

LIST OF PUBLICATIONS OF PROF. OLIVIER CHAZOT

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Contributions to books

1. Chazot, O.; Van Der Haegen, V.; Carbonaro, M : Flow visualization with a cold model for ICP torch design. In "*Progress in plasma processing of Materials*", Fauchais, P, Amouroux, J., eds., Begell House Inc., NY, 1999.
2. Chazot, O.: Study of flow field topology in an ICP torch by surface pressure measurements and numerical calculations. In "*Progress in plasma processing of Materials*", Fauchais, P, Amouroux, J., eds., Begell House Inc., NY, 1999.
3. Garcia, A.; Chazot, O.; Fletcher, D.: Investigations in plasmatron facilities on catalycity determination. In "ESA SP 487", Proceedings of the *4th European Symposium on Aerothermodynamics for Space Vehicles*, October 15-19, 2001, Capua, Italy, Harris, R.A. (Ed.), March 2002, ISBN 92-09292-789-5, pp 489-496
4. Kolesnikov, A.F.; Yakushin, M.I.; Pershin, L.S.; Vasil'evskii, S.A.; Chazot T, O.; Vancrayenest, B.; Muylaert, J.: Comparative study of surface catalycity under subsonic air test conditions. In "ESA SP 487", *Proceedings of the 4th European Symposium on Aerothermodynamics for Space Vehicles*, October 15-19, 2001, Capua, Italy, Harris, R.A. (Ed.), March 2002, ISBN 92-09292-789-5, pp 481-488.
5. Rini, P.; Kolesnikov, A.F.; Vasil'evskii, S.A.; Chazot, O. ; Degrez, G.: High temperature CO2 stagnation line flows: a code-to-code comparison. In "ICMAR 2004, Proceedings of the *12th International Conference on Method of Aerophysical Research*, June 28- July 3, 2004, Novosibirsk, Russia", published by Publishing House "Nonparel", 2004, ISBN5-93089-005-6, pp 162-167.
6. Chazot, O.; Régnier, R.; Garcia Munoz, A.: Simulation methodology in plasmatron facility and hypersonic wind tunnels. In "ICMAR 2004, Proceedings of the *12th International Conference on Method of Aerophysical Research*, June 28- July 3, 2004, Novosibirsk, Russia", published by Publishing House "Nonparel", 2004, ISBN5-93089-005-6.
7. Chazot O., Experimental studies on hypersonic stagnation point chemical environment, in RTO-EN-AVT-142, *Experiment, Modeling and Simulation of Gas-Surface Interactions for Reactive Flows in Hypersonic Flights*, Published July 2007, ISBN 978-92-837-0057-9.
8. Chazot O, Hypersonic stagnation point Aerothermodynamic in Plasmatron facilities, in *Collection of works on Hypersonic Entry and Cruise Vehicles*, Stanford and NASA Ames Research center, edited by Von Karman Insitute 2009, ISBN-13 978-2-930389-87-7.

9. PINNA, F.; BENSASSI, K.; RAMBAUD, P.; CHAZOT, O.; LANI, A.; MARXEN, O.: Development of an integrated methodology for the post-flight analysis of the transition payload on the EXPERT mission Studying Turbulence Using Numerical Simulation Databases - XIII, 2010 Summer Program, Center for Turbulence Research, December 2010, pp 423-432.
10. MAGIN, T. & CHAZOT, O.: Review of the VKI research on nonequilibrium phenomena in hypersonics 50th AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition, Nashville, USA, January 9-12, 2012, ISBN 978-1-622-76067-1.

Archival Journals

1. Chazot, O.; Vanden Abeele, D.; Carbonaro, M.: Comparison of experimental and numerical result for the dynamic pressure in an inductive plasma flow. *Annals of the New York Academy of Sciences*, December 1999, Vol. 891, pp 368-376
2. Bottin, B.; Carbonaro, M.; Chazot, O.; Degrez, G.; Vanden Abeele, D.; Barbante, P.F.; Paris, S.; Vander Haegen, V.; Magin, T.; Playez, M.: A Decade of Aerothermal Plasma Research at the von Karman Institute. *Contributions to Plasma Physics*, 2004, Vol. 44, No. 5-6, pp. 472 – 477.
3. Utyuzhnikov, S.V.; Konyukov, A.V.; Rudenko, D.V.; Valilevsii, S.A.; Kolesnikov, A.F.; Chazot; O.: Simulation of Subsonic and Supersonic flows in inductive Plasmatrons. *AIAA Journal*, Sept. 2004, Vol. 42, No 9, pp 1871-1877.
4. Barbante, P.F. & Chazot, O.: flight extrapolation of plasma wind tunnel stagnation region flowfield. *Journal of Thermophysics and Heat Transfer*, July-September 2006, Vol. 20, No. 3, pp 493-499.
5. Panesi M., Rini P., Degrez G., Chazot O., Analysis of Chemical Nonequilibrium and Elemental demixing in Plasmatron Facility. *Journal of Thermophysics and Heat Transfer*, January-March 2007, Vol. 21, No. 1, pp 57-66.
6. J. Beloki Perurena, C. O. Asma, R. Theunissen , O. Chazot, Experimental investigation of liquid jet injection into Mach 6 hypersonic crossflow, *Experiments in Fluids* vol. 46, N.3, March 2009, pp 403–417
7. Panesi, M.; Magin, T. E.; Bourdon, A.; Bultel, A.; Chazot, O., Analysis of the FIRE II flight experiment by means of a collisional radiative model, *Journal of Thermophysics and Heat Transfer*, Vol. 23, N.2, april-June 2009, pp 236-248.
8. Degrez G., A. Lani, M. Panesi, O. Chazot and H. Deconinck, Modelling of high enthalpy, high-Mach number flows. *J. Phys D: Appl. Phys.* 42 (2009) 19400 (16 pp)
9. Tirtey S., O. Chazot, L. Walpot, Characterisation of hypersonic roughness-induced boundary-layer transition. *Experiments in Fluids*: DOI 10.1007/s00348-010-0939-4.
10. Panesi M., T.E Magin, A. Bourbon, A. Bultel, O. Chazot, Study of electronically excited states of atoms and molecules predicted by a collisional-radiative model in the case of the FIRE II flight experiment, *Journal of Thermophysics and Heat Transfer*, 2011, 25, 361.
11. Panerai F., Chazot O, Characterization of gas/surface interactions for ceramic matrix composites in high enthalpy, low pressure air flow. *Materials Chemistry and Physics*, June 2012, Vol. 134, Issues 2-3, pp 567-607.

List of publications of Olivier Chazot

12. Verant J-L, N. Perron, M. Balat-Pichelin, O. Chazot, A. Kolesnikov, V. Sakharov, O. Gerasimova and P. Omaly. Microscopic and macroscopic analysis for TPS SiC material under Earth and Mars re-entry conditions, *Int. J. Aerodynamics*, Vol. 2, Nos. 2/3/4, 2012
13. Marschall J., Pejaković D. A., Fahrenholtz W. G., Hilmas G. E., Panerai F., Chazot O., Temperature Jump Phenomenon During Plasmatron Testing of ZrB₂-SiC Ultrahigh-Temperature. *Journal of Thermophysics and Heat-Transfer*. Vol. 26, No. 4, October–December 2012.
14. Masutti D., Spinosa E., Carbonaro M., Chazot O., Disturbance Level Characterization of a Hypersonic Blow-Down Facility, *AIAA Journal*, 2012, Vol. 50, Issue 12, pp 2720-2730.
15. Babou Y., D. Lequanga, , O. Chazot, S. T. Surzhikov, A.S. Dikaljuk, A. Panarese, S. Longo, J. Homane, Z. Szymanski, A. Kaminska, M. Dudeck, D. Vacher. Experimental aspects in hypersonic and supersonic plasma flows. *Accepted in Open Plasma Physics Journal*
16. Asma C;O., Chazot O., Vetrano M.R., Sauter Mean Diameter Measurements of a Water Jet Injected into Hypersonic Air Flow, *Accepted in Aerospace Science and Technology*
17. Panerai F., Helber B., Chazot O., Balat-Pichelin M., Surface temperature jump beyond active oxidation of carbon/silicon carbide composites in extreme aerothermal conditions. DOI: 10.1016/j.carbon.2014.01.018. *Accepted in CARBON*
18. Cipullo A., Chazot O., Helber B., Panerai F., Zeni L., Investigation of free stream plasma flow produced by an ICP Wind Tunnel. *Submitted to Journal of Thermophysics and Heat-Transfer*.
19. Helber B., Asma C.O., Babou Y., Hubin A., Chazot O., Magin T. E., Material response characterization of a low density carbon-composite ablator in high-enthalpy plasma flows. *Under review for Journal of Materials Science*
20. Villadegut A., Chazot O., Off-Stagnation Point Testing in Plasma Facility, *Under review for EUCASS 2013 Flight Physics Volume*.

Conference Papers

1999

Carbonaro, M.; Chazot, O.; Vander Haegen, V.: The VKI plasma minitorch supersonic jet facility. *91st Supersonic tunnel association MTG*, ARA, Bedford, United Kingdom, April 25-27, 1999.

Bottin, B.; Chazot, O.; Carbonaro, M.; Vander Haegen, V.; Paris, S.: The VKI Plasmatron characteristics and performance, In *Measurement Techniques for High Enthalpy and Plasma Flows*, NATO-RTO-EN 8, 1999.

2000

Chazot, O.; De la llave Plata, M.; Bottin, B.; Carbonaro, M.: The VKI inductive plasma facilities and their application to surface catalycity studies for planetary re-entry. *93th Semiannual Meeting of the Supersonic Tunnel Association*, Sunnyvale, California, USA, April 30 - May 2, 2000

Chazot, O. & Carbonaro, M.: Combined Pitot Probe and LDV measurements for characterization of plasma jet. *31st AIAA Plasmadynamics and Lasers Conference*, Denver, USA, June 19-22, 2000, AIAA 2000-2488

Chazot, O. & Carbonaro, M.: Laser-doppler velocimetry measurements in a plasma discharge. *10th International Symposium on Applications of Laser Techniques to Fluid Mechanics*, Lisbon, Portugal, July 10-13, 2000.

2001

List of publications of Olivier Chazot

De la llave, M. ; Chazot, O. ; Magin, T. ; Degrez, G. ; Kolesnikov, A.: Application and analysis of a methodology for the determination of TPS catalytic properties. *2nd International Symposium on Atmospheric reentry vehicles and systems*, Arcachon, France, March 26-29, 2001

Barbante, P.F.; Chazot, O.; Degrez, G.: Flight extrapolation of wind tunnel data for the determination of TPS materials catalycity. *2nd International Symposium on Atmospheric reentry vehicles and systems*, Arcachon, France, March 26-29, 2001

Degrez, G.; Barbante, P.F.; De la Llave Plata, M.; Magin, T.; Chazot, O. : Determination of the catalytic properties of TPS materials in the VKI ICP facilities. *European Congress on Computational Methods in Applied Sciences and Engineering*, ECCOMAS, Computational Fluid Dynamics Conference 2001, Swansea, Wales, UK, September 4-7, 2001.

2002

Jeronimo, A.; Rietmuller, M. L.; Chazot, O.: PIV application to mach 3.75 over-expanded jet. *11th International Symposium on Application of Laser Techniques to Fluid Mechanics*, Lisbon, Portugal, July 8-11, 2002.

Kolesnikov, A.F.; Yakushin, M.I.; Pershin, L.S.; Vasil'evsii, S.A.; Bykova, N.G.; Gordeev, A.N.; Chazot, O.; Muylaert, J.: Comparative analysis of the inductive plasmatrons capabilities for thermochemical simulation at the earth and Mars atmospheric entry conditions. *11th International Conference on Method for Aerophysical Research*, ICMAR 2002, July 1-5, 2002, Novosibirsk, Russia.

2003

Chazot, O.; Paris, S.; Collin, P.; Bickel, M.; Ullman, T.: TPS testing and catalycity determination in the VKI Plasmatron facility. *3rd International Symposium Atmospheric Reentry Vehicles and Systems*, Arcachon, France, March 24-27, 2003.

Chazot, O. & Boschek, E.: Plasmatron facility for combined particle-impact and aero-heating tests. *36th AIAA Thermophysics Conference*, Orlando, Florida, USA, June 23-26, 2003.

Rini, P.; Nannipieri, N.; Chazot, O.; Degrez, G. : Numerical simulation of thermo-chemical equilibrium boundary layers. *6th National Congress on Theoretical and Applied Mechanics*, Ghent, Belgium, May 26-27, 2003.

Bottin, B.; Carbonaro, M.; Chazot, O.; Degrez, G.; Vanden Abeele, D.; Barbante, P.F.; Paris, S.; Vander Haegen, V.; Magin, T.; Playez, M.. The Plasmatron and beyond: a decade of aerothermal plasma testing at the von Karman Institute. *XXVI International Conference on Phenomena in Ionized Gases (ICPIG 2003)*, Greifswald, Germany, July 15-20, 2003.

Caimano, D. & Chazot, O.: Calibration of heat flux measurement and development of data acquisition system for inductively coupled plasma wind tunnel. *FLUCOME'03, 7th Triennial International Symposium on Fluid Control, Measurement and Visualization*, Sorrento, Italy, August 25-28, 2003.

2004

Chazot, O.; Régnier, R.; Garcia Munoz, A.: Simulation methodology in plasmatron facility and hypersonic wind tunnels. ICMAR 2004, *12th International Conference On Method Of Aerophysical Research*, June 28- July 4, 2004, Akademgorodok, Novosibirsk, Russia.

Sanguinol, C. & Chazot, O. : Mesure LDV pour la caractérisation de conditions de rentrée planétaire en atmosphère poussiéreuse. *Congrès Francophone de Vélométrie Laser*, 14-17 septembre 2004, Bruxelles, Belgique.

2005

List of publications of Olivier Chazot

Tirtey, S.C.; Paris, S.; Fletcher, D.G.; Chazot, O.: Design of boundary layer probe payload for expert program. *Fifth European Symposium on Aerothermodynamics for Space Vehicles*, November 8-11, 2004, Cologne, Germany.

Asma, C.O. & Chazot, O.: Trajectory simulation and catalicity determination for expert vehicle. *Fifth European Symposium on Aerothermodynamics for Space Vehicles*, November 8-11, 2004, Cologne, Germany.

Baumgart, J.; Magin, T.; Rini, P.; Degrez, G.; Chazot, O.: Simulation of entry in the true martian atmosphere. *Fifth European Symposium on Aerothermodynamics for Space Vehicles*, November 8-11, 2004, Cologne, Germany.

Rini, P.; Vasil'evskii, S.A.; Kolesnikov, A.F.; Chazot, O. ; Degrez, G.: Inductively coupled CO₂ plasma flows: a code-to-code comparison. *4th International Symposium Atmospheric Reentry Vehicles & Systems*, March 21-23, 2005, Arcachon, France.

Guelhan, A.; Esser, B.; Del Vecchio, A.; Loehle, S.; Sauvage, N.; Chazot, O.; Asma, C.O.: Comparative heat flux measurements on standard models in plasma facilities. *13th AIAA International Space Planes and Hypersonic Systems and Technology Conference*, Capua, Italy, May 16-20, 2005.

Tirtey, S.; Paris, S.; Chazot, O.; Fletcher, D.: Investigation of the boundary layer characteristics on a re-entry vehicle. *13th AIAA International Space Planes and Hypersonic Systems and Technology Conference*, Capua, Italy, May 16-20, 2005, AIAA Paper 2005-3280.

Riethmuller, M.L.; Jeronimo, A.; Chazot, O.: PIV measurements in an over expanded Jet at $M = 3.75$. *PIVNET II Workshop on the application of PIV in compressible flows*, June 6-8 2005, Delft, The Netherlands.

Rini, P.; Kolesnikov, A.F.; Vasil'evskii, S.A.; Chazot, O.; Degrez, G.: CO₂ Stagnation line flow simulation for mars entry applications. *38th AIAA Thermophysics Conference*, 6-8 June 2005, Toronto, Ontario, Canada. AIAA Paper 2005-5206.

2006

Chazot, O.: Experimental studies on hypersonic stagnation point chemical environment *RTO AVT 142*, Experiment, modeling and simulation of gas-surface interactions for reactive flows in hypersonic flights, Rhode-St-Genève, Belgium, February 6-10, 2006.

Asma, C.O.; Paolucci, D.; Chazot, O.; Gulhan, A.; Esser, B.; Herdrich, G.; Knapp, A.; Auweter-Kurtz, M.: Design of a new calorimetric heat flux probe. *1st International ARA Days Atmospheric Reentry Systems Missions and Vehicles*, July 3-5, 2006, Arcachon, France.

Panesi, M.; Rini, P.; Degrez, G.; Chazot, O.: Analysis of chemical non-equilibrium and elemental demixing in the VKI Plasmatron. *9th AIAA/ASME Joint Thermophysics and Heat Transfer Conference*, San Francisco (CA), USA, June 5-8, 2006.
Submitted to Journal of Thermophysics and Heat Transfer

Thömel, J.; Rini, P.; Chazot O.: Sensitivity analysis of the local heat transfer simulation for the application to thermal protection systems. *9th AIAA/ASME Joint Thermophysics and Heat Transfer Conference*, San Francisco (CA), USA, June 5-8, 2006.

TIRTEY, S.C.; WALPOT, L.; CHAZOT, O.; FLETCHER, D.G.: Experimental characterization of hypersonic boundary layer in flight and in wind-tunnel condition
14th AIAA/AHI Space Planes and Hypersonic Systems and Technologies Conference, November 6-9, 2006, Canberra, Australia. AIAA 2006-7940 MP

2007

RINI, P.; PANESI, M.; THÖMEL, J.; CHAZOT, O.; DEGREGZ, G.: Non Equilibrium and Elemental Demixing Analysis of CO₂ Flows Inside ICPs
45th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, USA, January 8-11, 2007
AIAA-2007-1356 MP

PANESI, M.; THÖMEL, J.; RINI, P.; CHAZOT, O.: Numerical Analysis of Physico-Chemical State of the Plasma in the Test Chamber of the VKI Plasmatron Facility for Earth and Mars Testing
38th AIAA Plasmadynamics and Lasers Conference, Miami, USA, June 25-28, 2007

PANESI, M.; LANI, A.; MAGIN, T.; MOLNAR, J.; CHAZOT, O.; DECONINCK, H.: Numerical investigation of the non equilibrium shock-layer around the EXPERT vehicle.
18th AIAA Computational Fluid Dynamics Conference, Miami, USA, June 25-28, 2007

PANESI, M.; MAGIN, T.; BOURDON, A.; BULTELE, A.; BARBANTE, P.; CHAZOT, O.: Simulation of Air plasma in Collisional-Radiative Nonequilibrium in expanding and compressing flows
38th AIAA Plasmadynamics and Lasers Conference, Miami, USA, June 25-28, 2007

THÖMEL, J.; TIRTEY, S.; FLETCHER, D.G.; CHAZOT, O.: Progress in the development of a catalytic transition flight experiment
2nd European Conference for Aero-Space Sciences, Brussels, Belgium, July 1-6 2007, Paper 2-10-05 2007-44

THÖMEL, J.; LUKKIEN J.J.; CHAZOT, O.: A multiscale approach for building a mechanism based catalysis model for high enthalpy CO₂ flow.
39th AIAA Thermophysics Conference, Miami, USA, June 25-28 2007

PANESI, M.; LANI, A.; MAGIN, T.E.; DECONINCK, H.; CHAZOT, O.: Non equilibrium analysis of EXPERT In" 2nd European Conference for Aero-Space Sciences", Riethmuller, M.L., ed., von Karman Institute for Fluid Dynamics, 2007, ISBN 978-2-930389-27-3, Paper 2-09-06

KRASSILCHIKOFF, H. ; CHAZOT, O.; THÖMEL, J.: Procedure for the determination of cold copper recombination efficiency
In" 2nd European Conference for Aero-Space Sciences", Riethmuller, M.L., ed., von Karman Institute for Fluid Dynamics, 2007, ISBN 978-2-930389-27-3, Paper 2-10-02

ASMA, C.O.; PARIS, S.; TIRTEY, S.; THÖMEL, J.; CHAZOT, O.: An overview of re-entry aerothermodynamics investigation at the von Karman Institute – part I
4th Ankara International Aerospace Conference, Ankara, Turkey, September 10-12, 2007, AIAC-2007-091

2008

PANESI, M.; MAGIN, T.; BOURDON, A.; BULTELE, A.; CHAZOT, O.: Analysis of the FIRE II flight experiment by means of a collisional radiative model
46th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, January 7-10, 2008, AIAA-2008-1205

TIRTEY, S.; BOLNOT, H.; BOTTINI, H.; PARIS, S.; FLETCHER, D.; CHAZOT, O.: In-flight hypersonic roughness induced transition experiment design.
46th AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, USA, January 7-10 2008, AIAA-2008-0250

List of publications of Olivier Chazot

Tirtey S., O. Chazot, Experimental investigation on hypersonic roughness induced transition experiments, AIAA paper 2008-2597, May 2008.

Thoemel J., Chazot O., Barbante P., Aspects of advanced catalysis modeling for hypersonic flows, Proceedings of the Summer Program 2008, Center for Turbulence Research, Stanford University, 2008, 29.

Tirtey S.C., J. Thoemel & O. Chazot, Expert Hypersonic Roughness Induced Transition Experiment, Proceedings of 6th European Symposium on Aerothermodynamics for Space Vehicles, 3-6 November 2008 Versailles, France.

Paneraï F., J. Thoemel & O. Chazot, Ground Test Investigation on a Thermal Protection System Junction, Proceedings of 6th European Symposium on Aerothermodynamics for Space Vehicles, 3-6 November 2008 Versailles, France.

Chazot O., J. Thoemel & M. Balat-Pichelin, A Semi-Empirical Air Catalycity Determination in Plasma Wind Tunnels and Diffusion Reactors, Proceedings of 6th European Symposium on Aerothermodynamics for Space Vehicles, 3-6 November 2008 Versailles, France.

Panesi M., A. Munafo & O. Chazot, Modeling of Supersonic Plasma Flows in the VKI Minitorch by Means of a Collisional Radiative Model, Proceedings of 6th European Symposium on Aerothermodynamics for Space Vehicles, 3-6 November 2008 Versailles, France.

Thoemel J., E. Cosson & O. Chazot Review of Surface Properties of Thermal Protection Materials for the Design of IXV Thermal Protection System, Proceedings of 6th European Symposium on Aerothermodynamics for Space Vehicles, 3-6 November 2008 Versailles, France.

H. Krassilchikoff & O. Chazot, Enthalpy Determination for Ground Testing Conditions in Plasma Wind Tunnel, Proceedings of 6th European Symposium on Aerothermodynamics for Space Vehicles, 3-6 November 2008 Versailles, France.

2009

Paneraï F., O. Chazot, E. Tagliaferri, G. Rossi, Testing of the EXPERT thermal protection system junction in a plasma wind tunnel. AIAA paper 2009-7243, October 2009.

D. Masutti, O. Chazot, C. Asma, Criteria evaluation of 2-D roughness induced transition for Expert vehicle design. AIAA paper 2009-7212, October 2009.

Tirtey S., O. Chazot, L. Walpot, Characterization of Hypersonic Roughness Induced Transition for the EXPERT Flight Experiment. 16th AIAA/DLR/DGLR International Space Planes and Hypersonic Systems and Technologies Conference. 19 - 22 Oct 2009. AIAA-2009-7215.

Paneraï F., Thoemel J., Chazot O., Thermal Protection Material Characterization in Ground Plasma Testing, 41st AIAA Thermophysics Conference San Antonio, TX – 24 June 2009

Asma C., D. Masutti, and O. Chazot, Experimental Investigation of Liquid Fragmentation In Hypersonic Crossflow, AIAA-2009-3506, June 2009.

Panesi M., A. Lani, and O. Chazot, Reduced Kinetic Mechanism for CFD Applications, AIAA-2009-3920, June 2009.

Thoemel J. and O. Chazot, Surface Catalysis of Rough Surfaces, AIAA-2009-3931, June 2009

2010

Chazot O. Paneraï F., Muylaert JM., Thoemel J., Catalysis Phenomena Determination in Plasmatron Facility for Flight Experiment Design. AIAA paper 2010-1248, January 2010.

List of publications of Olivier Chazot

D. Fletcher, J. Thomel and O. Chazot, J. Marschall, Realization of a Gas- Surface Interaction Test Case for Model Validation. AIAA-2010-1249, January 2010.

B. Erzincanli, C. Asma, O. Chazot, Ablative Material Testing at VKI Plasmatron Facility, AIAA-2010-4511, July 2010.

K. Bensassi, A. Lani, P. Rambaud and O. Chazot, Numerical Simulation of Hypersonic Flow in VKI- Longshot Contoured Nozzle, AIAA-2010-4857. July 2010.

2011

HELBER, B.; BABOU, Y.; PANERAI, F.; CHAZOT, O. ; HUBIN, A.; MAGIN, T.E.: Investigation of the gas-surface interaction of innovative carbon composite ablators in the VKI plasmatron, 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

VILLEDIEU, N.; PANERAI, F.; CHAZOT, O.; MAGIN, T.E. : Uncertainty quantification for gas-surface interaction in plasmatron facility. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

PANERAI, F.; HELBER, B.; SAKRAKER, I.; CHAZOT, O. ; PICHON, T.; BARRETEAU, R.; TRIBOT, J.P.; VALLEE, J.J.; MARESCHI, V.; FERRARELLA, D.; RUFOLO, G.; MANCUSO, S.: Characterization of the IXV thermal protection system in high enthalpy plasma flow. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

CHAZOT, O.; PANERAI, F.; VAN DER HAEGEN, V.: Aerothermochemistry testing for lifting reentry vehicles. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

DEL VECCHIO, A.; GARDI, R.; REIMER, T.; ATXAGA, G.; CHAZOT, O.; PANERAI, F.: Thermostructural characterization of materials of the Expert capsule. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

GROSSIR, G.; PARIS, S.; CHAZOT, O.. RAMBAUD, P.: Prediction of the critical distributed roughness height inducing transition on the Expert vehicle. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

MASUTTI, D.; CHAZOT, O.; DONELLI, R.; DE ROSA, D.: Design and ground testing for the Expert PL4/PL5 'natural and roughness induced transition. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

MASUTTI, D.; GUNAYDINOGLU, E.; CHAZOT, O.: Surface pressure measurements on a flat plate and a 7deg half-cone at Mach 6. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

BENSASSI, K.; LANI, A.; LICO, A.; RAMBAUD, P.; CHAZOT, O.: Unsteady simulation of hypersonic flow over a heat probe in ground test conditions. 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

CHAZOT, O.; PANERAI, F.; MAROTTA, M.: Ground testing for GSI database, what do we determine? 7th European Symposium on Aerothermodynamics, Brugge, Belgium, May 9-12, 2011, ESA.

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HELBER, B.; ASMA, C.O.; BABOU, Y.; CHAZOT, O. ; MAGIN, T.: Experimental Investigation of the Material Response of Carbon Composite Ablators in the VKI Plasmatron Facility, 17th AIAA Space Planes and Hypersonic Systems and Technologies; Conference, San Francisco, USA, April 11-14, 2011
AIAA 2011-2302

MASUTTI, D.; SPINOSA, E.; CHAZOT, O.; CARBONARO, M.: Disturbance level characterization of a hypersonic blow-down facility, 41st AIAA Fluid Dynamics Conference and Exhibit, Honolulu, Hawaii, June 27-30, 2011.

MUYLAERT, J.; RAMBAUD, P.; PARIS, S.; CHAZOT, O. : An overview of the activities of the von Karman Institute for the aerothermodynamic analysis of the intermediate eXperimental vehicle (IXV), Eucass 2011, 4th European Conference for Aerospace Sciences, Saint-Petersburg, Russia, July 4-8, 2011.

PANERAI, F.; CHAZOT, O.; HELBER, B.; SAKRAKER, I.; PICHON, T.; BARRETEAU, R.:
Aerothermochemistry testing of a ceramic matrix composite TPS for a lifting reentry vehicle, Eucass 2011, 4th European Conference for Aerospace Sciences, Saint-Petersburg, Russia, July 4-8, 2011.

2012

HELBER, B.; CHAZOT, O.; MAGIN, T.: Ablation of carbon preform in the VKI Plasmatron, 43rd AIAA Thermophysics Conference, New Orleans, Louisiana, USA, June 25 - 28, 2012.

BENSASSI, K.; LANI, A.; CHAZOT, O.; RAMBAUD, P.: Arbitrary Lagrangian Eulerian simulation of a moving piston in hypersonic ground test facility, 42nd AIAA Thermophysics Conference, New Orleans, Louisiana, USA, June 25-28, 2012.

MASUTTI, D.; PINNA, F.; GUNAYDINOGLU, E.; SOPEK, T.; CHAZOT, O.; RAMBAUD, P.: Natural and induced transition on a 7deg half-cone at Mach 6, RTO-MP-AVT-200 Hypersonic Laminar-Turbulent Transition, April 16-20, 2012, San Diego, CA, USA.

Cipullo A., Helber B., Panerai F., Chazot O., Experimental Characterization of the Free-stream Plasma Flow Produced by the VKI Plasmatron Facility using Optical Emission Diagnostics. STO-MP-AVT-199 Catalytic Gas-Surface Interaction on hypersonic flows, Oct. 22-23, 2012, VKI Rhode-St-Genèse, Belgium.

Panerai F., Helber B., Chazot O., Balat-Pichelin M., Reusability Limits of Carbon/Silicon Carbide Heat Shield Materials - Part 1: Surface Temperature and Radiation Phenomenology. STO-MP-AVT-199 Catalytic Gas-Surface Interaction on hypersonic flows, Oct. 22-23, 2012, VKI Rhode-St-Genèse, Belgium.

Helber B., Panerai F., Chazot O., Balat-Pichelin M., Reusability Limits of Carbon/Silicon Carbide Heat Shield Materials - Part 2: Volatilization Detection by Space-& Time-Resolved Emission Spectroscopy. STO-MP-AVT-199 Catalytic Gas-Surface Interaction on hypersonic flows, Oct. 22-23, 2012, VKI Rhode-St-Genèse, Belgium.

Sakraker I., Asma C., Chazot O., In-Flight Experiment Design and Ground Testing for a Re-entry CubeSat. STO-MP-AVT-199 Catalytic Gas-Surface Interaction on hypersonic flows, Oct. 22-23, 2012, VKI Rhode-St-Genèse, Belgium.

Villedieu N., Panerai F., Chazot O., Magin T., Uncertainty quantification for gas-surface interaction in the Plasmatron facility. STO-MP-AVT-199 Catalytic Gas-Surface Interaction on hypersonic flows, Oct. 22-23, 2012, VKI Rhode-St-Genèse, Belgium.

2013

SAKRAKER, I. & CHAZOT, O.: In-flight experiment design and ground testing for TPS development
7th European Workshop on Thermal Protection Systems and Hot Structures, April 8-10, 2013, Noordwijk, The Netherlands, VKI RP 2013-20

List of publications of Olivier Chazot

- BENSASSI, K.; LANI, A.; DECONINCK, H.; CHAZOT, O.; RAMBAUD, P. : Numerical exploration of transient flow phenomena in hypersonic gun tunnel
21st AIAA CFD Conference, San Diego, USA, June 24-27, 2013,
- REGERT, T.; BABOU, Y.; MARXEN, O.; AVELAR CAMARINHA, M.; CHAZOT, O.: Investigation of flat plate transitional boundary layer in hypersonic flow by means of naphthalene based PLIF
EUCASS 2013, 5th European Conference for Aeronautics and Space Sciences, Munich, Germany, July 1-5, 2013
- VILADEGUT, A. & CHAZOT, O.: Off-stagnation point testing in plasma facility
EUCASS 2013, 5th European Conference for Aeronautics and Space Sciences, Munich, Germany, July 1-5, 2013
- DE CROMBRUGGHE, G. & CHAZOT, O. : Investigation of gas-surface interaction and modelling of the reference catalyticity for thermal protection material testing in plasma wind tunnels. IAC 2012, 63rd International Astronautical Congress, Naples, Italy, October 1-5, 2012, ISBN 978-16-2276-979-7
- HELBER, B.; PANERAI, F.; CHAZOT, O.; MAGIN, T.: The reusability limits of carbon/silicon carbide heat shield materials. RTO-AVT-199 "Specialists Meeting on Catalytic Gas Surface Interactions", October 22-24, 2012, Rhode Saint Genèse, Belgium
- CIPULLO, A.; HELBER, B.; PANERAI, F.; CHAZOT, O.: Experimental characterization of the free-stream plasma flow produced by the VKI plasmatron facility using optical emission spectroscopy RTO-AVT-199 "Specialists Meeting on Catalytic Gas Surface Interactions", October 2012, Rhode Saint Genèse, Belgium,
- SAKRAKER, I.; CHAZOT, O.; ASMA, C.O.: In-flight experiment design and ground testing for re-entry CubeSat RTO-AVT-199 "Specialists Meeting on Catalytic Gas Surface Interactions", October 2012, Rhode Saint Genèse, Belgium,
- LE QUANG, D.; BABOU, Y.; CHAZOT, O.; ANDRE, P. : Investigation of supersonic air plasma jet produced in the VKI plasmatron facility, 5th International Workshop on Radiation of High Temperature Gases in Atmospheric Entry, Barcelona, Spain. ESA SP 714, December 2012, ISBN 978-92-9092-2-278-0
- HELBER, B.; MAGIN, T.E.; CHAZOT, O.; HUBIN, A.: Space and time-resolved emission spectroscopy of carbon phenolic ablation in air and nitrogen plasmas. 44th AIAA Thermophysics Conference, San Diego, USA, June 24-27, 2013, AIAA 2013-2770, ISBN 978-1-62410-214-1

Lecture Series editor

- CHAZOT, O. & ZUBER, M.; eds. Introduction to magneto-fluid-dynamics for aerospace applications. October 27-30, 2003.
VKI LS 2004-01
- CHAZOT, O. & RINI, P.: Experiment, modeling and simulation of gas-surface interactions for reactive flows in hypersonic flights. February 6-10, 2006.
VKI LS 2006-02
- CHAZOT O. & RAMBAUD P., Production, Transport and Applications of Nanoparticles, February 26 – March 1, 2007.
VKI LS 2007-04
- CHAZOT O., & MAGIN T., *Collection of works on Hypersonic entry and cruise vehicle*, Stanford University and NASA Ames Research Center, USA, 30 June – 3 July 2008.
- CHAZOT O. & MAGIN T., Non Equilibrium Gas Dynamics - From Physical Models to Hypersonic Flights, RTO-EN-AVT-162, VKI September 8-12, 2008.

List of publications of Olivier Chazot

RAMBAUD P., CHAZOT O. AND PROULX P., Modeling and computation of nanoparticles in fluid flows, RTO-EN-AVT-169, VKI February 9-12, 2009.

CHAZOT O. & BENSASSI K., Aerothermodynamic design, Review on Ground Testing and CFD, RTO-EN-AVT-186, VKI March 29 - April 1, 2010.

CHAZOT O. & MAGIN T., Radiation and Gas-Surface Interaction Phenomena in High-speed re-entry, STO-EN-AVT- 218, VKI May 6-8, 2013.

CHAZOT O. & TIRTEY S., Hypersonic Flight Testing, STO-EN-AVT- 234, VKI Spring 2014, *in preparation*

Course notes

Chazot, O.: Guidelines for laboratories on advanced measurement techniques for aeronautics. VKI CN 188.

Chazot, O.: Plasma wind tunnel design, operation and applications. VKI CN 210

Technical notes

Caimano, D. & Chazot, O.: Data acquisition system and heat flux measurements for plasma wind tunnels. December 2003, 119 pgs. VKI TN 202.

Internal notes

Chazot, O.: Quantitative description of the flow field of an ICP torch with a cold model
January 1999, 12 pgs. VKI IN 114.

Chazot, O.: Global characterization of plasma flow in an ICP torch by intrusive measurements.
June 1999, 21 pgs. VKI IN 117.

Chazot, O.: Practical implementation of LDV measurements for plasma flow characterization.
October 1999, 12 pgs. VKI IN 120.

Chazot, O.: Surface pressure measurements, numerical calculations and flow visualizations for the study of the flowfield topology in an ICP torch. January 2000, 12 pgs. VKI IN 122.