

# 50 YEARS OF RB REACTOR



The idea of RB reactor construction matured in year 1956, when an agreement about the provision of natural uranium and heavy water with Russian partner was reached. The reactor was designed and built in the course of 1957, and in 1958 it was completed and put into operation.

Team expecting RB reactor first criticality:

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The reactor officially started operating in May 17, 1958. First criticality was reached in April 29, 1958.

RB reactor was designed and constructed as an unreflected zero power heavy water - natural uranium critical assembly. Later, the 2% enriched metal uranium fuel and 80% enriched  $UO_2$  fuel were obtained and used in the reactor core.



Modifications of the reactor control, safety, and dosimetry systems (1960, 1976, 1988) converted RB critical assembly into flexible heavy water reflected experimental reactor with 1 W nominal power, operable up to 50 W.

Several coupled fast-thermal systems were designed and constructed at RB reactor in the early 1990's, for the research in fast reactor physics.



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