

Chemical warfare agents are destroyed when chemically reacted with nitrogenous base, optionally containing solvated electrons which are conveniently produced by dissolving an active metal like sodium in a nitrogenous base such as anhydrous liquid ammonia. A reactor system (10) used to carry out the process comprises reaction vessel (20) adapted to receive either nitrogenous base or a solution of solvated electrons from solvator (30) and CWA from storage vessel (40). The reactor system also incorporates condenser (50) for treating gas evolved from the reaction vessel (20), decanter (60) for receiving slurried reaction products from the reaction vessel and separate the reaction products into a liquid fraction and a solid fraction, dissolver (70) for contacting the solid fraction with water to produce a fluid mixture and oxidizer (80) for oxidizing the fluid mixture.

