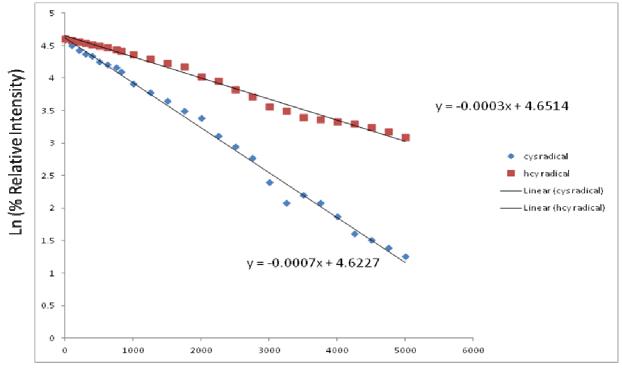
Structure and Reactivity of Homocysteine Radical Cation in the Gas Phase Studied by Ion-Molecule Reactions and Infrared Multiple Photon Dissociation.

Sandra Osburn¹, Ticia Burgie¹, Giel Berden², Jos Oomens^{2,3}, Richard A.J. O'Hair^{4,5,6}, Victor Ryzhov^{1*}

- ¹Department of Chemistry and Biochemistry, and Center for Biochemical and Biophysical Studies, Northern Illinois University, Dekalb, IL 60115, USA
- ²FOM Institute for Plasma Physics Rijnhuizen, Nieuwegein, The Netherlands
- ³University of Amsterdam, Amsterdam, The Netherlands
- ⁴School of Chemistry, The University of Melbourne, Melbourne, Victoria 3010, Australia
- ⁵Bio21 Institute of Molecular Science and Biotechnology, The University of Melbourne,
- Melbourne, Victoria 3010, Australia
- ⁶ARC Centre of Excellence for Free Radical Chemistry and Biotechnology, Melbourne, Victoria 3010, Australia

LIST OF FIGURES:

- Figure S1: Kinetic log plots of the radical cations of cysteine and homocysteine generated by CID.
- Figure S2: Calculated higher energy pathway for the charge transfer from the amine nitrogen to the carboxylate carbon followed by the radical migration from the sulfur to the α -carbon for the radical cation of homocysteine.



Time (ms)

Figure S1.

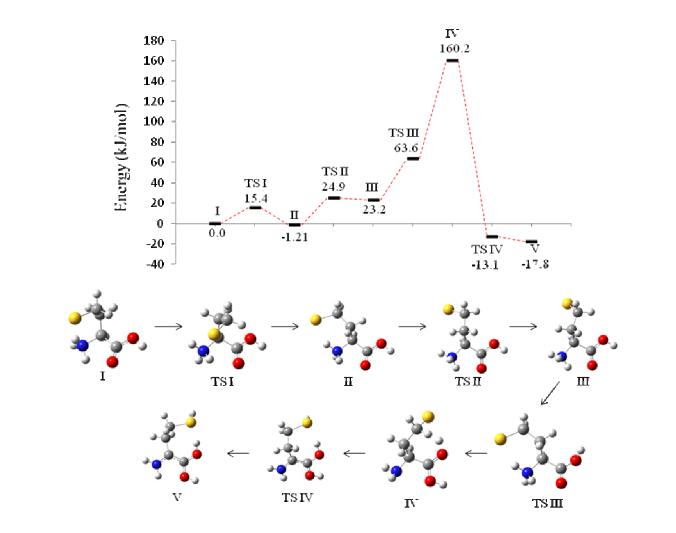


Figure S2.