## Invited talks/lectures (conferences/workshops/schools) (as of Aug, 23, 2022)

53. *From Clouds to Planets II: The Astrochemical Link*, to be held on 3-7 October 2022, Harnack Haus, Berlin (Germany).

52. MD-GAS (Molecular dynamics in the gas phase: experimental tools and methods) Training School, July 12-15, 2022, Trieste (Italy). Title: Applications to Astrochemistry.

51. 36th International Symposium on Free Radicals, July 3-8, 2022, Stockholm (Sweden). Title: Combined experimental and theoretical investigation of reactions involving atomic/diatomic radicals and leading to N-containing organic molecules in extraterrestrial environments

50. THE INTERNATIONAL CHEMICAL CONGRESS OF PACIFIC BASIN SOCIETIES 2021, Honolulu, Hawaii (USA), Symposium: Misconceptions in Astrochemistry: A Chemist's Guide – December 16 - 21, 2021 | Virtual. Title: Gas-phase chemistry in the interstellar medium: there is still much to learn

49. ECLA2020 - *European Conference on Laboratory Astrophysics*, September 26 – October 1, 2021, Anacapri (Italy). Title: Gas phase chemistry leading to interstellar complex organic molecules: there is still much to learn

48. *Chemical Processes in Solar-type Star-Forming Regions*, September 13-17, 2021, Torino (Italy). Title: Gas-phase chemistry in the interstellar medium: there is still much to learn

47. *Elucidating the Interstellar and Circumstellar Chemistry of Silicon Symposium @ Fall 2021 National* Meeting of the American Chemical Society (ACS), August 22-26, 2021, Atlanta (USA). Title: SiS detection and formation/destruction routes in shocked low-mass star-forming regions

46. Second School of ITN Astro-Chemical Origins (ACO), 12-16 July 2021, Padua (Italy). Title: Laboratory experiments for astrochemists

45. COSPAR 2020, F3.5: "Pre-biotic and complex molecules in the universe: Observational, laboratory and computational perspectives on the evolution of molecular complexity". January 28 – February 4, 2021, Sydney (Australia). Title: Deuterium enrichment of interstellar complex organic molecules in gas-phase chemistry.

44. *First Year School of ITN Astro-Chemical Origins (ACO)*, 2-20 December 2019, Perugia (Italy). Title: Laboratory experiments for astrochemistry: neutral-neutral reactions.

43. *The Physics and Chemistry of the Interstellar Medium – Celebrating the first 40 years of Alexander Tielens' contribution to science –* 2-6 September 2019, Avignon (France). Title: Gas-phase chemistry in the interstellar medium: there is still much to learn (Review Talk)

42. *French-Mexican Advanced School on the Origins and Evolution of Life 2019,* 1-5 July 2019, Paris (France). Title: The role of gas-phase reactions in prebiotic chemistry

41. Atomistic simulations in prebiotic chemistry – a dialog between experiment and theory (CECAM workshop), 1-5 July 2019, Paris (France). Title: The role of gas-phase reactions in prebiotic chemistry

40. *New Quests in Stellar Astrophysics IV - Astrochemistry, Astrobiology and the Origin of Life*, Puerto Vallarta (Mexico), March 31 - April 5, 2019. Title: Gas-phase chemistry and molecular complexity in space: how far do they go?

39. International Conference on Combustion Physics and Chemistry, Samara (Russia), July 24-28, 2018 (cancelled for personal problems). Title: Reactions of oxygen atoms with aliphatic and aromatic hydrocarbons by crossed beam experiments

38. European Week of Astronomy and Space Science (EWASS 2018), Special Session 5: Complex organic molecules in the Universe: current understanding and perspectives, Liverpool (UK), April 3-6, 2018. Title: Gas-phase formation routes of interstellar complex organic molecules

37. *Prebiotic Molecules in Space and Origins of Life on Earth*, Bad Honnef (Germany), March 19-23, 2018. Title: Gas phase chemistry and molecular complexity: how far do they go?

36. XXI Symposium on Atomic, Cluster and Surface Physics (SASP2018), Universitätszentrum Obergurgl (Austria), February 15, 2018. Title: Reactions of oxygen and nitrogen atoms with aliphatic and aromatic hydrocarbons by crossed beam experiments

35. WG1/WG2 workshops of the COST Action CM1401 Our Astro-Chemical History, Ciudad Real (Spain), December 11-13, 2017 (cancelled for personal problems). Title: The role of atomic oxygen chemistry in the interstellar medium

34. XXIV International Symposium on Free Radicals (ISFR2017), Hayama (Japan), August 28 - September 1, 2017. Title: Reactions of atomic radicals with aliphatic and aromatic hydrocarbons by crossed beam experiments

33. Workshop "*Esobiologia ed ambienti estremi: dalla chimica delle molecole alla biologia degli estremofili*", Sede ASI, Roma, December 13, 2016. Title: Chimica prebiotica in fase gassosa

32. 252nd National Meeting, Symposium on Frontiers of Solar System Chemistry: Planets to Comets and Beyond (Astrochemistry Subdivision), Philadelphia (USA), August 21-25, 2016. Title: Neutral gas-phase chemistry in upper planetary atmospheres

31. *41st COSPAR Scientific Assembly*, Istanbul (Turkey), 30 July - 7 August 2016 (*the meeting was cancelled*). Title: Gas phase chemistry and molecular complexity: how far do they go?

30. XXIII European Conference on Atomic and Molecular Physics of Ionized Gas, Bratislava (Slovakia), July 12-16, 2016. Title: The reactions of atomic oxygen with alkenes and alkynes: primary products, branching ratios and role of intersystem crossing

29. *GoCAS Workshop "Origins of Habitable Planets"*, Goteborg (Sweden), May 16-20, 2016. Title of the first talk: Gas phase chemistry in the interstellar medium. Title of the second talk: Experimental methods to investigate the chemistry of the interstellar medium: highs and lows

28. *From Star and Planet Formation to Early Life*, Vilnius (Lithuania), April 25-28, 2016. Title: Gas phase chemistry and molecular complexity: how far do they go?

27. 1st Italian Workshop on Astrochemistry - Astronomical Complex Organic Molecules in Different *Environments*, Palazzo Strozzi, Firenze, March 10-11, 2016. Title: Gas-phase formation routes of complex organic molecules in the interstellar medium

26. *Colloquium on kinetics and scattering theory for astrophysics*, Max Planck Institute for Extraterrestrial Physics, Garching (Germany), November 26 -27, 2015. Title: Revisiting gas-phase chemistry in astrochemical models

25. *From clouds to protoplanetary disks: the astrochemical link*, Hans Harnack Haus, Berlin (Germany), October 4-9, 2015. Title: Gas-phase formation routes of complex organic molecules in the interstellar medium

24. *XIII Iberian Joint Meeting on Atomic and Molecular Physics (IBER2015)*, Aveiro (Portugal), September 6-9, 2015. Title: Product branching ratio and extent of intersystem crossing in atomic oxygen reactions with unsaturated hydrocarbons

23. *Dynamics of Molecular Collisions XXV*, Asilomar Conference Centre, Monterey (USA), July 12-17, 2015. Title: Product branching ratio and extent of intersystem crossing in atomic oxygen reactions with unsaturated hydrocarbons

22. *First General Meeting of the COST Action CM1401 "Our Astrochemical History"*, Prague (Czech Republic) May 25 - 29, 2015. Title: Introductory talk on the activities of the Working Group 1 "Gas phase chemistry"

21. *Materia extraterrestre ed esplorazione dello spazio*, Bari (Italy), November 12, 2014. Title: Molecole complesse nel mezzo interstellare

20. *Our Common Origins*, University College London, London (UK), November 18-19, 2013. Title: Updates on gas-phase experiments of rate coefficients

19. ACS 246th National Meeting, Indianapolis (USA), September 8-12, 2013. Title: Chemical frontiers in solar system exploration

18. *Brittany Synchrotron Radiation School*, Rennes (France), March 25-29, 2013. Title: Crossed molecular beam experiments with soft-ionization mass spectrometric detection

17. *V Encuentro de Dinamica Molecular – Avances en Astroquimica y Quimica Atmosferica*, Salamanca (Spain), February 28, 2013. Title: Hydrocarbon growth in interstellar clouds and implications for prebiotic chemistry

16. *The Warm Universe: Astrochemistry at Hot and Intermediate Temperatures*, Tallinn (Estonia), May 29 – June 2, 2012. Title: Reactions of atomic oxygen with unsaturated hydrocarbons: the break-up of carbon atom skeleton

15. *S. Barthelemy Astronomy Summer School*, Osservatorio Astronomico della Regione Autonoma Valle d'Aosta, Nus (Italy), July 25-29, 2011. Title of the first lectio magistralis: Cosmochemistry. Title of the second lectio magistralis: The atmosphere of Titan

14. *NIS Colloquium 'First chemical steps towards the origin of life'*, Museo Regionale di Scienze Naturali, Torino (Italy), September 16-15, 2010. Title: Gas-phase prebiotic chemistry in the Solar System: how and where

13. *The ALMA Telescope: Heralding a new era of astrochemistry,* Boppard (Germany), May 9-12, 2010. Title: Crossed-beam studies of astrophysically relevant atom-neutral reactions

12. *Láseres y Espectroscopia Avanzada en Química (QUIMILASER)*, Seville (Spain), February 2010. Title: Recent progress in reaction dynamics studies with crossed molecular beams

11. XXVII Internation Astronomical Union General Assembly, Special Session SpS06 'Planetary Systems as Potential Sites for Life', Rio de Janeiro (Brazil), August 2009. Title: Gas-phase prebiotic chemistry in extraterrestrial environments

10. XXIII International Symposium on Molecular Beams, Dalian (China), June 1-5, 2009. Title: Crossed molecular beam studies of S(1D) and N(2D)reactions with simple hydrocarbons

9. *XII ISSOL Meeting - XV International Conference on the Origin of Life*, Firenze, August 24-29, 2008. Title: Gas-phase prebiotic chemistry in the Solar System: how and where

8. *Atomic and Molecular Interactions Gordon Conference 2008*, Colby Sawyer College, New London, NH (USA), July 6-11, 2008. Title: Crossed molecular beam studies of astronomically relevant bimolecular reactions

7. 1st Italian Astrobiology Society Workshop, Cortona (Italy), May 29-30, 2008. Title: Gas-phase reactions relevant to prebiotic chemistry: a laboratory investigation by the crossed molecular beam technique.

6. *Second Workshop on 'Titan - Observations, Experiments, Computations, and Modeling'*, Miami, Florida (USA), March 24-26, 2008. Title: Crossed molecular beam studies of gas phase reactions relevant to the atmospheric chemistry of Titan

5. *XXIX International Symposium on Free Radicals*, Big Sky, Montana (USA), August 12-17, 2007. Title: Crossed molecular beam studies of radical-molecule and radical-radical reactions.

4. *IUGG XXIV General Assembly "Earth: our changing planet"*, Session #JMS013 Aeronomy of Planetary Atmospheres: Comparative Planetology, Perugia (Italy), July 2-17, 2007. Title: Gas-phase neutral-neutral reactions in planetary atmospheres.

3. *XVI European Conference on Dynamics of Molecular Systems*, Levico Terme (Italy), September 11-15, 2006. Title: Crossed molecular beam studies of radical-radical reactions: O(3P)+CH3 and O(3P)+C3H5

2. 2005 International Chemical Congress of Pacific Basin Societies (PACIFICHEM), Honolulu (Hawaii, USA), December 15-20, 2005. Title: Neutral-neutral reactions in extraterrestrial environments

1. Final Meeting of the Training and Mobility of Researchers (TMR) Network on "Astrophysical Chemistry", Perugia, April 4-5, 2002. Title: Crossed beam studies of CN and C2 reactions relevant to the formation of hydrogen deficient molecules in extraterrestrial environments