

Curriculum Vitae - Alberto Verdini

March 1995 Graduation - "Laurea cum laude" in Physics, discussing the thesis "Studio delle proprietà elastiche dei superreticolati a semiconduttore mediante spettroscopia Brillouin".

Jan.1999 PhD in Physics, discussing the thesis "Surface Structure Determination by Photoelectron Diffraction. A new geometrical configuration at ALOISA beamline." University of Trieste (Italy)

Up to September 2019 Beamline scientist at the ALOISA Beamline - IOM-CNR in Trieste.

From Sept 2019 --> now Responsible of the Joint Lab IOM-CNR - University of Perugia for the Study of Surfaces and Nanostructures (<https://www.iom.cnr.it/research-facilities/facilities-labs/analytical-microscopy-and-spectroscopy/across/>)

Involved in the Italian National Projects:

- "Interazione molecole superfici: dall'olio ai film di molecole organiche" (Cofin2001);
- "Proprietà elettroniche e strutturali e crescita di film debolmente legati: verso la comprensione dell'interfaccia organico-inorganico" (Cofin2003);
- "Studio di sistemi ad alta correlazione e bassa dimensionalità con spettroscopie elettroniche di coincidenza: una nuova generazione di metodi sperimentalisti e teorici" (PRIN 2005)
- "Misure con radiazione di sincrotrone degli effetti di correlazione elettronica e di dicroismo nella forma di riga Auger per lo studio di sistemi magnetici a bassa dimensionalità (PRIN 2008)
- "Eurofel" (from 2013)
- "Electron structure and charge transfer dynamics at hybrid molecular interfaces" (CNR-STM 2014), as Principal Investigator Partner.
- "Fast Electron Dynamics In Novel Hybrid Organic–2d-Materials (FERMAT)" PRIN 2017, "Corso formativo di tecniche di vuoto per le scuole superiori" Bando Fondazione Cassa di Risparmio di Perugia
- Co-Funding of a PhD fellowship @ University of Perugia (2021-2023), within the PON call DM 1061 10.8.2021

and international:

- "Correlazione tra le proprietà elettroniche e strutturali di film ultrasottili" (Correlation between electronic and structural properties in ultrathin films), in collaboration with the University of Ljubljana (ref. prof. D. Cvetko), within the framework of the Technological and Scientific Cooperation between Italy and Slovenia (2002-2005).
- "Creazione di rete di ricerca Italo-Slovena per lo studio dei materiali nanostrutturati e l'utilizzo della radiazione di sincrotrone" within the Community Program InterReg III (2004-2009)
- Italian Responsible of the project-grant "Studio delle Proprietà di Trasferimento di Carica nelle Interfacce Ibride per Applicazioni di Dispositivi Innovativi" awarded to dr. G. Kladnik for his research activities at the ALOISA beamline (2013).

- "Nanoscience for energy: a joint Italy-US laboratory ", from jan.2014 together with prof. A. Morgante

-Research Program "Electron structure and charge transfer dynamics at hybrid molecular interfaces" (CNR-STM 2014), in collaboration with prof. D. Cvetko.

Project "Advanced Nanotechnologies For Multivariate Sensor Fabrication", PI of the CNR unit, funded by the NATO SPS (Science for Peace and Security) program from September 2016

2010-16 elected in the Institute Panel (Consiglio d'Istituto) of the IOM (Istituto Officina dei Materiali)

2012-14, elected in the steering committee of SILS, Societa' Italiana Luce di Sincrotrone – Italian Society of Synchrotron Light. Financial Administration of the SILS, as Treasurer 2013-14

From 2012, Internal referee for the Italian Evaluation of Research (VQR) for the Physics Group (GEV02)

From 2013, Registered Expert of the European Research Council

Summer 2013, evaluator of scientific projects for the Czech Science Foundation

Referee for the Surface Science, Applied Surface Science, and the American Chemical Society journals

Invited as SILS representative to the Opening Ceremony of the International Year of Light 2015 held at UNESCO site in Paris 19-20 Jan. 2015

More than 10 oral presentation in International Events. Invited for the presentations:

"Metalation of porphyrins and the role of the interaction with surfaces" FISMAT2015 congress (Palermo,28 sept-2 oct 2015)

"Excess electrons distribution in TiO₂(110) and Mg:TiO₂(011) surfaces" TRENDOXIDES 2015 Workshop (Brescia, 16-18 November 2015)

"Metalation of porphyrins and the role of the surface oxidation in metal surfaces", invited – AIV XXIII Conference Florence, April 5-7 2017 – Materials, Interfaces, Processes in Industrial and Basic Research Applications.

Author of more than 140 papers in peer reviewed scientific journals, plus 2 chapters in two books. June 2022: Scopus h-index = 30 and the Web of Knowledge ISI h-index = 30.

Involved in the organization of

Congress/Workshops:

- NanoTechYoung (2003)

- First IOM-CNR Workshop (2010),
- Congresses of SILS, Societa' Italiana Luce di Sincrotrone – Italian Society of Synchrotron Light (2012, 2013, 2014, 2014)
- Congress of SIF, Societa' Italiana di Fisica, Italian Physics Society (2013)
- Selection of the new Logo for the IOM-CNR institute in 2010

Teaching Experience:

Academic years 2005-06 to 2008-09 and 2010-11: 10 hours of lessons in the course “Elementi di fisica moderna e di microscopia” (Elements of modern physics and microscopy) of the “Laurea in Biotecnologie Mediche” course (Faculty of Medicine -University of Trieste)

Academic year 2018/2019: 72 hours of lesson in the course “Fisica Generale” (General Physics) course (Facoltà Scienze della Vita – Univ. Trieste)

Academic year 2021/2022: 35 hours of lesson in the course “Fondamenti di Fisica delle Superfici” (Univ. Perugia)

At the international school HERCULES 2004 (Higher European Research Course for Users of Large Experimental System) on the use of synchrotron light and neutrons: two practical sessions on “Thin film structural analysis with combined use of Photoelectron Diffraction (PED) and Grazing Incidence X-ray Diffraction (GIXD)” at the ALOISA beamline

At the VIII Scuola Nazionale di Luce di Sincrotrone (Frascati - Roma, 10-21 Ottobre 2005): one practical session about the photoelectron diffraction

At the international school HERCULES 2006 (Higher European Research Course for Users of Large Experimental System) on the use of synchrotron light and neutrons: two practical sessions on “Thin organic film structural analysis performed by multi-technique approach” at the ALOISA beamline

Professeur Invitè - Invited Professor by the Laboratoire Interdisciplinaire Carnot, University of Burgundy (Dijon, France), one month stay in Summer 2009, 2011, 2014, 2017

Perugia 27/06/2022

