**Title:** Comparison of thermodynamic cycles for power production from low-temperature geothermal heat sources

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From the abstract: “Two types of binary cycles are proposed in the literature. The first one is the organic Rankine cycle, which is similar to a steam Rankine cycle, but uses an organic working fluid instead of water. A second type is the so-called Kalina cycle. The Kalina cycle is similar to an ORC, but uses a mixture of water and ammonia with a variable composition as [sic] working fluid.”

The paper discusses sub-critical ORCs with and without recuperators for 10 different working fluids (in a cited work) which yielded R236ea as the best performing working fluid for a heat source of 145oC.

There is some discussion of efficiency and power yield improvements related to regeneration and recuperation in this paper.

According to this paper, the Kalina cycle has approximately equivalent performance statistics to the ORC.

Several configurations of the ORC are discussed as well as a discussion on modelling.