

**THE COLLISIONAL ATOMIC PROCESSES IN GEO-COSMICAL
PLASMAS: DATA NEEDED FOR SPECTROSCOPY**

V. A. Srećković¹, Lj. M. Ignjatović¹ and M. S. Dimitrijević^{2,3}

¹*Institute of Physics Belgrade, Pregrevica 118, 11080 Belgrade, Serbia*

²*Astronomical Observatory, Volgina 7, 11060 Belgrade, Serbia*

³*Sorbonne Université, Observatoire de Paris, Université PSL,
CNRS, LERMA, F-92190 Meudon, France.*

E-mail: vlada@ipb.ac.rs, ljuba@ipb.ac.rs, mdimitrijevic@aob.rs

In this paper, we investigate the chemi-ionization (CI) processes in atom-Rydberg atom collisions. The rate coefficients for CI processes in $K^*(n) + K$ and $H^*(n) + K$ collisions are presented for a wide region of temperatures and principal quantum numbers. The data for the rate coefficients are very useful for the improvement of modelling and analysis of different layers of weakly ionized plasmas in atmospheres of various stars where these and other CI processes could be important and could change the optical characteristics (Mihajlov et al 2011; Srećković et al. 2014). Also, the results are of interest in spectroscopy of low temperature laboratory plasma.

References

- Mihajlov, A. A., Ignjatović, L. M., Srećković, V. A., Dimitrijević, M. S.: 2011, *ApJS*, **2**, 193.
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