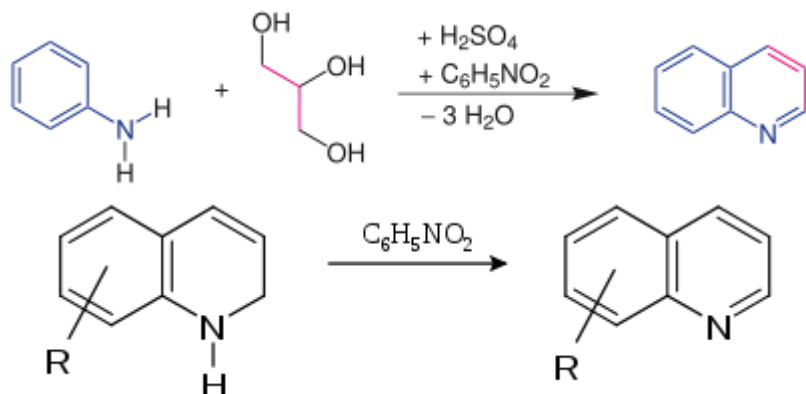


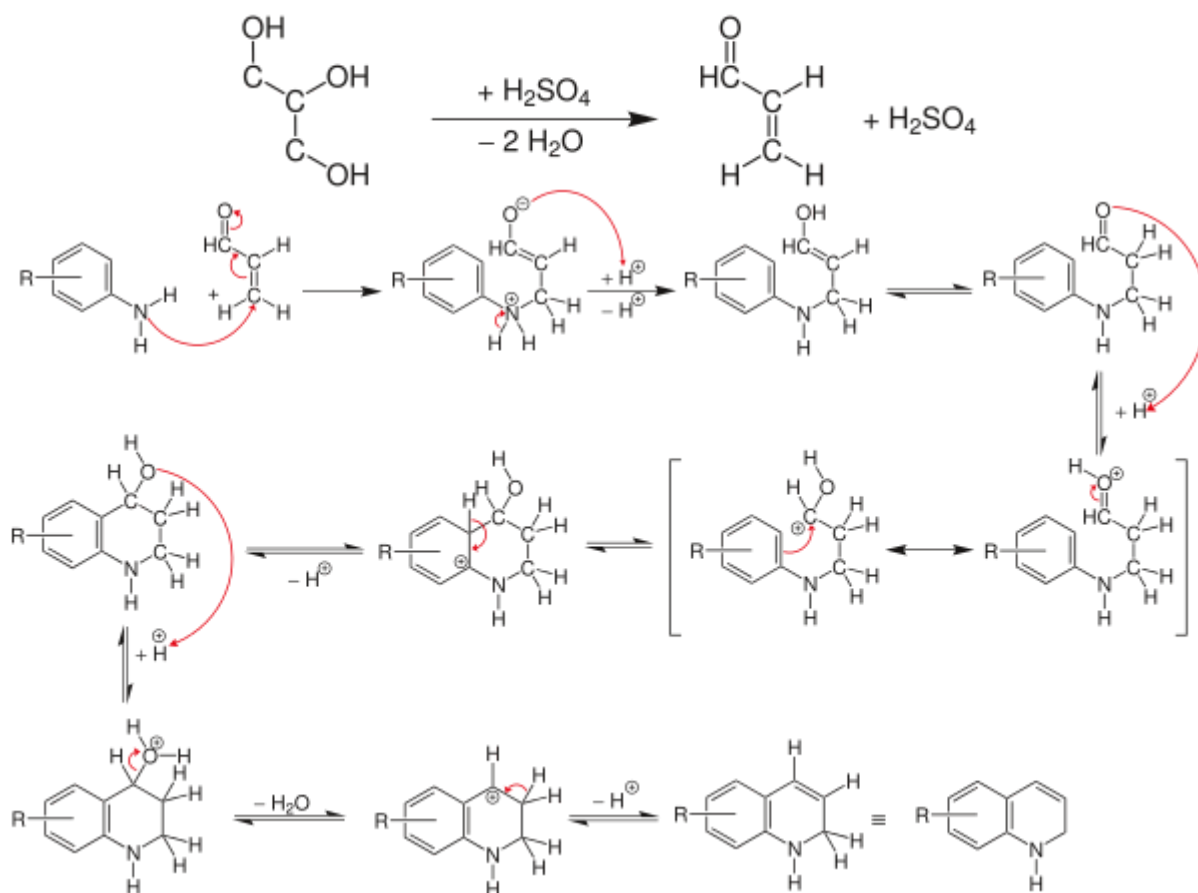
Skraup reaction

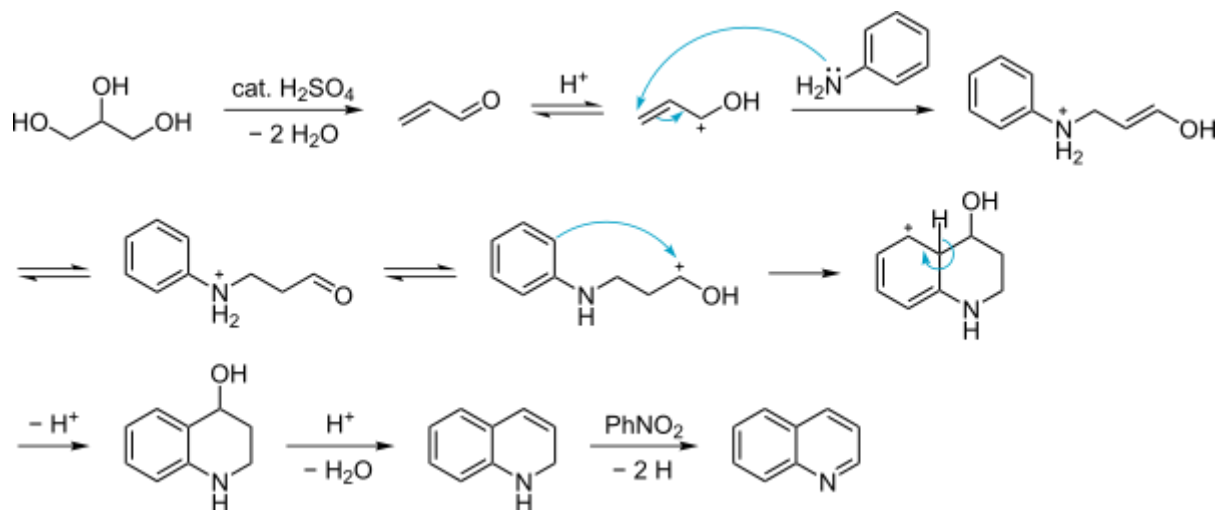
The **Skraup synthesis** is a chemical reaction used to synthesize quinolines. It is named after the Czech chemist Zdenko Hans Skraup (1850-1910). In the archetypal Skraup reaction, aniline is heated with sulfuric acid, glycerol, and an oxidizing agent such as nitrobenzene to yield quinoline.^{[1][2][3][4]}



Skraup reaction	
Named after	Zdenko Hans Skraup
Reaction type	Ring forming reaction
Identifiers	
RSC ontology ID	RXNO:0000062

In this example, nitrobenzene serves as both the solvent and the oxidizing agent. The reaction, which otherwise has a reputation for being violent, is typically conducted in the presence of ferrous sulfate.^[5] Arsenic acid may be used instead of nitrobenzene and the former is better since the reaction is less violent.^[6]





See also

- [Bischler-Napieralski reaction](#)
- [Doebner-Miller reaction](#)

References

1. Skraup, Z. H. (1880). "Eine Synthese des Chinolins". *Berichte*. **13**: 2086.
2. Manske, R. H. F. (1942). "The Chemistry of Quinolines". *Chem. Rev.* **30**: 113–144. doi:10.1021/cr60095a006 (<https://doi.org/10.1021%2Fcr60095a006>).
3. Manske, Richard H. F.; Kulka, Marshall (1953). "The Skraup Synthesis of Quinolines". *Org. React.* **7**: 80–99. doi:10.1002/0471264180.or007.02 (<https://doi.org/10.1002%2F0471264180.or007.02>). ISBN 0471264180.
4. Wahren, M. (1964). "Stabilisotop markierte verbindungen—II , Untersuchung der skraupschen chinolin-synthese mit hilfe von 15N". *Tetrahedron*. **20** (12): 2773. doi:10.1016/S0040-4020(01)98495-9 (<https://doi.org/10.1016%2FS0040-4020%2801%2998495-9>).
5. Clarke, H. T.; Davis, A. W. (1941). "Quinoline" (<http://www.orgsyn.org/demo.aspx?prep=cv1p0478>). *Organic Syntheses*; *Collective Volume*, **1**, p. 478
6. Finar, Ivor Lionel (1973). *Organic Chemistry, Volume 1* (6th ed.). p. 857. ISBN 978-0582442214.

Retrieved from "https://en.wikipedia.org/w/index.php?title=Skraup_reaction&oldid=980044966"

This page was last edited on 24 September 2020, at 08:32 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.