

# Abstract

Cyanophycin is a natural biopolymer consisting of a polyasp backbone with 4Arg  
U H V L G X H V D W W D F K Y I G S I E R H A M K I L peptide bonds. First discovered in

# CURRICULUM VITAE

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## ACADEMIC BACKGROUND:

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Thesis title: Structural insights into the biosynthesis  
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B.Sc. Biology and Chemistry, Tel Aviv University  
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## PUBLICATIONS:

12. Sharon I, Hilvert D, Strauss M, Schmeing TM. Cyanophycin and its biosynthesis. Imminent submission. *Natural Product Reports*
11. Markus LMD\*, Sharon I\*, Munro K, Grogg M, Hilvert D, Strauss M, Schmeing TM. Structure and function of a hexameric cyanophycin synthetase 2. Imminent submission. *Protein Science*
10. Sharon I\*, McKay G\*, Nguyen D, Schmeing TM. Specific cyanophycin dipeptide hydrolase enzymes suggest widespread utility of this natural polymer. Minor revision requested. *Proceedings of the National Academy of Sciences USA*
9. Sharon I, Schmeing TM. Bioinformatics of cyanophycin metabolism genes and characterization of promiscuous isoaspartyl dipeptidases that catalyze the final step of cyanophycin degradation. *bioRxiv*, PLOS ONE
8. Dattani A, Sharon I, Shtifman Segal E, Robinzon S, Gophna U, Allers T, Altman N. Differences in homologous recombination and maintenance of heteropolyploidy between *Haloferax volcanii* and *Haloferax mediterranei*. In press, *G3 Genes & Genetics*
7. Sharon I, Grogg M, Hilvert D, Schmeing TM. The structure of cyanophycinase in complex with a cyanophycin degradation intermediate. *Biochimica et Biophysica Acta General Subjects* 2022

GTj Dtceng 3 (onu (tG)-6 TcnD)d (t)-148 Td [8 ( s)2.7 (8)5.3 (r79 (en(c)120.93(e)((en(c)1d [8 ( 5.3 (ngt)0.8 ( (ox)0.r)-7-0.0fn -0.001 (d)-5i)0.8 ( (ox)0.r)1.4 (5 (4