

Europass Curriculum Vitae



Personal information

Surname(s) / First name(s)

Email(s)

Nationality(-ies)

Date of birth

Locatelli, Andrea

andrea.locatelli@elettra.eu

Italian

19/05/1967

Career

Presentation

Andrea Locatelli graduated in physics at the University of Trieste in 1994. He continued his studies in Cambridge (GB), where he joined the group of Prof. Sir. David A. King and obtained a PhD in Physical Chemistry. Currently, he is the coordinator of the Spectroscopy, Photoemission and Dynamics group at Elettra-Sincrotrone Trieste. His main scientific interests are in the field of surface chemistry and materials sciences, which he addresses using synchrotron-based spectroscopy and microscopy. His research activity mainly focuses on the study of surfaces, interfaces and ultra-thin films, tackling topics related to the characterization and control of the chemical, electronic and magnetic properties of low dimensional systems. Andrea Locatelli has coauthored more than 225 papers in international referred journals and gave more than 60 presentations at international workshops, conferences as well as in various universities and research centers.

Work experience

10/2019 - present

Coordinator of the SPEctroscopy, PhotoEmission and Dynamics (SPEED) group at Elettra - Sincrotrone Trieste S.C.p.A.

06/2005 - present

First researcher and Coordinator of the Nanospectroscopy beamline at Elettra

03/2002 - 05/2005

Beamline scientist at Elettra

05/2000 - 03/2002

Postdoc at Elettra

05/1995 - 12/1995

Trainee at Elettra

Education and training

04/1996 - 04/2000

Ph.D. in Physical Chemistry (awarded on 24/01/2001)

Institution

University of Cambridge, Department of Chemistry, UK

Thesis title

A 4K interferometer for emission studies on surfaces

Principal subject

Studies on dynamical processes on surfaces using emission infrared spectroscopy

Advisor

Prof. Sir. D.A. King

1988 - 1994	Diploma in Physics, "Laurea in Fisica"
Institution	University of Trieste, Italy
Marks	110/110 cum laude
Thesis title	Adsorption site determination by means of high energy photoelectron diffraction: Pd(110)(2x1)p2mg-CO
Principal subject	Studies of surface atomic structures using photoelectron diffraction techniques
Advisor	Prof. R. Rosei
Areas of Expertise	
Research fields	Surface science and catalysis, mass transport by chemical reactions, spatio-temporal pattern formation during oscillatory surface catalytic reactions, surface magnetism, thin-film magnetism, ultra-thin film growth on metal and oxide supports, graphene and 2D materials, graphene growth, electronic structure, self-organization processes in ultra-thin films. Surfaces and interfaces, nanostructures. Synchrotron radiation, synchrotron radiation microscopy.
Analytic characterization methods	Synchrotron Radiation Characterization Methods, X-ray Spectroscopies, X-ray Spectro-microscopy, X-ray Photo-emission Electron Microscopy (XPEEM), Low Energy Electron Microscopy (LEEM), Low Energy Electron Diffraction (LEED), X-ray Photoelectron Spectroscopy (XPS), X-ray Photoelectron Diffraction (XPD), Angle-Resolved Photo-emission Spectroscopy (ARPES), STM, Reflection Absorption Infrared Spectroscopy (RAIRS), Magneto-Optical Kerr Effect (MOKE) magnetometry.
Information technology	Programming languages: Java, Jython, Python, C, C++, Fortran, Igor Pro; Operating systems: Windows, Unix; Data analysis software: Igor Pro.
Main Achievements	
Publications	As of 4/3/2022, I have coauthored more than 225 publications (see Scopus Author ID 55612897600 or ORCID ID: 0000-0002-8072-7343) in international referred journals (11 articles on Phys. Rev. Lett., 33 in Phys. Rev. B, 11 in ACS Nano, 5 in Nano Letters), 15 as main author, including one review paper, one invited concept article.
Participation to Conferences and Workshops	68 presentations at international workshops, conferences and in various universities and research centers, 3 as keynote speaker, 28 as invited speaker, 10 as invited lecturer.
Scientific Projects	Principal investigator of the CERIC MAG-ALCHEMI research project (duration of 3 years starting from September 2017).
Event Organization	Organizer and chair of the VI international workshop on LEEM-PEEM (Trieste, September 7-11, 2008); member of the International Advisory Board of the LEEM-PEEM conference series; Co-chair of the workshop "Probing Magnetic Dynamics with Ultra-Short Coherent X-ray pulses", organized by Elettra, Trieste, December 16-18, 2009; external member of the organizing committee of the international symposium ALC' (International Symposium on Atomic Level Characterizations for New Materials and Devices) 2009-2017. Member of the advisory board of IVC-19 (19th International Vacuum Congress), Paris, 2013 and co-organizer of the Special Symposium "Frontiers in Photoelectron Full-field Imaging and Spectromicroscopy". Co-organizer the XII European Conference of Surface Crystallography and Dynamics (Trieste, October 18-21, 2015). Member of the Scientific Committee of the EMRS Spring Meeting, Symposium CC on Nanomaterials "In situ studies of functional nano materials at large scale facilities: from model systems to applications" (Lille, May 2-6, 2016); Deputy and co-organizer of the HERCULES 2018 Local session and practicals @ Elettra/Fermi, 2018.

Editorial Activity	Editor of the Proceedings of the 6th international workshop on LEEM/PEEM, published on the Journal of Physics: Condensed Matter 21 (31) (2009) 310301. Member of the editorial board of the Elettra Highlights publication booklet in 2006, 2007, 2009; Head of the editorial board of Elettra Highlights publication in 2012.
Refereeing Activity	Referee for the following Scientific Journals: Nano Letters, ACS Nano, the Journal of Physical Chemistry B; Carbon; the Journal of the American Chemical Society; Nuclear Instruments and Methods in Physics Research Section B; J. Phys: Condensed Matter; Surface Science; Review of Scientific Instruments; Ultramicroscopy. Referee for the Italian agency ANVUR, for the Assessment of Quality in Scientific Research 2004-2010 and 2010-2014. Referee of various governmental research funding institutions.
Teaching Activity	Lecturer at Various School and Conferences: "ICTP School on Synchrotron Radiation and Applications - in memory of John Fuggle and Luciano Fonda", The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy (2004, 2006); "Advanced School on Synchrotron and Free Electron Laser Sources and their Multidisciplinary Applications" (2008-2018), The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy); "International School on Synchrotron Radiation: Fundamentals, Methods and Applications", organized by the Italian Society for Synchrotron Radiation (2005-2017); Lecturer for the Ph.D. course in Nanotechnology, University of Trieste.
Training Activity	During my activity I trained several postdocs: Dr. Francesca Genuzio (Elettra, Italy), Dr. Alessandro Sala (University of Trieste, Italy), Dr. T.O. Menteş (Elettra, Italy), Dr. Lucia Aballe (now at CELLS-ALBA, Barcellona, Spain), Dr. M. Á. Niño (now at IMDEA, Madrid, Spain), Dr. Benito Sanots (Elettra, Italy); I have been advisor of the following undergraduate students for their Diploma thesis in Physics: J. Ardini (University of Trieste), G. Zamborlini (University of Trieste), Pietro Genoni (University of Milan).
Awards	
1996-1999	Oppenheimer Trust scholarship
1996-1999	Cambridge European Trust scholarship