What came first: ~~the~~ DNA or protein? ~~Discovery~~ The discovery of ribozymes and the RNA world hypothesis ~~of RNA world has~~ have provided a new perspective to ~~given~~ this question ~~another dimension~~. Enzymes were ~~was~~ the only known natural catalysts to the discovery of ribozymes.

Ribozymes (also known as RNA ~~enzyme~~ enzymes or catalytic RNA) are RNA particles that catalyze ~~biochemic~~ biochemical ~~reaction~~reactions. ~~Thomas~~ Cech and Altman, who ~~were the~~ first ~~to discover~~ discovered ribozymes ~~during~~ in the 1980s, ~~and went on later to investigate~~ subsequently studied their ~~the~~ catalytic properties. ~~Thomas~~ Cech found that when additional cell extract was absent, the ~~splicing of~~ introns in ~~a~~ ribosomal RNA in ribosomal RNA ~~gene~~ genes ~~in *Tetrahymena thermophila* were found to occur~~ in *Tetrahymena thermophila* underwent splicing~~in the absence of additional cell extract~~. ~~Sidney~~ Altman ~~and his colleagues~~et al.~~,~~ ~~separated~~ discovered ~~the~~ bacterial RNase P, an enzyme responsible for ~~changing~~ converting ~~a~~ precursor tRNA to its active ~~tRNA~~form. However, ~~it was found that~~ in addition to ~~the~~ proteins, the enzyme ~~also~~ contained RNA that could stimulate the cleavage of ~~the cleavage of~~ precursor tRNA into tRNA in the absence of the protein component. ~~Also, Thomas~~ Cech ~~gave the conclusion~~ concluded that the intron sequence of ~~the~~ RNA ~~can~~could ~~break~~ cleave and reform phosphodiester~~phosdiester~~ bonds. ~~They~~ Cech and Altman won the Nobel Prize in chemistry for ~~the same thing~~ this in 1989. Natural ~~ribosomes~~ ribozymes catalyze the hydrolysis of their own phosphodiester bonds~~. They also catalyze~~ and other RNA sequences. They also catalyze ~~the~~ aminotransferase activity~~. They also catalyze the hydrolysis of the other RNA. Ribozymes are so called because they act as enzymes in terms of their specificity and belong to RNA.~~ ~~However~~Despite possessing enzymatic activity, ~~they~~

Comment [A1]: A comma is not used to separate the subject and the verb and has therefore been deleted here.

Comment [A2]: In academic writing, information should be presented with accuracy. At this instance, the term "ribosomes" refers to a cell organelle, whereas "ribozymes" refers to catalytic RNA. This typographical error has been revised for accuracy.

Comment [A3]: This information has been deleted because it is not essential with respect to context and has already been conveyed previously in the text.

ribozymes ~~are different~~ differ from other enzymes ~~because of th~~because of the ~~e~~ following reasons:

1) Unlike enzymes, ribozymes do not require a specific pH and temperature to function.
2) ~~Ribozymes consists~~ They consist of nucleotides.
3) They do not have ~~well defined~~ well-defined regions, such as active ~~site~~ and ~~catalyzed~~ catalytic ~~site~~sites.
4) They can act on ~~a very~~extremely small amounts of substances but perform a more limited set of instructions.

To date, ~~A~~ many ~~number of~~ natural ribozymes have been discovered and several artificial ribozymes have been synthesized ~~till date~~. ~~The discovery of naturally occurring ribozymes is increasing, along with which several artificial ribozymes have also been synthesized. Due to~~ Because of their abilities, ribozymes have been investigated for applications as therapeutic agents and~~,~~ biosensors~~, and in genomics functions~~ in addition to their functions in genomics and gene discovery~~and discovery of genes~~.

Comment [A4]: A compound modifier contains 2 or more words, which act together as one adjective and are connected by hyphens. Hyphens are used with these terms so that their meaning is understood clearly.