

Ninth Biennial HITRAN Conference
Harvard-Smithsonian Center for Astrophysics, Cambridge MA

Day 1, Monday 26 June 2006

Session	Presenter	Title (click on title for access to presentation)
Welcome	Stephen S. Murray, Deputy Director for Science	<u>Keynote Address</u>
Session 1 Laboratory Spectroscopy	L.S. Rothman	<u>The Quest for Consistency and Accuracy of Spectroscopic Parameters in HITRAN: Bridge between Archive and Application</u>
	J. Orphal	<u>Diode- and difference-frequency laser studies of atmospheric molecules in the near- and mid-infrared: H₂O, NH₃ and NO₂</u>
	G. Wagner	<u>Water Pressure Broadening: A Never-ending Story</u>
	A. Barbe	<u>Analysis of High-resolution Infrared CW-CRDS Spectra of Ozone in the 6000 to 6750 cm⁻¹ Spectral Region</u>
	A. Perrin	<u>Relief is on the Way: Status of the Line Positions and Intensities for Nitric Acid</u>
Session 2 Theory	L.H. Coudert	<u>The Water Molecule: Line Position and Line Intensity Analyses up to the Second Triad</u>
	V. Boudon	<u>Global Frequency and Infrared Intensity Analysis of ¹²CH₄ Lines in the 0-4800 cm⁻¹ Region</u>
	R.R. Gamache	<u>Temperature dependence of N₂-, O₂-, and air-broadened half-widths of water vapor transitions: insight from theory and comparison with measurement</u>
	Q. Ma	<u>Modification of the Robert-Bonamy Formalism and Further Refinement Challenges</u>
Poster	I. Gordon	<u>A New "Diet" for Air-broadened Half-widths of Water Vapor in the HITRAN2004 Compilation</u>
	R.R. Gamache	<u>A Semi-empirical Adjustment of the Vibrational Dependence of the Polarizability of Ozone for use in Line Shift Calculations</u>
	A. Barbe	<u>Observations of SO₂ spectra with a quantum cascade laser spectrometer around 1090 and 1160 cm⁻¹. Comparison with</u>

Session 1		<u>HITRAN database and updated calculations</u>
	D. Jacquemart	<u>Recent knowledge of spectroscopic parameters for Acetylene in the IR</u>
	K.C. Gross	<u>Developing a Phenomenological Model of Infrared Emissions from Detonation Fireballs for Explosives Identification</u>
	K.L. Letchworth	<u>Rapid and Accurate Calculation of the Voigt Function</u>
Day 2, Tuesday 27 June 2006		
Session 3 Remote Sensing	J.-M. Flaud	<u>Synergistic use of different atmospheric instruments: What about the spectral parameters</u>
	C.D. Boone	<u>Linelist Needs for the Atmospheric Chemistry Experiment</u>
	B. Sen	<u>CO₂ Spectroscopy Evaluation using Atmospheric Solar Absorption Spectra</u>
	L.R. Brown	<u>Infrared Laboratory Spectroscopy of CH₄ and CH₃D for Atmospheric Studies</u>
	M.A.H. Smith	<u>Spectroscopic parameter requirements for remote sensing of terrestrial planets</u>
Session 4 Laboratory Spectroscopy	D.F. Plusquellic	<u>THz Studies of Water Vapor</u>
	L. Daumont	<u>HDO and D₂O long path spectroscopy: Ongoing work of the Brussels-Reims Team</u>
	B. Drouin	<u>Air-broadening Ozone Linewidths in the Submillimeter Wavelengths CO₂ Spectroscopy Evaluation using Atmospheric Solar Absorption Spectra</u>
	D. Jacquemart	<u>Methyl Bromide: Spectroscopic line parameters in the 7- and 10-μm region</u>
	L.-H. Xu	<u>High Resolution Assignment of the ν_{14} and ν_{16} Bands in the 10-μm Regions for Trans-Acrolein</u>
	A. Goldman	<u>Improved Line Parameters for the $X^1\Sigma_g^+(1-0)$ IR Quadrupolar Transitions of ¹⁴N₂</u>
	M. Carleer	<u>Reinvestigation of the ¹⁶O₂ Atmospheric A Band by High-resolution Fourier Transform Spectroscopy</u>
	V.H. Payne	<u>Assessment of microwave line parameters for oxygen: Comparisons between models and atmospheric measurements</u>

Poster Session 2	M.W. Shephard	<u>Implications for ν_2 and ν_3 CO₂ Spectroscopic Parameters from Atmospheric Remote Sensing</u>
	S. Fally	<u>UV Fourier Transform Absorption Cross-sections of Benzene, Toluene, Ortho-, Meta-, and Para-Xylene</u>
	X. Liu	<u>The Effect of Different Ozone Cross Sections in the Ultraviolet on Ozone Profile Retrievals from GOME</u>
	S.T. Gibson	<u>Temperature Dependence of the O₂ Schumann-Runge Continuum Photoabsorption Cross Section from a Coupled-Channel Perspective</u>
	M. McHugh	<u>Free, Fast and Accurate Online Calculation of Spectral Absorption and Radiance at www.gats-inc.com</u>
	V. Beloborodov	<u>Use of HITRAN and UVACS databases for the task of precision ambient air control</u>
Day 3, Wednesday 28 June 2006		
Session 5 Databases	H.S.P. Müller	<u>Recent Developments in the Cologne Database for Molecular Spectroscopy, CDMS, and the Need for Further Laboratory Spectroscopy</u>
	N. Jacquinet-Husson	<u>Assessment of the GEISA and GEISA/IASI Spectroscopic Data Quality: through comparisons with other public database archives</u>
	J. Tennyson	<u>A database for water transitions from experiment and theory</u>
	S.T. Massie	<u>New cross sections, indices of refraction, and reflectance spectra of atmospheric interest</u>
	H. Harde	<u>MolExplorer: A New Tool for Computation and Display of Spectra from the HITRAN Database</u>
	M.L. Dubernet	<u>Atomic and Molecular Lines Data Model</u>