

PERSONAL INFORMATION

Name: Igor Piš

Address: Trieste, Italy

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CURRENT POSITION
JULY 2019 – PRESENT

Beamline scientist

BACH beamline

IOM – CNR, Laboratorio TASC., S.S. 14 - km 163,5 in AREA Science Park

34149 Basovizza, Trieste, Italy; www.iom.cnr.it

WORK EXPERIENCE

2013 - 2019 Beamline scientist, Post-Doc (2013-2015)

Elettra-Sincrotrone Trieste S.C.p.A., S.S. 14 - km 163,5 in AREA Science Park

34149 Basovizza, Trieste, Italy; www.elettra.eu

- Running and further developing the BACH beamline and experimental stations in order to accomplish the experimental program. Research activities expanding Elettra collaborations on material sciences
- Providing high-quality support to external users
- Pursuing research in the field of tailored 2D materials and C-layers for novel catalytic materials and green chemistry

Business or sector Research

2009 - 2010 Guest researcher

National Institute for Materials Science (NIMS), 1-2-1 Sengen, Tsukuba-city Ibaraki 305-0047, Japan

- International Joint Graduate School Fellowship
- Development of laboratory based system for photoemission spectroscopy induced by hard X-rays (HAXPES)

Business or sector Research and development

EDUCATION AND TRAINING

2007 - 2013 Ph.D. in Physics

EQF 8

Charles University in Prague, Faculty of Mathematics and Physics, Department of Surface and Plasma Science, Czech Republic

Principal subjects: Surface and interface physics

2002 - 2007 Master's degree in Physics

EQF 7

Charles University in Prague, Faculty of Mathematics and Physics, Czech Republic

Principal subjects: Physics of surfaces and thin layers, Physics of condensed matter, Vacuum physics

PERSONAL SKILLS

Languages

English – fluent with good writing skills

Italian – conversation level

Slovak – native language

- Job-related skills**
- Experience of **working at synchrotron facilities** (Elettra, Italy; SPring-8, Japan)
 - Expert knowledge of **photoemission spectroscopy techniques** (XPS, UPS, XPD, SR-PES, HXPES), including resonant, angle-resolved, diffraction spectroscopy and **soft X-ray absorption spectroscopy** (XAS, XANES, NEXAFS), pump-probe time resolved XAS
 - Experience in using surface sensitive techniques in materials science
 - **Vacuum physics and technology**
 - Other techniques: SEM, EDX, LEED, SIMS, STM, ISS, Mass spectroscopy, Thermal-desorption spectroscopy

- Digital skills**
- programming in **LabView** (experienced user level)
 - advanced command of **Igor Pro** data analysis software
 - good command of other similar software: Python, Delphi

ADDITIONAL INFORMATION

- Publications**
- Author or co-author of **74 articles** published in peer-reviewed international scientific journals
 - Number of citations: 798
 - h-index: 17 (Web of Science, as of 06-01-220)
- Reviewing activities**
- ACSNano, Langmuir, App.Surf. Sci., App.Phy.Let., Nanotechnology, JPCC, others
- Research sectors**
- surface structures, graphene, 2D materials, bimetallic systems, metal alloys, thin oxides, nanostructures, chemical reactivity, electronic structure, heterogeneous catalysis, photocatalysts, catalysts for fuel cells
- Recent scientific activities**
- Chemistry under 2D cover: Investigation of growth, physical and chemical properties of graphene and hexagonal boron nitride heterostructures on solid substrates, intercalated with transition metal atoms and gas molecules
- Projects**
- surface-assisted polymerization of halogenated molecular precursors
 - 2014 – 2017, co-investigator in project :Beyond graphene – Tailored C-layers for novel catalytic materials and green chemistry, FIRB futuro in ricerca, MIUR;
<http://www.beyond-graphene.mater.unimib.it/>