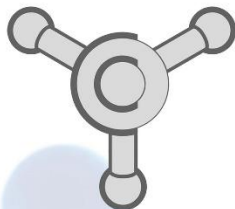


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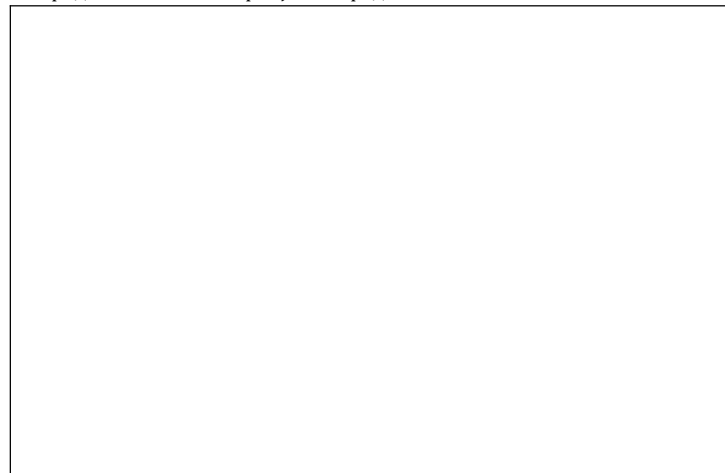
# Seventh Conference of the Young Chemists of Serbia

# *Book of Abstracts*

Belgrade, 2<sup>nd</sup> November 2019



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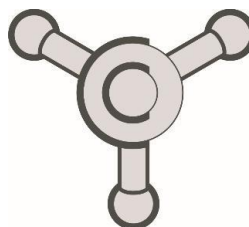
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## Amyloid PDB structure set

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Amyloids are insoluble proteins of a cross- $\beta$  structure found as deposits in many diseases. They are largely examined structurally, but there is a lack of a unique structural database for amyloid proteins resolved with atomic resolution. Here, we present a constructed set of amyloid structures found in the Protein Data Bank based on keyword criterion as well as structural features of amyloids described in literature (Fig. 1). An amyloid consists of parallel self-assembled  $\beta$ -sheets or coils [1,2]. The searching filter was performed by python programming. The total number of structures is 109 and it keeps increasing. This database can help further structural general and statistical analysis of amyloids.

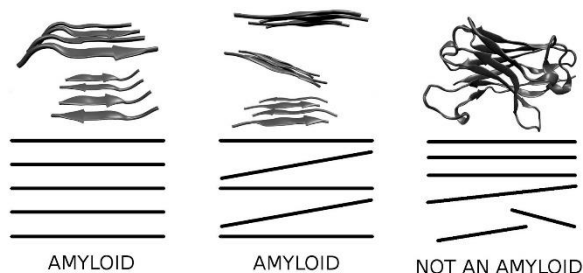


Figure 1. Criterion for distinguishing amyloid structures from other non-helical structures: an amyloid consists of parallel self-assembled  $\beta$ -sheets or coils.

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