

Angelo Minotti

Current Positions

**Founder, CEO and CTO of the
Innovative Start-Up “MIEEG s.r.l.”, Micro Electric Energy Generator.**

**Founder, CEO and CTO of the
Innovative Start-Up “MIPRONS s.r.l.”, Micro PROpulsion for Nano Satellites.**

Owner of the Micro-Enterprise “Angelo Minotti”

Occupational fields

Dual Use Goods and Technologies – Arms Control;
Microcombustion for nanosatellites and energy applications;
Space Systems and Space Propulsion;
Fluid Dynamics, Real gas, Radiation.

Previous Positions

Professor of Dual Use of Space Systems

(a.a. 2015/16 and a.a. 2016/17)

School of Aerospace Engineering, Sapienza University of Rome.

Via Salaria 851, 00138, Rome, Italy.

Researcher in Dual Use and Arms Control

(10 October 2016 – 09 October 2017)

School of Aerospace Engineering, Sapienza University of Rome.

Assistant Professor in Space Systems

(01 August 2013 – 31 July 2016)

Dept. of Astronautics, Electrics and Energetics Engineering, Sapienza University of Rome.

Via Eudossiana 18, 00184, Rome, Italy.

Assistant Professor in Space Propulsion

(01 January 2011 – 31 December 2012)

Dept. of Mechanics and Aerospace Engineering, Sapienza University of Rome.

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PROFESSIONAL EXPERIENCE

International Projects

8 March 2018 – 7 March 2022

EU-P2P programme on Dual Use Goods: “Framework contract for the provision of expertise on Strategic Trade Control related activities”, EU-P2P Export Control Programme, Researcher.

Scientific consortium: University of Liege, King’s College London, Stockholm International Peace Research Institute (SIPRI), The Institute of Customs and International Trade Law (AWA), University of Kent (UoK) and Angelo Minotti.

31 May 2017 – 30 May 2018

EU-P2P programme on Dual Use Goods: “Short term expert under the scope of the EUP2P Export Control Programme for Dual Use Goods”. Expertise France, consultancy service.

01 March 2012 – 31 July 2016

EU-F.P.7 - HRC research project: “Hybrid Renewable energy Converter for continuous and flexible power production”, Researcher.

Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering, Dept. of Astronautics, Electrics and Energetics.

01 October 2010 – 30 November 2012

EU-F.P.7 - ISP-1 research project: “In Space Propulsion-1: CH₄/Oxygen Combustion Studies”, Researcher.

Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering

01 June 2007 - 01 November 2007

EU-FP6 - LAPCAT research project: “Large Eddy Simulations of Shock Boundary Layers Interaction”, Researcher.

Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering

01 January 2005 – 31 December 2006

E.S.A. F.L.P.P. (Future Launchers Preparatory Program) research project:

“Sub-Trans and Supercritical Combustion Modelling of LO₂/CH₄ rocket engines for future reusable launchers”, Researcher.

Sapienza University of Rome, Dept. Of Aerospace and Mechanical Engineering – AVIO S.p.A.

01 January 2004 – 31 December 2004

N.A.T.O. “low observability” research project: “Infrared (3,5-5 μ m and 8-12 μ m) analysis and visibility of a turbojet plume using the NATO Nplume, Modtran and Niratam software”, Researcher.

Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering-Avio S.p.A.

01 May 2003 – 31 December 2003

E.S.A. “Vega” research project: “Plume Radiation Analysis: SRMs & AVUM M.E., of the VEGA launch vehicle”, Researcher.

National Projects

14 May 2019 – 15 October 2019

Global Start-Up Program, International Scale-Up. Italian Trade Agency.

19 February 2019 – 18 February 2021

Funding Project “Smart & Start”, Invitalia, n. SSI001997.

10 October 2016 – 09 October 2017

“Dual Use and Arms Control”, Researcher. Sapienza University of Rome, School of Aerospace Engineering. Via Salaria 851, 00138, Rome, Italy.

01 October 2013 – 31 July 2015

“Soundy Rockets aerodynamic and propulsion design”, Researcher.
Sapienza University of Rome, Dept. of Astronautics, Electrics and Energetics

01 January 2011 – 31 December 2011; 01 May 2012 – 30 November 2012

Assistant Professor in Aerospace Propulsion
Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering

01 July 2011 – 31 December 2011

A.S.I. (Italian Space Agency) “Theseus (Thrusters Evolution for Space Exploration an Upper Stages)” research project, Researcher-Supervisor.
Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering-Avio S.p.A.

01 March 2011 – 30 April 2011

“Effects of the aerodynamic force on the missile ejection from an aircraft”, Researcher-Supervisor.
Sapienza University of Rome, School of Aerospace Engineering.

01 March 2010 – 22 September 2012

PRIN 2008 research project: “LES Numerical Simulations of Pressurized Microcombustors for microturbines applications and/or propulsion”, Researcher.
Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering

01 June 2009 - 30 November 2012

“Impact of the k-eps and LES turbulence models on the assessment of the entropy production in a channel”, Researcher.
Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering

01 November 2007 – 01 June 2009

PRIN 2006 research project: “RANS and LES Numerical Simulations of Microcombustors for microturbines applications and/or propulsion”, Researcher.
Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering.

International Working Groups

BOTTICELLI: Harmonization and effectiveness of the Export Control System (coordinator of the Aerospace sector).

CHAUDFONTAINE: debates, exchanges information as well as considers ways and means to regulate the trade of dual-use items and technologies so as to meet the objectives of security and competition in the European Union.

ESARDA: European Safeguards Research and Development Association.

National and International Institutions Scientific Advisor

12-13 April 2017

Missile Technology Control Regime (MTCR), Joint Technical Expert Group, Experts Meeting. By invitation of the Ministry of Foreign Affairs as part of the Italian Delegation (technical expert). Paris.

04 April 2017

Nuclear Supplier Group - Wassenaar, Joint Technical Expert Group, Experts Meeting. By invitation of the Ministry of Foreign Affairs as part of the Italian Delegation (technical expert). Wien.

28 February 2017

Nuclear Supplier Group, Joint Technical Expert Group-Licensing and Enforcement, Experts Meeting. By invitation of the Ministry of Foreign Affairs as part of the Italian Delegation (technical expert). Wien.

7-11 November 2016

Nuclear Supplier Group pre-plenary. By invitation of the Ministry of Foreign Affairs as part of the Italian Delegation (technical expert). Wien.

15 June 2016

Italian candidate to the Seconded National Expert vacancy, “Dual Use Export Control Expert – Joint Comprehensive Plan of Action – Procurement Channel”, Delegation to the European Union to the International Organizations in Wien.

11-12 April 2016

Consultations with Academia in Support of the 1540UN Resolution 2016 Comprehensive Review, by invitation of the United Nations Office for Disarmament Affairs (UNODA). United Nations, New York.

07 December 2015

Italian Scientific referee, by invitation of the European Commission, European Forum on Dual Use Technology – Export Control Policy Review.

23 October 2014

Italian Scientific referee, “European Forum on Dual Use Technology – Export Control Policy Review - Italian EU Presidency”, by invitation of the Ministry of Economic Development.

01 September 2011 – 01 August 2012

“Ministry of Economic Development – Sapienza Innovazione Memorandum of Understanding on the Dual Use Goods and Technologies Compliance Analyses”, Scientific Referee.

National and International Private Companies Technical Advisor

02 May 2019 – 30 June 2019

Technical Expert

Dual Use Technology, Reg. EU 1922/2018

01 March 2019 – 30 April

Technical Expert

Dual Use Technology, Reg. EU 1922/2018

15 January 2019 – 30 March 2019

Technical Expert

Dual Use Technology, Reg. EU 1922/2018

10 January 2019 – 01 March 2019

Technical Expert

Dual Use Technology, Reg. EU 1922/2018

03 November 2018 – 10 January 2019

Technical Expert

Dual Use Technology, Reg. EU 2268/2017

27 September 2018 – 30 October

Technical Expert

Dual Use Technology, Reg. EU 2268/2017.

18 May 2018 – 7 September

Technical Expert

Dual Use Technology, Reg. EU 2268/2017, Reg. 1375/2016.

30 April 2018 – 1 July

Technical Expert

Dual Use Technology, Reg. EU 2268/2017, Reg. 1375/2016.

20 February 2018 – 28 May 2018

Technical Expert

Dual Use Technology, Reg. EU 2268/2017, Reg. 1375/2016.

01 December 2017 – 31 December 2017

Technical Expert

Dual Use Technology, Reg. EU 2268/2017, L.185/90

01 May 2017 – 30 September 2017

Technical Expert

Dual Use Technology, Reg. EU 1969/2016, Reg. 1375/2016.

01 November 2016 – 31 December 2016

Technical Expert

Dual Use Technology, Reg. EU 1969/2016, Reg. 1290/2014, Reg. 1375/2016, L.185/90

01 October 2016 – 1 November 2016

Technical Expert

Dual Use Technology, Reg. EU 2024/2015, Reg. 1290/2014

01 July 2016 – 5 October 2016

Technical Expert

Dual Use Technology, Reg. EU 2024/2015, Reg. 1861/2015

01 July 2016 – 31 July 2016

Technical Expert

Dual Use Technology, Reg. EU 2024/2015, Reg. 1861/2015

25 June 2015 – 27 July 2015

Expert Witness

Dual Use Technology, reg. CE 1382/2014 and reg. 401/2013 (Myanmar)

22 May 2015 – 01 July 2015

Technical Expert

Dual Use Technology, reg. CE 1382/2014, reg. 1263/2012 and reg. 833/2014

1 April 2015 – 01 June 2015

Technical Expert

Dual Use Technology, reg. CE 1382/2014 and reg. 1263/2012

10 December 2010 – 02 April 2014

Expert Witness (Full Acquittal)

Dual Use Technology, reg. CE 1334/2000

1 June 2014 – 10 October 2014

Expert Witness (Full Acquittal)

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

15 September 2014 – 10 October 2014

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 833/2014

01 July 2014 – 31 July 2014

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 March 2014 – 31 May 2014

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

14 January 2014 – 30 April 2014

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 December 2013 – 31 March 2014

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 September 2013 – 01 October 2013

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 May 2013 – 01 July 2013

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 March 2013 – 31 July 2013

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 February 2013 – 01 June 2013

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 November 2012 – 31 January 2013

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 1263/2012

01 July 2012 – 30 April 2013

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 267/2012

20 July 2012 – 10 September 2012

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 267/2012

1 September 2012 – 30 September 2012

Technical Expert

Dual Use Technology, reg. CE 338/2012 and reg. 267/2012

27 March 2012 – 10 July 2012

Technical Expert

Dual Use Technology, reg. CE 428/2009 and reg. 267/2012

20 October 2011 – 01 March 2012

Technical Expert

Dual Use Technology, reg. CE 428/2009 and reg. CE 961/2010

05 July 2011 – 01 August 2011

Technical Expert

Dual Use Technology, reg. CE 428/2009 and reg. CE 961/2010

01 April 2011 – 01 August 2011

Technical Expert

Dual Use Technology, reg. CE 428/2009 and reg. CE 961/2010

TEACHING RECORDS

11-14 November 2019

Lecturer on “Dual use technologies in the information security”. Master in “Information security and strategic information”, 16 hours – 2 ECTS.

Department of Informatics engineering, Sapienza University of Rome, Italy.

19-25 May 2019

Lecturer on “Dual Use Goods and Technologies: General Frame, Key Points, MTCR Technical aspects and Test Cases”, Master course, STCU, Kiev, Ukraine.

19 November 2018

Lecturer on “Dual use and swarms of nano-drones”, The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

01 October 2018

Lecturer on “Dual use and Blockchain”, The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

10-24 September 2018

Lecturer on “Dual use technologies in the information security”. Master in “Information security and strategic information”, 16 hours – 2 ECTS.

Department of Informatics engineering, Sapienza University of Rome, Italy.

09 April 2018

Lecturer on “Industries’ experience in facing trade control obligations: teaching lessons learnt to academia”, 8th meeting of the Chaudfontaine Group, Chaudfontaine, Belgium.

27 March 2018

Lecturer on “Technical analysis and dual use aspects of the DPRK missiles”, Argentine Council For International Relations, Institute of International Security and Strategic Affairs -ISIAE-, Buenos Aires, Argentina.

26 March 2018

Lecturer on “The Dual use Regulation: general frame, control regimes and weaknesses”, Pontifical Catholic University of Argentina, Buenos Aires, Argentina.

14 March 2018

Lecturer on “The Dual use Regulation: general frame, control regimes and the North Korea technical issue”. “Workshop on the Export Control of Dual-use Materials and Technologies in GUAM Countries”, by invitation of the Science and Technology Center in Ukraine (STCU). Kiev, Ukraine.

06 February 2018

Lecturer on “The Dual Use Goods list: origin, structure and technical aspects”, presentation of the New Legislative Decree on Dual Use and Sanctions, Milan, Italy.

21 November 2017

Lecturer on “Bio-weapons means of delivery”, The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

18-31 October 2017

Lecturer on “Dual use technologies in the information security”. Master in “Information security and strategic information”, 24 hours – 3 ECTS.

Department of Informatics engineering, Sapienza University of Rome, Italy.

12 October 2017

Lecturer on “the Non-Proliferation Issue, general frame and technical insights”. “Export control on dual-use materials and technologies in central Asia” workshop, by invitation of the International Science and Technology Centre. Astana, Kazakhstan.

27 July 2017

Lecturer on “the Academia outreach in non-proliferation: the Dual Use Space System Course”; 2017 Summer Symposium on Science and World Affairs, UCS (Union of Concerned Scientist), 22-30 July 2017, Technical University of Darmstadt, Germany.

13 June 2017

Lecturer on “Academic outreach in non-proliferation: the Dual Use of Space System academic course”, EU-P2P programme on Dual Use Goods, SEE Final Regional Event by invitation. Brussels.

16 March 2017

Lecturer on “Iran-International Communities new relationship: updates to the Reg. “267/2012”, The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

1 March 2017 – 1 June 2017

Professor of “Dual Use of Space Systems”, 72 hours – 9 ECTS.

School of Aerospace Engineering, Sapienza University of Rome, Italy.

6 December 2016

Lecturer on “new satellite technologies for telecommunications”, The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

5 December 2016

Lecturer on “Technical aspects of the Dual Use Regulation”, The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

24 November 2016

Lecturer on “Dual Use Technologies and arms control regulations: focus on ammunitions and explosives”, Symposium on “Explosives Safety management and Risk analysis”, 22-24 November 2016, Defence Ministry – NATO MSIAC.

23 November 2016

Lecturer on “Drones”, The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

29 September 2016

Lecturer, “Presentation of the Dual Space Systems course”. Center for Information on Security Trade Controls, CISTEC, Tokyo. Botticelli’s Project Asian Tour.

30 June 2016

Lecturer on "Information Security and Strategic Information: role in the control of the Dual Use and Arms goods and technologies. UN Resolution 1540, EU Reg. 428/2009 and the Italian Law 185/90", Master of Science in "Strategic Information and Information Security". Sapienza University of Rome.

17 June 2016

Presentation of the results of the "Dual Space Systems" academic course; "9th JRC-NNSA and ESARDA workshop on export control technical issues", Join Research Centre, Ispra, Italy.

1 March 2016 – 01 June 2016

Professor of "Dual Use of Space Systems", 72 HOURS – 9 ECTS.
School of Aerospace Engineering, Sapienza University of Rome, Italy.

15 April 2016

Lecturer on "IRAN – Dual Use technical analysis", ANIMA, Milan, Italy.

19 January 2016

Lecturer on "Micro-Meso Swirling Combustion Chambers: concepts, projects and future developments", School of Aerospace Engineering, Sapienza University of Rome.

3 December 2015

Presentation of the "Dual Space Systems" academic course. "7th Export Control Working Group Concept Paper: Complying with trade controls in a research setting", JRC-NNSA and ESARDA Export control Working Group seminar. Join Research Centre, Ispra, Italy.

1 December 2015

Lecturer on "Drones and Nanosatellites", The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

06 October 2015

Lecturer on "RUSSIA – Dual Use analysis", ANIMA, Milan, Italy.

16 September 2015

Lecturer on "IRAN – Dual Use analysis", ANIMA, Milan, Italy.

02 September 2015

Lecture on "Micro-Meso Swirling Combustion Chambers: concepts, projects and future developments", Dept. of Mechanical Engineering, Polytechnic of Hong Kong, by invitation of the Head of the Dept. Prof. Wen.

21 July 2015

Lecturer on "Drones and Nanosatellites", the Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

18 March 2015

Lecturer on "Technical aspects of the Micro-Swirling Chambers", Workshop; Sapienza – Gauss – Huznoye.

23 October 2014

Lecturer on “Export Control Policy review - Dual Use Technology technical-scientific and research aspects”, European Symposium on Dual Use Technology - Italian EU Presidency, Brussels, by invitation of the Ministry of Economic Development.

19 September 2014

Lecturer on “Russia-Ucraina crisis, Reg. 833/2014 – Dual Use analysis”, Milan, Italy.

03 - 14 September 2014

Lecturer – Connoisseur on the subject “Fundamentals of Computational Fluid Dynamics”, Dept. of Astronautics, Electrics and Energetic Engineering, Sapienza University of Rome, IT.

07 March 2014

Lecturer on “Dual Use Technology technical-scientific aspects”, Ateneo Banca Impresa, Milan, Italy.

15 November 2013

Lecturer on “Arms Control and Dual Use Technology technical-scientific aspects”, Ateneo Banca Impresa, Milan, Italy.

04 November 2013

Lecturer - Connoisseur on the subject “Aerodynamic Stability”; Soundy Rocket post graduate course, Sapienza University of Rome, Dept. of Astronautics, Electrics and Energetics.

27 July 2013

Lecturer on “Heat Exchangers and Dual Use Technology”; 2013 Summer Symposium on Science and World Affairs, UCS (Union of Concerned Scientist), Segni (RM), Italy.

10 May 2013

Lecturer on “Arms Control and Dual Use Technology technical-scientific aspects”, Ateneo Banca Impresa, Milan, Italy.

07 November 2012

Lecturer on “Dual Use Technology technical-scientific aspects”, API (Associazione Piccole Imprese), Varese, Italy.

25 September 2012

Lecturer on “Dual Use Technology technical-scientific aspects”, AICE (Associazione Italiana Commercio Estero), Milan, Italy.

10 July 2012

Lecturer on “Dual Use Technology, “May well hole casings be used for nuclear plants?”; 2012 Summer Symposium on Science and World Affairs, UCS (Union of Concerned Scientist), Princeton, US.

16 February 2012

Lecturer on “Dual Use Technology control and security”, Course on Intelligence for Asi and Finmeccanica, Link Univ. of Malta, Rome, Italy.

October-December 2011

Professor of “Fluid Dynamics in Turbomachinery”;
Master Degree in Mechanical Engineering at the “Sapienza” University of Rome, Department of Mechanics and Aeronautics, Prof. E. Sciubba, a.a. 2011/12.

8 August 2011

Lecturer on “Dual Use Technology, an effective experience”; 2011 Summer Symposium on Science and World Affairs, UCS (Union of Concerned Scientist), King’s College, London.

10 July 2010

Lecturer on “Micro Combustion Technology for Nuclear Security and Arms Control”; 2010 Summer Symposium on Science and World Affairs, UCS (Union of Concerned Scientist), DESY, Hamburg.

10 June 2010

Lecturer - Connoisseur on the subject “Ox/Methane Combustion Studies at low and high Pressure”; Workshop on LOx/Methane Propulsion, Sapienza University of Rome-NASA-Purdue University.

25 May 2009

Lecturer on the subject “ChemKin: Aurora and Equil. applications”, Master Degree in Astronautics at the Aerospace School of Engineering at the “Sapienza” University of Rome.

12 June 2008 and 25 March 2009

Lecturer on the subject “Ideal and Real Gases: Properties, Differences and Practical Consequences”; Master Degree in Astronautics at the Aerospace School of Engineering at the “Sapienza” University of Rome.

February 2008-July 2008

Professor of “Combustion and Fluid Dynamics”;
Bachelor Degree in Mechanical Engineering at the “Sapienza” University of Rome, Department of Mechanics and Aeronautics, Prof. R. Piva, a.a. 2008/09.

September 2007-January 2010

Professor of “Numerical Methods for Astronomy”;
Master Degree in Astronomy at the “Sapienza” University of Rome, Department of Physics and Astrophysics, Prof. R. Capuzzo Dolcetta, a.a. 2007/08, 2008/09 and 2009/2010.

19 December 2006

Lecturer, “LYRA Launch Vehicle plume and nozzle infrared analysis (400 to 5000 cm^{-1}) at different altitudes”.
ENEA la Casaccia Research Centre.

COURSES, SEMINARS, SYMPOSIA and WORKSHOPS

07 June 2019

“Workshops on Propulsion4Cubesats”, ESA-ESTEC, Noordwijk.

03-06 June 2019

“4TH ESA Cubesat Industry Days”, ESA-ESTEC, Noordwijk.

12 September 2018

Flagship SPACE- Piattaforme Orbitali, Workshop, organized by the Italian Centre of Aerospace Research – CIRA, Capua, Italy, by invitation of the CIRA.

09 April 2018

8th meeting of the Chaudfontaine Group “Do academic activities contribute to WMD proliferation?”, organized by the University of Liege – European Studies Unit, funded by the European Union, Chaudfontaine, Belgium.

14-15 March 2018

EU-P2P programme on Dual Use Goods: “Workshop on the Export Control of Dual-use Materials and Technologies in GUAM Countries”, by invitation of the Science and Technology Center in Ukraine (STCU). Kiev, Ukraine.

06 October 2018

“The New Legislative Decree on Dual Use and Sanctions”, seminar. Milan, Italy.

21 November 2017

“Bio-threats and bio-terrorism: actors and scenario”, seminar. The Italian President of the Council of Ministers, Security Intelligence Department, Rome, Italy.

12-13 October 2017

EU-P2P programme on Dual Use Goods: “Export control on dual-use materials and technologies in central Asia”, Workshop. By invitation of the International Science and Technology Centre. Astana, Kazakhstan.

22-30 July 2017

2017 Summer Symposium on Science and World Affairs, Technical University of Darmstadt; by invitation of the UCS (Union of Concerned Scientists).

12-13 June 2017

EU-P2P programme on Dual Use Goods: SEE Final Regional Event, by invitation. Brussels.

25 October 2016

“Key Enabling Technologies for Dual use, KET4 Dual”, Science 14 Atrium, Brussels, Belgium.

29-30 September 2016

“Non-proliferation seminar”. Botticelli’s Project Asian Tour. Center for Information on Security Trade Controls, CISTEC, Tokyo.

16-17 June 2016

“9th JRC-NNSA and ESARDA workshop on export control technical issues”, Ispra, Italy.

15 April 2016

“Focus on IRAN”, seminar. ANIMA, Milan, Italy.

11-12 April 2016

Moderator of the panel discussion “Emergent Threats”. Consultations with Academia in Support of the 2016 Comprehensive Review, by invitation of the United Nations Office for Disarmament Affairs (UNODA). UN, New York.

29 March 2016

“Intangible Technology Controls in Industry and Academia”, Project Alpha, King’s College, London. Academia representative on behalf of the Botticelli’s Project.

3-4 December 2015

“7th Export Control Working Group Concept Paper: “Complying with trade controls in a research setting”, JRC-NNSA and ESARDA Export control Working Group seminar. Join Research Centre, Ispra, Italy.

30 October 2015

Presentation of the “Botticelli Project”, Harmonization and effectiveness of the Export Control System, Workshop, United Nations, NY, USA.

18 September 2015

“Botticelli Project”, Harmonization and effectiveness of the Export Control System, Workshop, BUSINESS EUROPE, Brussels.

06 October 2015

“Focus on RUSSIA”, seminar. ANIMA, Milan, Italy.

16 September 2015

“Focus on IRAN”, seminar. ANIMA, Milan, Italy.

22-23 April 2015

“Seminar on Export Control technical issues: Enhanced dialogue and Best practices for export compliance”, JRC-NNSA and ESARDA Export control Working Group seminar. Join Research Centre, Ispra, Italy.

18 March 2015

Workshop on “Nanosatellites, technical aspects and future applications”; Sapienza – Gauss – Huznoye.

17 March 2015

Workshop on “ICT e Supercalcolo” Workshop, ENEA, Rome, by invitation of the Head of the ICT Dept at ENEA, Dr. S. Migliori.

23 October 2014

“European Symposium on Dual Use Technology”, Italian EU Presidency, Brussels, by invitation of the Ministry of Economic Development.

07 March 2014

“Reg. EU 388/2012 on Dual Use Goods and Technologies”, seminar. Ateneo Banca Impresa, Milan, Italy.

14-15 November 2013

“L. 195/80 and Reg. EU 388/2012, Arms Control and Dual Use Technology”, seminar. Ateneo Banca Impresa, Milan, Italy.

21-28 July 2013

2013 Summer Symposium on Science and World Affairs, UCS (Union of Concerned Scientist), Organizer. Segni, Rome, Italy.

10 May 2013

“L. 195/80 and Reg. EU 388/2012, Arms Control and Dual Use Technology”, seminar. Ateneo Banca Impresa, Milan, Italy.

07 November 2012

“IRAN Regulations and Dual Use Technology good exports”, seminar. API (Associazione Piccole Imprese), Varese, Italy.

25 September 2012

“L’esportazione dei Beni Duali: aggiornamenti normativi”, seminar. AICE (Associazione Italiana Commercio Estero), seminar. Milan, Italy.

6-13 July 2012

2012 Summer Symposium on Science and World Affairs, Princeton, US; by invitation of the UCS (Union of Concerned Scientists).

14-16 February 2012

Course on Intelligence for Asi and Finmeccanica, Link Campus University of Malta, Rome, Italy.

20 September 2011

2011 Dual-use Exporter Conference, European Commission, Brussels.

3-10 August 2011

2011 Summer Symposium on Science and World Affairs, King’s College, London; by invitation of the UCS (Union of Concerned Scientists).

8-17 July 2010

2010 Summer Symposium on Science and World Affairs, DESY, Hamburg; by invitation of the UCS (Union of Concerned Scientists).

10 June 2010

Workshop on “LOx/Methane Propulsion”, Sapienza University of Rome-NASA-Purdue University.

10-17 January 2010

International School on Disarmament and Research on Conflicts, ISODARCO: "the Road to Nuclear Zero and Arms Control", Andalo (TN).

15-26 October 2007

International Centre for Theoretical Physics, Trieste: “School on Astrophysical Fluid Dynamics”.

THESIS SUPERVISOR

02 July 2019

Master of Science in “Information security and strategic information”, “Sapienza” University of Rome: “UAV and swarms of nano-UAV as asymmetric threat: Dual use goods export control EU Regulation and proposal of technical amendment”.

08 June 2018

Master of Science in “Information security and strategic information”, “Sapienza” University of Rome: “The Blockchain paradigm and the dual use goods: compliance analysis and proposal as proliferation control tool”.

08 June 2018

Master of Science in “Information security and strategic information”, “Sapienza” University of Rome: “dual use goods export control: legal frame, weaknesses and the intelligence’s function”.

18 March 2015

Master Degree in Space and Astronautics Engineering, “Sapienza” University of Rome: “Parachute airdrop of a small launch vehicle: numerical and experimental analysis on a scaled model”.

17 December 2013

Bachelor Degree in Aerospace Engineering, “Sapienza” University of Rome: “Aerodynamic control of a sounding rocket”.

18 July 2013

Ph.D. in Aerospace Engineering, Aerospace School of Engineering, XXV ciclo. "Studio di un sistema di lancio per microsattelliti aviotrasportato con lanciatore rilasciato da un velivolo cargo"; Aerospace School of Engineering.

28 January 2011

Master Degree in Astronautics Engineering, Aerospace School of Engineering, Sapienza University of Rome: “Modelling of an ablative trust chamber within the THESEUS (Thrusters Evolution for Space Exploration an Upper Stages) project”.

14 July 2009

Bachelor Degree in Mechanical Engineering, “Sapienza” University of Rome: “Effects of the post-tip dimension on the anchoring of a CH₄/Air diffusion flame”

PAPERS, BOOKS and TECHNICAL REPORTS

Papers

- Minotti, A. " A new NANOSATs propulsion system: swirling-combustion chamber and water electrolysis ", AIMS Energy, 6(3): 402–413; DOI: 10.3934/energy.2018.3.402.
- Pallone, M., Pontani, M., Teofilatto, P. and Minotti, A. "Design Methodology and Performance Evaluation of New Generation Sounding Rockets," International Journal of Aerospace Engineering, vol. 2018, 1678709. doi:10.1155/2018/1678709.
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PATENTS

Minotti, A. "Space propulsion system", PCT/IB2018/055595, already issued in Italy; intellectual and commercial property.

Minotti, A. "Electrical energy generation device", PCT/IB2018/052036, already issued in Italy; intellectual and commercial property.

Minotti, A. and Ollier,E. "Combustion module offering an improved gas combustion". PCTEP2016/051024, 19/01/2016; intellectual property.

The commercial property is shared between the Sapienza University of Rome and the French Alternative Energies and Atomic Energy Commission (CEA).

EDUCATION and TRAINING

31 July 2008 – 30 June 2010

Post doc in Aerospace Propulsion

“Advanced methodologies for the simulation and design of ultra-micro turbogas combustion chambers”

Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering.

01 October 2004 - 12 February 2008

Ph.D. in Theoretical and Applied Mechanics

“Modelling of O₂/CH₄ Liquid Rocket Engines injector combustion at Subcritical and Supercritical conditions”

Sapienza University of Rome, Dept. of Aerospace and Mechanical Engineering-Avio S.p.A.

01 September 2002 - 22 April 2005

Special Master Degree in Astronautics (110/110 cum laude)

“Plume and nozzle infrared radiative heat load on the structure of the 3rd stage of the LYRA launch vehicle”.

Aerospace School of Engineering of the Sapienza University of Rome.

01 May 2003 - 17 December 2003

Master of Science in Space Transportation Systems

“Plume Radiation Analysis: SRMs & AVUM M.E., of the VEGA launch vehicle”.

Aerospace School of Engineering of the Sapienza University of Rome-Avio S.p.A.

01 October 1994 - 22 May 2002

Master Degree in Mechanical Engineering (105/110)

“Development of the k-w turbulence model on a finite elements code for the solution of fluid dynamics field of turbomachinery interest.”

Sapienza University of Rome.

PERSONAL SKILLS and COMPETENCES

Mother Tongue

Italian

Other Languages

English: C1 level, proficient user (understanding, speaking and writing)

Operating systems

Windows9X-ME; XP; Unix, Linux.

Programming languages

Turbo Pascal; Fortran 77-90.

Software

Missile Datcom;

N.A.S.A. C.F.D. codes: K.I.V.A., BOAT and SHIP;

N.A.T.O. radiative codes: Modtran, Niratam and Nplume;

Ansys-Fluent; OpenFoam; GAMBIT;

ChemKin; C.E.A.

TECPLOT; finite elements code XENIOS;

Power Point; Word; Excel; Matlab.

Driving licences

A, B.

Rome, December 2019

Angelo Minotti, Ph. D.