

**Robert Gamache**, Professor, Environmental, Earth and Atmospheric Sciences,  
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**Research:** Line Shape Parameters in Support of Remote Sensing of Earth's and  
Planetary Atmospheres

**Related Recent Publications:**

S. A. Tashkun, V. I. Perevalov, R. R. Gamache, J. Lamouroux, "CSDS-296, high resolution carbon dioxide spectroscopic databank: Version for atmospheric applications", *J. Quant. Spectrosc. Radiat. Transfer* **152**, 45-73, 2015. DOI 10.1016/j.jqsrt.2014.10.017

Robert R. Gamache, Michaella Farese, Candice Renaud, "A spectral line list for water isotopologues in the 1100-4100  $\text{cm}^{-1}$  region for application to  $\text{CO}_2$ -rich planetary atmospheres," in press *J. Mol Spectrosc.*, August, 2015. DOI 10.1016/j.jms.2015.09.001

V. Malathy Devi, D. Chris Benner, Keeyoon Sung, Linda R. Brown, Timothy J. Crawford, Charles E. Miller, Brian J. Drouin, Vivienne H. Payne, Shanshan Yu, Mary Ann H. Smith, Arlan W. Mantz, Robert R. Gamache, "Line parameters including temperature dependences of self- and air-broadened line shapes of  $^{12}\text{C}^{16}\text{O}_2$ : 1.6-mm region", in press, *J. Quant. Spectrosc. Radiat. Transfer*, December, 2015, DOI:10.1016/j.jqsrt.2015.12.020.

D. Chris Benner, V. Malathy Devi, Keeyoon Sung, Linda R. Brown, Charles E. Miller, Vivienne H. Payne, Brian J. Drouin, Shanshan Yu, Timothy J. Crawford, Arlan W. Mantz, Mary Ann H. Smith, Robert R. Gamache, "Line parameters including temperature dependences of air- and self-broadened line shapes of  $^{12}\text{C}^{16}\text{O}_2$ : 2.06-mm region", submitted to *J. Mol Spectrosc.*, December, 2015.

N. Jacquinet-Husson, R. Armante, L. Crépeau, A. Chédin, N.A. Scott, C. Boutammine, A. Bouhdaoui, C. Crevoisier, V. Capelle, C. Boone, N. Poulet-Crovisier, A. Barbe, D. Chris Benner, V. Boudon, L.R. Brown, J. Buldyreva, A. Campargue, L.H. Coudert, V.M. Devi, M.J. Down, B.J. Drouin, A. Fayt, C. Fittschen, J.-M. Flaud, R.R. Gamache, J. J. Harrison, C. Hill, D. Jacquemart, E. Jiménez, A. Jolly, L. Lodi, Ø. Hodnebrog, A. Makie, S.T. Massie, S. Mikhailenko, H.S.P. Müller, O.V. Naumenko, A. Nikitin, C.J. Nielsen, J. Orphal, V. Perevalov, A. Perrin, A. Predoi-Cross, M. Rotger, A. A. Ruth, Y. Shanshan, K. Sung, S. Tashkun, J. Tennyson, V.I. Tyuterev, "The 2015 edition of the GEISA spectroscopic database", submitted to *J. Mol Spectrosc.*, December, 2015.