

Astrochemistry - Evolution from stardust to biomolecules

Dr. Arunlibertsen Lawzer & Dr. Thomas Lawzer

Registration: send an e-mail to arunlibertsen.lawzer@ichf.edu.pl by January 15, 2022

Date of the first lecture: February 1, 2022

Syllabus

Section I (4 hours) (Dr. Lawzer)

An introduction to interstellar molecular clouds and planetary ices

From H, C, O atoms to hydrocarbons and oxygen-containing molecules

Section 2 (4 hours) (Dr. Lawzer)

Nitrogen-containing hydrocarbons in the interstellar medium

Origin of amino acids, polypeptides, and nitrogenous bases

Phosphorus and sulphur chemistry

Section 3 (4 hours) (Dr. Lawzer)

Origin of carbohydrates

Formation of nucleic acids (DNA and RNA)

Section 4 (3 hours) (Dr. Custer)

Techniques involved in detection and laboratory investigation of space chemistry