

Molecular Universe annual meeting and mid-term review

Perugia March 19-21, 2007

Monday March 19

Session: Mid Term Review

9:00-9:05	Welcome	
9:05-9:20	Introduction	Erno Vandeweert
9:20-10:20	Coordinators report	Xander Tielens
10:20-11:00	Molecular Astrophysics in the US	Eric Herbst
11:00-11:15	Coffee	
11:15-11:45	FP7 Programme: Marie Curie Actions (People programme)	Erno Vandeweert
11:45-12:45	Discussion between team leaders and Commission's representative	
1:00-2:00	Lunch	
2:00-2:20	Reactivity of C ₄ H with hydrocarbons	P. Birza
2:20-2:40	Formation and destruction of PAHs in PDRs	R. NI Chuimin
2:40-3:00	Supersonic Jet Spectroscopy on Small Carbon Containing Molecules	Patrik Kania, Cologne
3:00-4:00	Poster session	
4:00-4:15	Coffee	
4:15-5:45	Discussion between ESR/ERs and Commission's representative	
5:45-6:45	Open discussion	
6:45	Concluding remarks	Erno Vandeweert
8:00	Dinner	

Tuesday March 20, 2007

Session: Chemistry chair: T. Millar

- 8:30-9:00 Chemistry in Space: the Laboratory Perspective I. Sims
9:00-9:30 Chemistry in Space: A Brief Introduction to Astrochemistry E. Herbst
9:30-10:10 Gas-phase neutral-neutral reactions in the interstellar medium: what can we learn from molecular beam experiments? : N. Balucani
10:10-10:30 The C+C₂H₂ reaction, evolution of the c/l-C₃H branching ratio at low energy K. Hickson
10:30-10:45 Coffee
10:45-11:30 Deuterium chemistry in molecular clouds: from observations to models E. Roueff
11:30-12:00 Deuterium chemistry in the environment of protostars C. Ceccarelli
12:00-12:20 Theoretical concepts on the H₃⁺ + H₂ collision and isotopic variants E. Hugo
12:20-12:50 Inelastic and reactive collisions at low temperatures J.M. Launay

1:00-2:00 Lunch

Session: Spectroscopy chair: G. Wlodarczak

- 2:00-2:30 New spectroscopic results on astrophysically interesting carbon chains and rings J. Maier
2:30-2:50 Gas phase electronic spectroscopy of AlC₂H C. Apetrei
2:50-3:20 Spectroscopy at Cologne, recent progress S. Schlemmer
3:20-3:35 Spectroscopy on Dimethyl ether C. Endres
3:35-3:55 Spectroscopically accurate potential energy surfaces for bound-state and scattering calculations M. Meuwly
3:50-4:10 coffee
4:10-4:30 Atomistic simulations for CO vibrations in ice-forms relevant to astronomy N. Plattner

Session: Data bases chair: H. Linnartz

- 4:30-4:50 The UMIST Database for Astrochemistry 2006 Tom Millar
4:50-5:10 Standardized Access to Collisional and Spectroscopic Data and Databases: validation of data and technology. Review of the work done on BASECOL and on the VO access to CDMS and JPL databases M.L. Dubernet, N. Moreau, H. Mueller
5:10-5:30 Spectroscopic data for Herschel, ALMA and other sub-millimetre and far-infrared instruments V. Lattanzi, A. Walters, B. Drouin, J.C. Pearson
5:30-6:30 Discussion

8:00 Dinner

Wednesday March 21, 2007

Session: Collisional Excitation chair:J. Troe

- 9:00-9:20 Spectra and collisions involving cyanoacetylene: recent theoretical advances
L. Shirkov
- 9:20-9:40 Rotational excitation of HF by collisions with ortho and para-H₂ T.
Stoecklin
- 9:40-10:00 Collisions involving ammonia E. Scifoni
- 10:00-10:30 Discussion
- 10:30-10:45 Coffee

Session: Carbon in the universe chair:D. Flower

- 10:45-11:25 Interstellar PAHs: recent progresses from space to the laboratory C. Joblin
- 11:25-11:55 Laboratory Spectroscopy of large carbon bearing molecules. Perspectives
with the new FIR Synchrotron Source at SOLEIL O. Pirali
- 11:55-12:15 Photodissociation of PAHs and C-clusters F. Useli Bacchitta
- 12:15-12:45 Reactivity of PAHs A. Canosa

1:00-2:00 Lunch

Session: Water in the universe chair:F. Helmich

- 2:00-2:40 Water in the universe: present status and future perspectives C.Ceccarelli
- 2:40-3:10 Energy Potential Surfaces P.Valiron
- 3:10-3:40 Collision coefficients (quantum) M-l.Dubernet
- 3:40-4:10 Collision coefficients (classical) A.Faure
- 4:10-4:25 Coffee
- 4:25- 4:45 Test results on inelastic collisions JJ. ter Meulen/Chung-Hsin Yang
- 4:45-5:15 Water in PDR modeling M.Gonzalez-Garcia
- 5:15-5:30 Water Radiative transfer in in PDRs D.Poelman/X. Tielens
- 5:30-5:50 Water in shocks A.Gusdorf :
- 5:50-6:30 Discussion
- 8:00 Conference Dinner