Síntesis de Dilantín a partir de benzaldehído

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- Resultados y discusión
- Sección experimental
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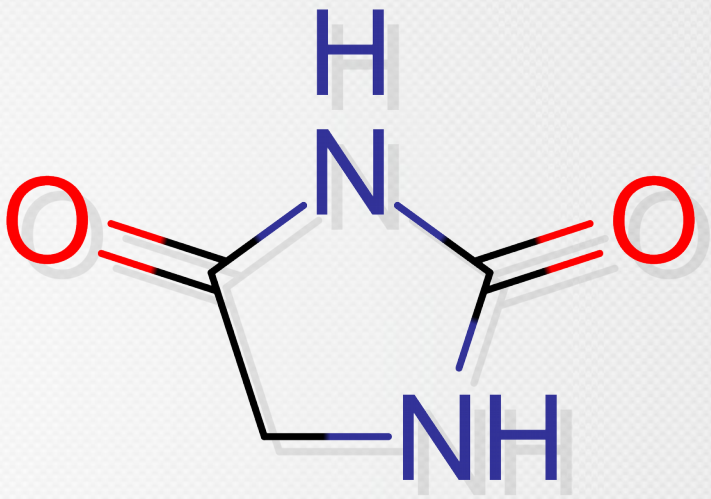
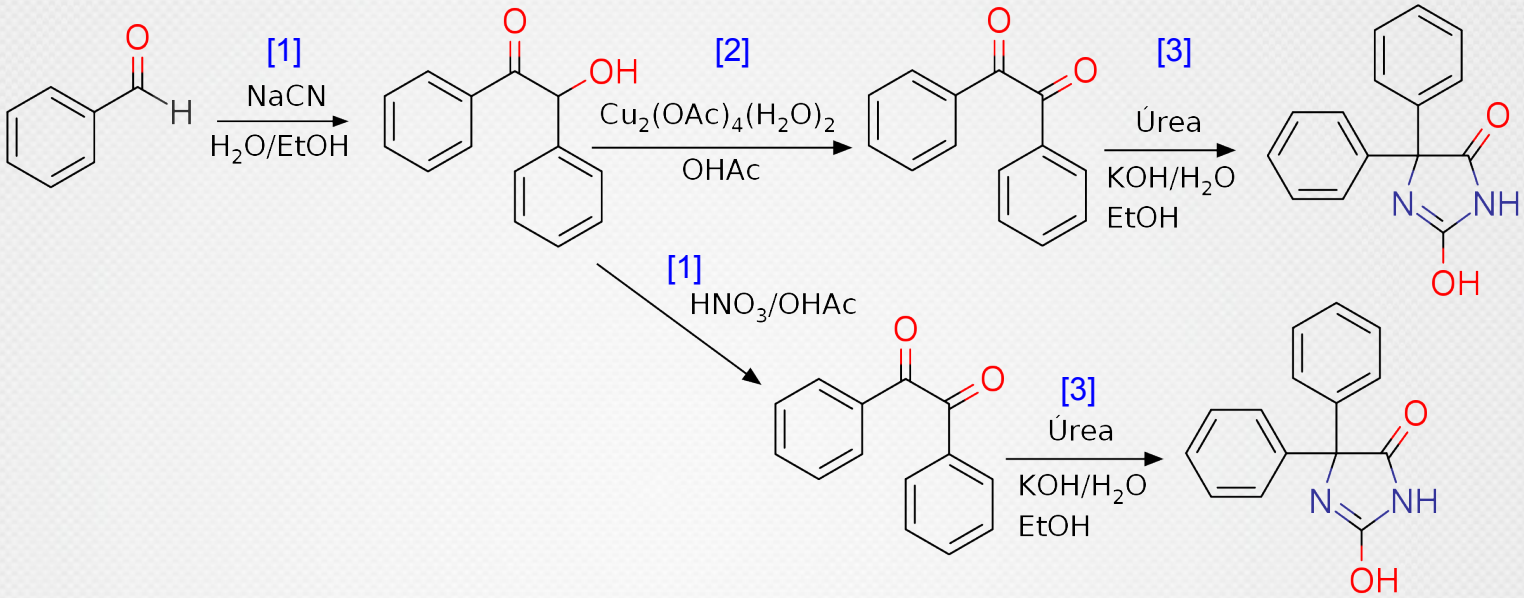
Introducción



Esquema 1. Anillo de hidantoina.

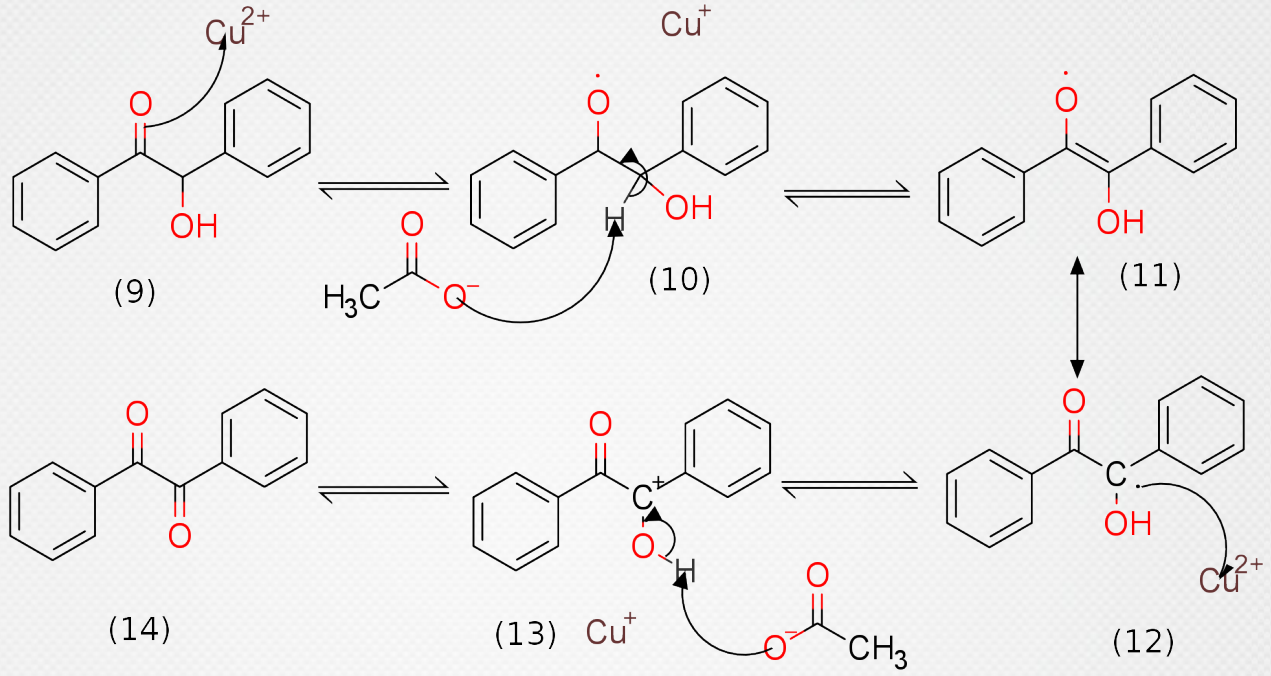
Introducción



Esquema 2. Síntesis seguida en el laboratorio.

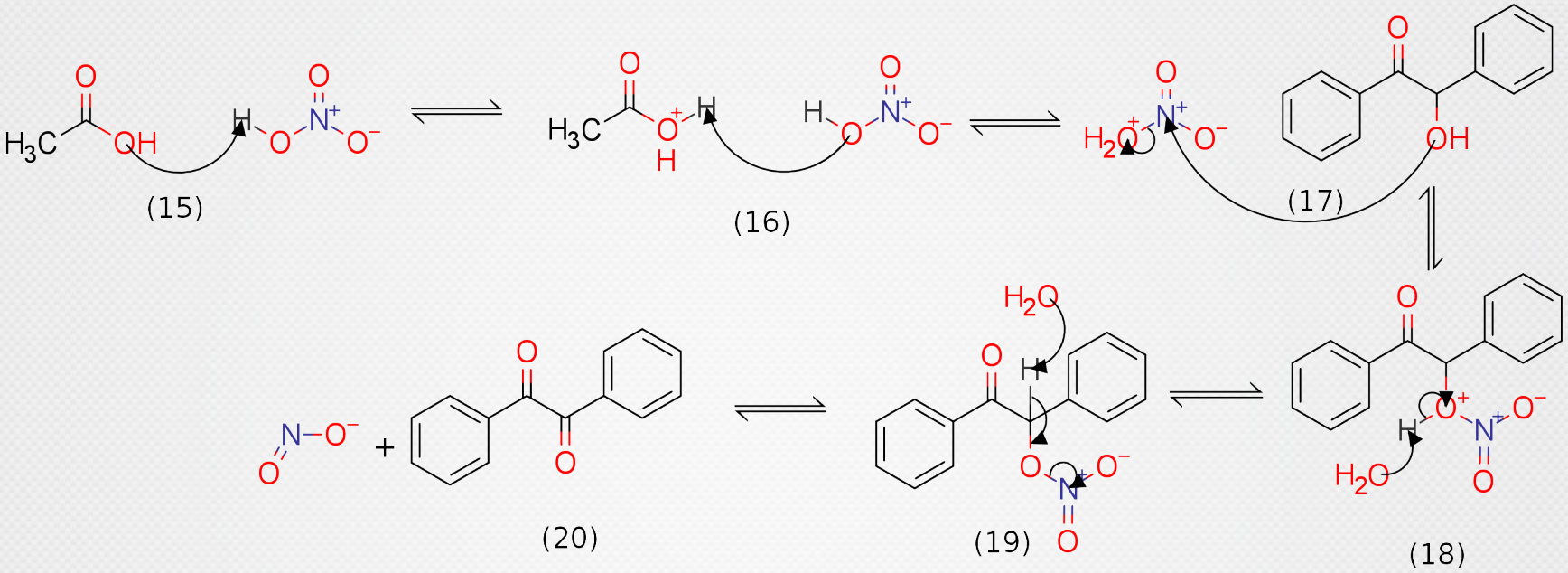
[1] Pavia, D. L.; Lampman, G. M.; Kriz, G. S. *A small scale approach to organic laboratory techniques: A small-scale approach* - 3rd edition, 3rd ed.; Brooks/Cole Cengage Learning: United States, 2010; pp 266–276.
[2] Depreux, P.; Bethegnies, G., A. Synthesis of benzil from benzoin with copper(II) acetate. *Journal of Chemical Education*. June 1988, 65 (6), 553.
[3] Safari, J.; Moshtael Arani, N.; Ramezan Isfahani, A. Ultrasound-enhanced green synthesis of 5, 5-Diphenylhydantoin derivatives using symmetrical or Unsymmetrical Benzils. *Chinese Journal of Chemistry*. Feb 2010, 28 (2), 255–258.

Resultados y discusión



Esquema 4. Oxidación de la benzoína usando acetato de cobre.

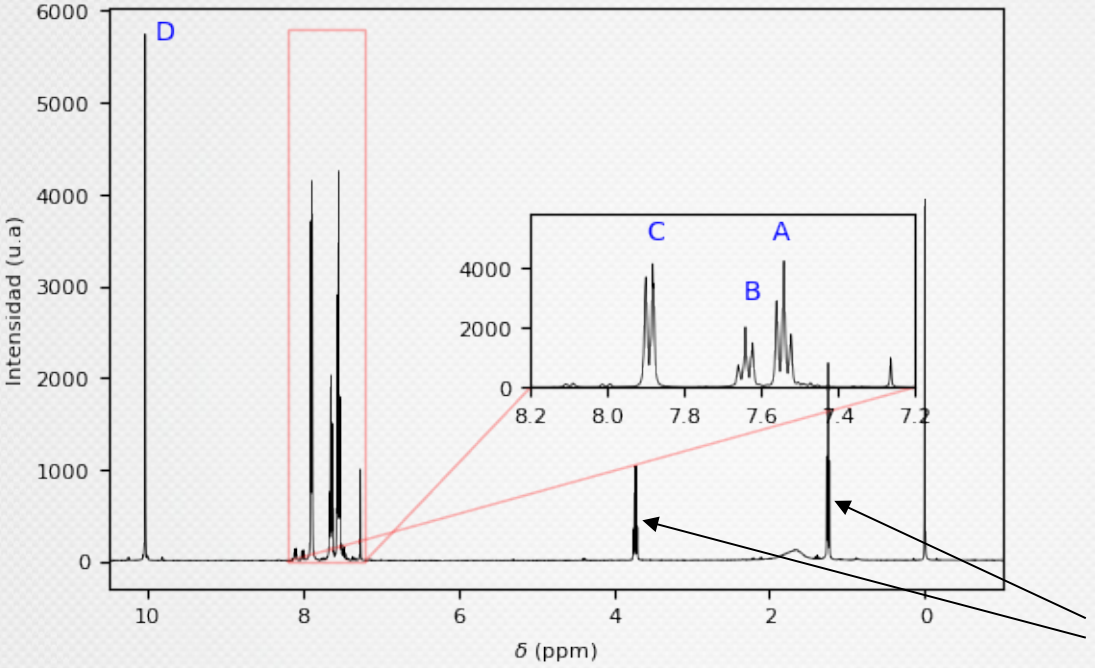
Wigal, C. T. *Modular laboratory program in chemistry*, Chemical Education Resources ed.; Jeffers, J., Ed.; H. A. Neidig, 2000.

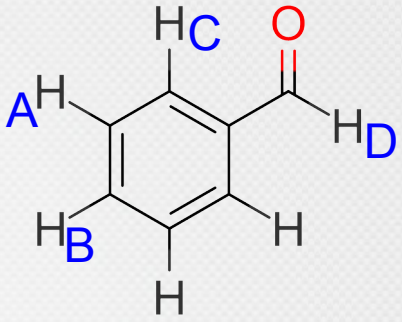


Esquema 5. Oxidación de la benzoína usando ácido nítrico.

Pavia, D. L.; Lampman, G. M.; Kriz, G. S. *A small scale approach to organic laboratory techniques: A small-scale approach*, 3rd ed.; Brooks/Cole Cengage Learning: United States, 2010; pp 266–276.

^{1}H-Benzaldehído

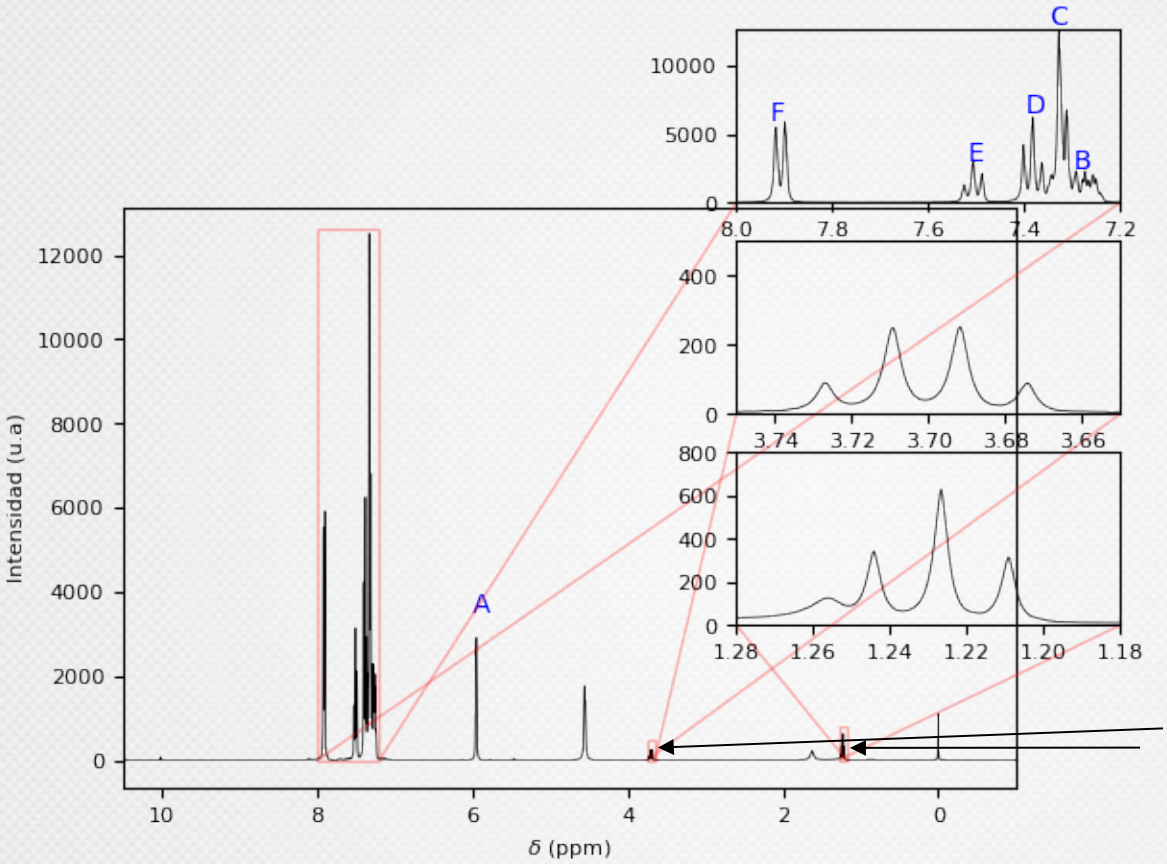


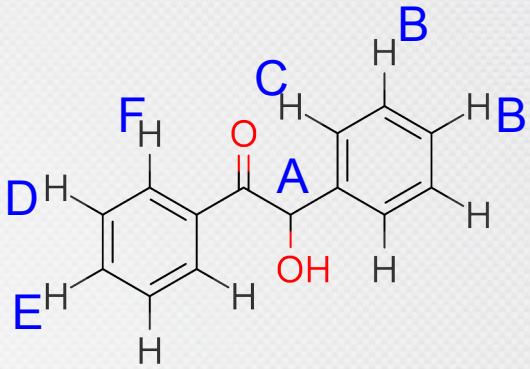


Señal	Int	Mult.
A	1.88	t
B	0.89	t
C	1.77	d
D	1.00	s

Etanol

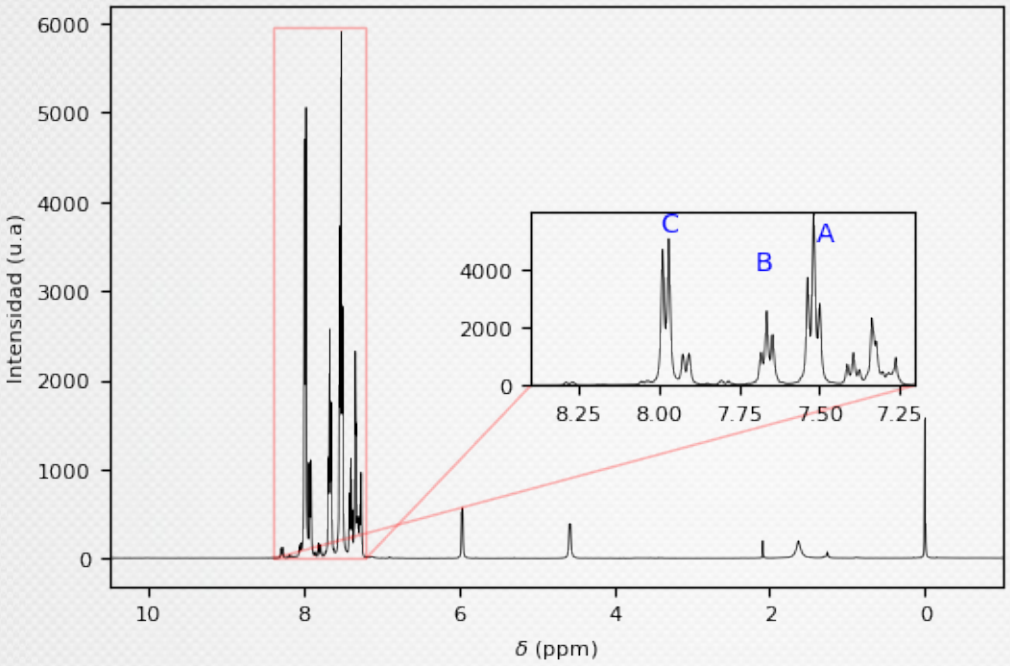
^{1}H-Benzoína

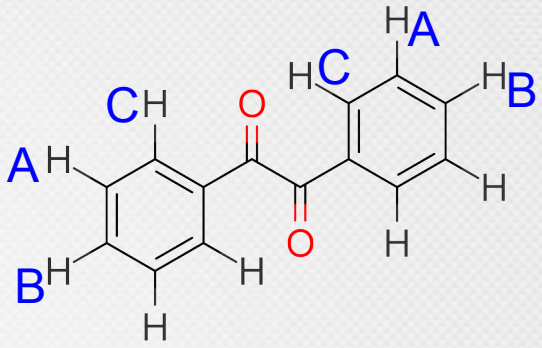




Señal	Int	Mult.
A	1.00	s
B + C	4.80	m
D	2.10	d
E	1.08	s
F	2.01	d

^{1}H-Benzil





Señal	Int	Mult.
A	4.25	t
B	2.00	t
C	3.71	d