59pm 7 pts
	Addition Reactions: HBr, Br2, H2O (SkillBuilders 9.3, 9.4 & Conc. Chkpt 13-15, 18-21) Due May 18 at 11:59pm 21 pts
	Ozonolysis of Alkynes (Conc. Chkpt 9.24-9.26) Due May 18 at 11:59pm 4 pts
	Alkylation & Synthesis (SkillBuilders 9.2, 9.5, 9.6) Due May 18 at 11:59pm 12 pts
	Chapter 9 EOC Due May 18 at 11:59pm 73 pts

Please complete all CPP course evaluations by Sunday 5/5. Thank you!

	Spring 2024 Course Evaluations Course: CHM_3140-02_2243	Open	Due May 05 2024 11:59:00 PM
	Spring 2024 Course Evaluations Course: CHM_3140-03_2243	Open	Due May 05 2024 11:59:00 PM
	Spring 2024 Course Evaluations Course: CHM_3150-05_2243	Open	Due May 05 2024 11:59:00 PM

You know what this weekend is...

Week	Mon	Tues	Wed	Thurs	Fri
13	4/22	4/23 Ch. 8 #1	4/24	4/25 Ch. 8 #2	4/26
14	4/29	4/30 Ch. 9 #1	5/1	5/2 Ch. 9/10 #2	5/3
15	5/6	5/7 Ch. 10 #1	5/8	5/9 Ch. 11 #1	5/10
Finals (section)	5/13	Tue. 3:00–4:50 pm (02) 5/14 5:00–6:50 pm (03)	5/15	5/16	You are here

- Ch. 10 **Radical Reactions** (free radical halogenation, radical additions to alkenes, polymerization)
- Ch. 11 **Synthesis Strategies** (and Review of Chapters 7-10)

Carbide Lamps: Sizzling Hot Alkyne Chemistry, Since 1862

Carbide lamp

From Wikipedia, the free encyclopedia

See also: *Headlamp (outdoor)*



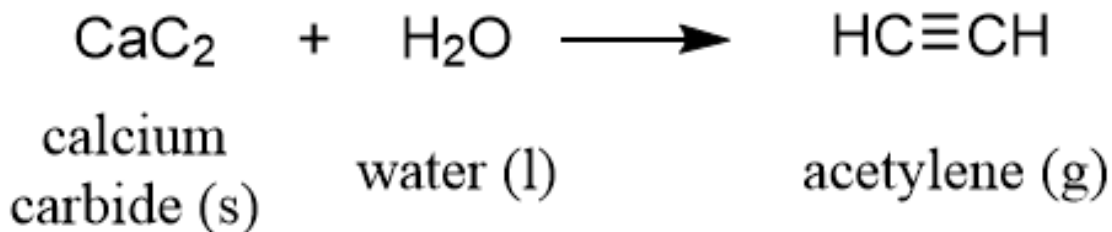
This article **needs additional citations** for **this article by adding citations to reliable sources** so it can be **challenged and removed**.

Find sources: "Carbide lamp" – news · newspapers · books · scholar · JSTOR (July 2015)
(*Learn how and when to remove this template message*)

Carbide lamps, or **acetylene gas lamps**, are simple lamps that produce and burn **acetylene** (C₂H₂) which is created by the reaction of **calcium carbide** (CaC₂) with **water** (H₂O).^[1]

Acetylene gas lamps were used to illuminate buildings, as **lighthouse** beacons, and as headlights on motor-cars and bicycles. Portable acetylene gas lamps, worn on the hat or carried by hand, were widely used in mining in the early twentieth century. They are still employed by **cavers**, hunters, and **cataphiles**. Small carbide lamps called "carbide candles" or "smokers" are used for blackening rifle sights to reduce glare. They are used because of the **sooty** flame produced by acetylene.^[2]

Contents [hide]



An acetylene gas miner's lamp

