

A molecular journey : tales of sublimating ices from hot cores to comets Bogelund, E.G.

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A Molecular Journey

Tales of sublimating ices from hot cores to comets

1. The study of isotopologues, in particular deuterated species, is essential for an accurate characterisation of the chemical inventory of star-forming regions.

Chapter 2 & 4

- 2. On small spatial scales, the abundances of complex organic molecules around low and high mass forming stars can be very similar. *Chapter 4*
- 3. Methylamine is common in star-forming regions and may provide an important molecular reservoir for prebiotic chemistry. *Chapter 3*
- 4. ALMA's high resolution, both spatial and spectral, is essential to decipher the molecular content of star-forming regions with complex structures.

Chapter 2 & 3

- 5. Comprehensive studies of individual star-forming regions are needed to identify the origin of similarities and differences in interstellar chemistry.
- 6. No observational astrochemical publication is complete without mention of the included spectroscopic work.
- 7. In the hunt for new discoveries, the potential of mining archival data should not be overlooked.
- 8. The costs of future space missions to comets need to be substantially reduced if they are to compete with ground-based telescopes to study cometary populations as a whole.
- 9. Physical and emotional stress during a PhD should not be ignored nor accepted as a "normal" part of the job.
- 10. Inaccurate or unclear reports of scientific results feed the public mistrust of science.
- 11. Interacting with a pet promotes mental well-being and can serve as a source of comfort and support.
- 12. The idea that bicycle helmets are reserved for lycra-clad road racers and tourists needs to be revised.

Eva G. Bøgelund Leiden, March 2019