The 13th Annual University of Waterloo **Symposium on Chemical Physics**

October 24-26, 1997

Acknowledgements

We are very grateful to the following sponsors for their generous financial support of this conference.

Inoue Foundation for Science
Morino Foundation
Steacie Institute for Molecular Science, NRC
CSC, Division of Physical Theoretical Chemistry
Faculty of Science, University of Waterloo
Department of Chemistry, University of Waterloo
Coherent Laser Group
Allan Crawford Associates Ltd.
Atlas Wines

6a) S.M. Cybulski (Miami University), R.A. Kendall (Pacific Northwest National Lab), G. Chalasinski)University of Warsaw) and M.W. Severson and M.M. Szczesniak (Oakland University)
Ab initio study of the $Ar(^1S)$ - $O_2(X^3\Sigma_g^-)$ *complex*

6b) A.L.L. East (NRC, Ottawa)
Theoretical prediction of rovibronic intensities in the fluorescence excitation spectrum of toluene

7a) A.P. Hitchcock, I.G. Eustatiu, J.T. Francis and C.C. Turci (McMaster University)
Electron impact core excitation of molecules: Non dipole spectroscopy and generalized oscillator strengths

7b) K.M. Gough, J.R. Dwyer and T.J. Gawlik (University of Manitoba)
Ab initio Raman trace scattering parameters for CH and CC stretching vibrations in straight chain, cyclo- and bicycloalkanes, and propellanes

8a) E. Hackl, S. Kornilova and Y. Blagoi (National Academy of Sciences of Ukraine)
Influence of water activity on binding constants of biologically active metal ions interacting with DNA

8b) Z.J. Jakubek (NRC, Ottawa), Q. Hui and M. Takami (RIKEN, Japan)
Excitation dynamics of Ag in gaseous and liquid helium

9a) S.P. Goldman and J.A. Kempe (University of Western Ontario)
Accurate modified configuration interaction calculation on H_2^+

9b) R.M. Lees and L.-H. Xu (University of New Brunswick)
Our knowledge on Torsion-Vibration coupling of methanol in the fundamental region

10a) H.-P. Loock, A. Berces and B. Simard (NRC, Ottawa), C. Linton (University of New Brunswick)
Laser spectroscopy of the $A_(^2\Pi)$ - $X(^2\Sigma^+)$ *Transition of Ytterbium Monoacetylide*

10b) H.-P. Loock and B. Simard (NRC, Ottawa) and C. Linton (University of New Brunswick), S. Wallin and O. Launila (Stockholm University)
Photoionization efficiency spectroscopy of TiO, YO, ZrO, NbO and MoO

11a) U. Marvet, Q. Zhang, E. Brown, P. Gross and M. Dantus (Michigan State University)
Femtosecond studies of concerted elimination from gem - dihaloalkanes

11b) A.R.W. McKellar (NRC, Ottawa)
A cosmic complex: High resolution infrared spectrum and energy levels of the CO-H_2 *Van der Waals complex*

12a) N. Moazzen-Ahmadi (University of Lethbridge
Infrared diode laser spectroscopy of CCO near $1950cm^{-1}$

Invited talks are 45 min. including 5 min. for discussion
Contributed talks are 15 min. including 3 min. for discussion

12b) J.J. Neville , A. Hitchcock (McMaster University), A. Jurgensen and R.G. Cavelle, (University of Alberta)
Photoionization and photofragmentation spectroscopy of phosphorous compounds using synchrotron radiation and time-of-flight mass spectrometry

13a) J. Paci and D. Wardlaw (Queen's University, Kingston)
Strong field dissociation of HCl^+ - The calculation of kinetic energy distributions

13b) T. Parekunnel, T. Hirao, R.J. Le Roy and P.F. Bernath (University of Waterloo)
High Resolution IR spectra of DCl at high temperatures

14a) I. Pastirk, E.J. Brown, Q. Zhang and M. Dantus (Michigan State University)
Coherent control of the yield of chemical reactions

14b) J. Reho, C. Callegari, J. Higgins, K.K. Lehmann and G. Scoles (Princeton University)
Time-resolved spectrosopy of Na atoms and oligomers on the surface of He clusters

15a) Q. Gao, F.J. Morgan and C.M. Sadowski (York University)
State-to-state and total rotational energy transfer rate constatns for CN(B,V=0, N=11,13) + Ne

15b) K. Higgins, I. Ho, and W. Klemperer (Harvard University)
Rg-ClF_3 Complexes: Further ab initio and experimental studies

16a) Y.J. Shi, X.K. Hu, D.M. Mao and R.H. Lipson (University of Western Ontario)
Qualitative and quantitative analysis of Xanthates by VUV laser/Time-of flight mass spectrometry

16b) K. Takagi and F. Matsushima (Toyama University, Japan)
Rotational spectra of NeH^+ and NeD^+

17a) Q. Hui and M. Takami (RIKEN, Japan)
Phonon bands associated with narrow Eu atomic lines in liquid helium

17b) J. Miyawaki, K. Sugawara and H. Takeo (National Institute for Advanced Interdisciplinary Research, Japan)
Electronic Spectrum of $AgNH_3$

18a) J. Tang and T. Oka (University of Chicago)
Infrared spectrum of the η_1 fundamental band of H_30^+

18b) R. Tanner and N.P.C. Westwood (University of Guelph)
Boron nitrogen compounds: Ab initio techniques and related spectroscopic results

19a) H. Wei and T. Carrington, Jr. (Université de Montréal)
Eckart frames and exact kinetic energy operators for triatomic and tetra-atomic molecules

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Contributed talks are 15 min. including 3 min. for discussion

19b) E. White, J. Tang and T. Oka (University of Chicago)
Observation of the C--H stretch band of CH_5^+

20a) R.P. White and H.R. Mayne (University of New Hampshire)
Some recent advances in global minimization techniques for atomic and molecular clusters

20b) D.-S. Yang, M.Z. Zgierski and P.A. Hackett (NRC, Ottawa)
Structure of gaseous zirconium-ether complexes

21a) Y. Zhang and T. Oka (University of Chicago)
v=1 exciton hopping in solid para-hydrogen

21b) D.S. Tonner and T.B. McMahon (University of Waterloo)
Energetic bottlenecks in the infrared multi-photon dissociation of gaseous ions under collision-free conditions

22a) M. Czajkowski and J. Koperski (University of Windsor)
Excitation and fluorescence spectra of ZnAr and ZnKr molecules

22b) J.D.D. Martin and J.W. Hepburn (University of Waterloo)
Electric Field induced dissociation of molecules in Rydberg-like highly vibrationally excited ion-pair states

23a) R.C. Shiell, M. Evans, S. Stimson, C.-W. Hsu, C.Y. Ng and J.W. Hepburn
(University of Waterloo and Iowa State University)
A high resolution study of correlation satellites in xenon

23b) A. Beatty, R.C. Shiell and J.W. Hepburn (University of Waterloo)
A photodissociation study of CS_2

24a) R.J. Le Roy (University of Waterloo)
Uncertainty, sensitivity, convergence and rounding in performing and reporting least-squares fits

24b) E. Bernard, B. Strazisar and H.F. Davis (Cornell University)
Excited state dynamics of H_2CN radicals

25a) P.A. Willis, H.U. Stauffer, R.Z. Hinrichs and H.F. Davis (Cornell University)
Crossed beams study of C-H bond activation: $Mo(^5S_2) + CH_4 \rightarrow MoCH_2 + H_2$

25b) A.K. Bertram and J.J. Sloan (University of Waterloo)
The Freezing of Nitric Acid Aerosols

26a) J. Reho, J. Higgins, M. Radcliffe, K.K. Lehmann and G. Scoles (Princeton University)
Non-adiabatic processes in the photodissociation of quartet state Na trimer

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