

PERSONAL INFORMATION

Vojko Bratina



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WORK EXPERIENCE

March 2024-today

Science and Technology Counsellor

Italian Ministry of Foreign Affairs and Cooperation
Consulate General of Italy – Shanghai
Changle Lu 989, The Center, 19° Floor.

- Promote Italian Science and Technology;
- Encourage contacts between Italian research organizations and academia with their Chinese counterparts;
- Assist visiting Italian delegations;
- Monitor and inform on research, development and innovation;
- Organize scientific and technological initiatives;
- Promote the mobility of researchers and scholars.

Business or sector Science Diplomacy

October 2019-February 2024

International Relations Officer, Policy Officer - Scientific Attaché

Delegation of the European Union to China
Science and Technology Section
4th Floor, Entrance D, Qian Kun Mansion, 6, Sanlitun Xi Liu Jie, Beijing 100027

- Promote Science and Technology cooperation between the EU and China
- Promote Chinese participation in the EC -funded Research Framework Programme.
- Coordinate the Group of EU MS Science Counsellors based in China, facilitating and guiding the work of specific working groups
- Liaise with the relevant Departments of the Government of China and leading research institutions of China and EU Member States representations in China.
- Participate in the preparation of EC activities identified in the EU-China S&T Cooperation Agreement.
- Plan and execute the participation of the Delegation of EU in S&T events in China.

Business or sector EU Research programmes - Science Diplomacy

February 2018-September 2019

Research Program Administrator (Temporary Agent)

REA -Research Executive Agency, European Commission
Unit B1: Space Research
Place Rogier 16, B-1210 Brussels, Belgium

Prepare and manage the evaluation of proposals to EU calls in the field of Space Research

- Topic Coordinator
 - Scientific instrumentation and technologies enabling space science and exploration
 - Secure satellite communications in preparation for the GOVSATCOM program
- select experts for the evaluation of the proposals
- organize and supervise evaluation sessions as moderator
- prepare EU contracts and ensure their technical and financial aspects

Manage EU funded projects in the area of Space Research

- ensure the follow-up of project implementation
- participate in periodic project monitoring
- extract and disseminate best practices and results of EU funded projects
- establish connections and clustering among EU funded projects
- Cluster1: Space Exploration and Science -Life Support Technologies and Habitat Management
- Cluster2: On Board data Processing and High Speed Chain Data Relay

Develop and implement relevant EU policies in the field of Space Research

- act as REA contact person for EC and ESA in specific domains of Space Research
- organize and contribute to meetings to discuss specific technical aspects of EU funded projects
- participate to relevant working groups or committees
- establish links with relevant EC services and other external stakeholders

Business or sector EU Research programmes - H2020 - Industrial Leadership – Space Research

October 2015-January 2018

Research Program Officer (Temporary Agent)

REA -Research Executive Agency, European Commission
 Unit A1: Marie Skłodowska-Curie Actions: Innovative Training Networks (ITN)
 Place Rogier 16, B-1210 Brussels, Belgium

Panel Coordinator // Panel of Physics & Mathematics

- implement EU Research Policy under the pillar of Excellent Science
- prepare and select experts for the evaluation of the proposals
- manage and moderate evaluation sessions
- prepare EU contracts and negotiate its technical and financial aspects
- ensure the follow-up of project implementation
- participate in periodic project monitoring
- extract and disseminate best practices and results of EU projects
- participate in relevant working groups at REA, EC and other EC Executive Agencies

Business or sector EU Research programmes - H2020 - Excellent Science - MSCA

January 2015-September 2015

Program Manager (Contract Agent)

INEA, Innovation and Networks Executive Agency (INEA), European Commission
 Unit H.2: Horizon 2020, Transport
 Chausse de Wavre 910, 1050 Brussels, Belgium

Prepare and manage EU calls for proposals and EU funded projects in Transport Research

- Contribute to the development and implementation of relevant EU policies in Transport research and innovation through the management of projects in programmes under the responsibility of the Agency
- Prepare, manage and monitor calls for proposals in Transport research and innovation
- Evaluate, select and follow-up EU funded projects in Transport research and innovation

Business or sector EU Research programmes - H2020 - Societal Challenges - Transport Research

October 2013-December 2014

Staff Researcher

C.N.R. Consiglio Nazionale delle Ricerche -National Research Council
 c/o IOM - Istituto Officina dei Materiali Headquarters (Trieste, TASC)
 Area Science Park – Basovizza –Sincrotrone Trieste
 Strada Statale 14 km 163,5 - 34149 Trieste

- **support to CNR research groups in understanding the various aspects of the new EU Framework Programme for Research and Technology Horizon 2020**
- **support to Italian Representatives in the National Expert Groups for H2020 (Space, Environment)**
- **support to CNR activities regarding ERA (European Research Area) and Science Europe.**

Business or sector EU Research funding mechanisms, EU research policy

October 2012-September 2013

Senior Scientific Officer

Science Europe
 14, Rue de la Science, B-1040 Brussels

- **Support to Scientific Committee on Engineering and Technology**
- **Support to Scientific Committee on Physical, Chemical and Mathematical Sciences**
 - support and management of research activities
 - organization of R&T experts' meetings
 - participation in science-related seminars and workshops
 - collaboration with representatives and experts from different European Member States
 - contribution to technology watch
 - promoting stakeholder mobilization, engagement, and consultation

Business or sector EU Research funding mechanisms - EU research policy

April 2008-August 2012

Research Programme Officer (Expert National Detaché)

European Commission, DG RTD, Directorate Environment
 Unit I.3: Management of Natural Resources; Sector: Earth Observation
 Rue du Champ de Mars 21, 1050 Brussels, Belgium

Implementation of European Commission research policy

Project Officer of several European research projects in the domain of Earth observation and climate change; preparation, process, and follow-up of the FP7 calls for proposal in the domain of Earth Observation (sub activity of FP7 Cooperation Theme Environment). Preparation of calls for proposals, facilitating the evaluation, contributing to the negotiation and follow-up of projects, preparation of reports and recommendations.

- **Support the European Commission in international activities**

Support the EC within the activities of the Group on Earth Observation (GEO) global initiative in view of the development of the Global Earth Observation System of Systems (GEOSS). Participation in GEO Committees, regular participant of GEO Architecture and Data Committee and of GEO Science and Technology Committee, EC alternate member of GEO Data Sharing Task Force. Participation in GMES Advisory Council, in hearings on GMES observation data, and in several other GMES Workshop to discuss principles of GMES Data Sharing policy and downstream services.

- **Participation in European Commission Inter-service consultation**

Support the EC with expertise in different fields in the following Interservice groups: 1) Inter-service Group on Space and Climate Change; 2) Spectrum Interservice group; 3) Commission Interservice group on Geographical Information; 4) Inter-Service Group Meeting on Ways of Strengthening the Partnership with EIROforum and its Member Organizations in the Context of the ERA (European Research Area), 5) Inter-Service consultation on GMES Initial Operation.

Business or sector EU Research programmes - FP7 - Environment and Earth observation

April 2001-April 2008

Staff Researcher

C.N.R.-I.N.O. Consiglio Nazionale delle Ricerche - Istituto Nazionale di Ottica
National Research Council - National Institute of Optics
L.go Fermi 6, 50125 Firenze (Italy)

- **Project Management**

Coordinator of the project study "Earth Observation from the Moon" in the framework of the program "Italian Vision for Moon Exploration" funded by ASI (Italian Space Agency), a consortium made up of 3 CNR Institutes, 2 Universities, and 2 SME's.

Work Package leader of optical testing of FSL at the system level (see below a description of FSL under Science under microgravity conditions)

- **Space Astronomy**

Optical design and assessment of the optical system of **EUSO (Extreme Universe Space Observatory)**, a Mission to Explore the Extremes of the Universe using the Highest Energy Cosmic Rays and Neutrinos and its fluorescence signals coming from Earth's atmosphere. Member of HEAPNET collaboration.

- **Science under microgravity conditions**

Test and calibration of the optical system of **FSL (Fluid Science Laboratory)** for the ISS, a payload for the Columbus Orbital facility. Supporting scientific microgravity research in the field of fluid physics, and acting as an optical consultant for FSL Prime Contractor (Alenia Spazio) and ESA. The work included several working periods at Prime Contractor (Alenia Spazio, Turin, Italy) and Subcontractor (Verhaert DD, Antwerp, Belgium) premises with final optical cleaning at NASA premises at KSC.

- **Laser technology development**

Design and test an integrated laser tool for space application (manufacturing, metrology, and energy transfer in space) in the framework of the ERA STAR Regions program.

- **Atmosphere and Earth observation**

Space mission concept for **LAME**, active Earth observation system, combining the use of ultra-lightweight mirrors and of solid-state, diode pumped, lasers. The payload is meant to be a facility for atmospheric science research and an opportunity to develop lightweight mirror technology. ASI awarded study

Preliminary optical design for **CIA (Advanced Hyperspectral Camera)**, a high resolution multispectral (from VIS to IR) camera for Earth observation, trading-off the different optical design solutions for the camera. ASI awarded study.

Space mission concept for **ALC (Advanced Lidar Concept)**: new technological concepts of lightweight large aperture telescopes for Light Detection & Ranging (LIDAR) instruments, preliminary design of a telescope subsystem for a spaceborne LIDAR based on lightweight mirrors technology and active optics. ESA awarded contract.

Business or sector Space Research: design, assessment, test and calibration of optical system for space based instrumentation

January 2000-September 2001

Science writer

ESA-ESTEC, Keplerlaan 1
2200 AG Noordwijk ZH, The Netherlands

Freelance contractor at ESA/ESTEC in communication support on Cassini/Huygens mission

Press release preparation on Cassini/Huygens scientific contents; Contribution to ESA web site with stories on Cassini/Huygens scientific contents; Interaction with other freelance contractor supporting other ESA space missions to shape a common vision on ESA science missions.

Business or sector Communication, multimedia tool production for the general public

January 1999-December 2000

Research Fellow

Area Science Park Trieste, Italy
 c/o C.A.R.S.O. Center for Advanced Research in Space Optics
 Padriciano 99, 34012 Trieste, Italy

- Project Coordinator of the project "Evaluation of radiation doses and shielding requirements on satellites and instruments"; with a working period at ESA-ESTEC in the Space Environments and Effects Analysis Section; performed activity on the following satellites and instruments:
 - **INTEGRAL (INTErnational Gamma-Ray Astrophysics Laboratory**, an ESA scientific mission); evaluation of the total radiation dose collected by the electronic components inside the electronic units mounted in the INTEGRAL satellite.
 - **UVISS (UltraViolet Italian Sky Surveyor)**, an Italian instrument for the Space Station; evaluation of the total radiation dose collected by various components with different shielding
 - **AURORA**, an Italian-Japanese spectrometer for the study of aurora lines; evaluation of the total dose collected by the electronics and the mirrors.
- Responsible, on behalf of CIFS (Italian Interuniversity Consortium for Space Physics), for the following works, funded by ASI (Italian Space Agency):
 - **UVSTAR data analysis**
 - **The geocoronal background observed by UVSTAR during STS95**

Business or sector Space Research: design, assessment, test and calibration of optical systems for space based instrumentation

November 1996 - December 1998

Research Fellow

C.A.R.S.O. Center for Advanced Research in Space Optics
 Padriciano 99, 34012 Trieste, Italy

- Preparation activity for the UVSTAR flight on Shuttle Discovery during the mission STS85 (07/08/97-20/08/97): finalization of the observation campaign and real-time operation at NASA GSFC (Goddard Space Flight Center) during the flight.
- data analysis from mission STS 85
- Evaluation of optical characteristics of a system for liquid samples analysis, commissioned by EUROSPITAL S.P.A. from Trieste
- Preparation activity for the UVSTAR flight on Shuttle Discovery during the mission STS95 (29/10/98-8/11/98): finalization of the observation campaign and real-time operation at NASA GSFC (Goddard Space Flight Center) during the flight.
- Data analysis from mission STS 95

Business or sector Design and assessment of optical systems for space based instrumentation

EDUCATION

2002-2004

Master in Science Communication

I.S.A.S. (International School of Advanced Studies) – Trieste

- Science Communication techniques

1997-2000

PhD in Optics (grade 70/70 cum laude)

University of Florence

- Optics
- Optical Design
- Optical testing

1996-1997

Master specialization in Space Engineering (Corso di Perfezionamento in Sistemi Spaziali, Master II livello)

University of Padova

- Space engineering
- Structural dynamics
- Assessment of critical structures

1987-1995

Master degree in Physics (Laurea Vecchio Ordinamento)

University of Trieste

- Space Physics
- Optics
- Astrophysics

TRAININGS

October 2021-December 2021

Science Diplomacy

DiploFoundation & Geneva Science-Policy Interface and the GESDA - Geneva

- Main ideas and concepts of science diplomacy
- Understand and contextualise evidence-based decision-making
- Skills and practices that foster science diplomacy and science-policy interactions

April 2008 – September 2019

Trainings provided by EC

European Commission

- Language trainings
- Project management trainings
- EC Policy trainings

November 2007

ASAP Introductory course

Breault Research Organization Inc, Tucson, AZ (USA)

- Optical system modelling and Source modelling
- Numerical and graphical verification of system and source models
- Ray tracing and analysis

August 2003

SPIE Short Course on Optomechanics for Space Applications

International Society for Optical Engineering

- Overview of material selection for space applications
- Verification and physical tests required for spacecraft payloads
- Overview of specific design considerations

July 2003

ZEMAX Training course on Illumination and Stray Light Analysis

ZEMAX Development Corporation, San Diego, CA (USA)

- Principles of optical design
- Designing manufacturable optical system

August 2002

SPIE Short Course on Practical Optical System Design

International Society for Optical Engineering

- Optical system configuration and performance optimization and analysis

September 2000

STK fundamental training

Analytical Graphics, Inc.

- Software products to support space-based systems

PERSONAL SKILLS

Mother tongue(s)

Italian, Slovenian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2 PROFICIENT LEVEL	C2 PROFICIENT LEVEL	C2 PROFICIENT LEVEL	C2 PROFICIENT LEVEL	C1 ADVANCED LEVEL
French	C2 PROFICIENT LEVEL	C2 PROFICIENT LEVEL	C1 ADVANCED LEVEL	C1 ADVANCED LEVEL	B2 INDEPENDENT LEVEL
German	B1 INTERMEDIATE LEVEL	B2 INDEPENDENT LEVEL	B1 INTERMEDIATE LEVEL	B1 INTERMEDIATE LEVEL	B1 INTERMEDIATE LEVEL
Chinese	A2 BASIC USER	A1 BASIC USER	A1 BASIC USER	A1 BASIC USER	NONE

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

Good communication skills having obtained a Master in Science Communication and gained through a specialization participation in international and national scientific conferences. I'm always paying attention to balancing correcting my communications, identifying the needs of the audience, and tailoring the communication to suit. Author of popular science articles

Organisational / managerial skills

Mentoring skills acquired as team leader of small teams. Good ability in motivating co-workers, in order to have the work done through the co-workers.
 Problem-solving oriented with particular ability in identifying specific issues and proposing solutions, developing new ideas and implementing new strategies by detailed organizing and planning, trying to

visualize in advance potential outcomes of the work proposed.
 Deep understanding of the various procedures in use, and ability to adapt quickly to the different tools needed to achieve the requested objectives

Job-related skills

Educational background in physics with 15 years of experience as a researcher in the field of space and environmental sciences in high-profile projects at national and international level within the broader scientific community.

15 years of additional experience acquired working in EC, its Executive Agencies and Delegations of EU. Involved in the implementation of EC research policy, covering the full chain of the Research Framework Programme (FP7, H2020, Horizon Europe). Good knowledge of EU and international policy frameworks in various fields, including Space, Climate Change and Biodiversity.

Part of EC delegation at GEO MINISTERIAL SUMMIT in Beijing, China Project Officer of research projects involving EU and Chinese scientists and Chinese research entities (e.g. FP6-2005-GLOBAL-4/YEOS, FP7-ENV-2010/265113/GMOS). Project Officer in charge of the management of the evaluation of the call topic on International cooperation in aeronautics with China (H2020-MG1.10-2015).

5 years of experience as S&T Attaché at the Delegation of EU to China.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Basic user	Independent user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

- Microsoft Office package
- Graphics: Photoshop, Paint shop, Image J, IrfanView
- Graphics: Photoshop, Paint shop, Image J, IrfanView
- EC PM IT tools: SYGMA/COMPASS/HORIZON Dashboard, PDM, EMI, SEP
- videoconferencing tools: Webex, Teams, Zoom
- bibliometric IT tools: SCIVAL, Lens, Scopus
- Optical design software with ray-tracing technique: ZEMAX, BEAM4, OSLO, ASAP, OPTICAD
- Space radiation analysis software: ESABASE, Space Radiation, CREME, SPENVIS
- Data analysis and data reduction software: IDL
- Space mission analysis software: STK

Other skills

Good ability to adapt to multicultural teams achieved through work experience abroad and in international working environments. I'm particularly strong in coping under pressure, remaining calm and maintaining a positive outlook, never the looking at negative side of situations.
 Good interpersonal skills with proven self-confidence and determination. I have the particular ability to manage conflict constructive way and to react quickly under pressure, supporting a fair distribution of tasks in a team environment.