

THE EXOMOL DATABASE: SPECTRLE

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ExoMol¹ is a database of molecular line lists that can be used for spectral characterisation and simulation, and as input to atmospheric models of exoplanets, brown dwarfs and cool stars, and other models including those for combustion and sunspots.

ExoMol hosts over 80+ computed molecular line lists, where we present them as a game called 'spectrle', a variation of the popular game 'wordle', where one has to guess what molecule belongs to each presented spectrum. A prize will be given to the person who guesses the highest number of molecular spectra.

We present an update to the ExoMol database, featuring new line lists for AlCl², LiOH³, SO⁴, H₂CS⁵, H₃⁺⁶, CaOH⁷, SiN⁸, NaO⁹ and updated line lists for CaH, MgH¹⁰, AlO¹¹, NO¹².

¹<https://www.exomol.com/>

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¹²<https://doi.org/10.1093/mnras/stab1154> Q Qu, SN Yurchenko, J Tennyson - Monthly Notices of the Royal Astronomical Society, 2021