



Intramolecular Kröhnke pyridine synthesis¹³⁸ as well as Kröhnke pyridine synthesis under microwave irradiation¹³⁹ have also been reported. In addition, indium trichloride can be used as a catalyst in the Kröhnke pyridine synthesis.¹⁴⁰

Synthesis of anti-malarial reagent enpiroline (**17**) involved the formation of the pyridine skeleton **206** *via* the Kröhnke reaction of aroyl acrylic acid **204**, acyl pyridinium salt **205**, and ammonia acetate. Condensation of the carboxyl group in **206** with 2-lithiopyridine afforded the diaryl ketone **207**. The relative higher basicity of the terminal pyridinyl ring allowed selective reduction of this ring *via* hydrogenation in the presence of an acid and simultaneously reduction of the ketone to the alcohol. The desired isomer was then obtained by fractional crystallization to afford **17**.¹⁴¹

