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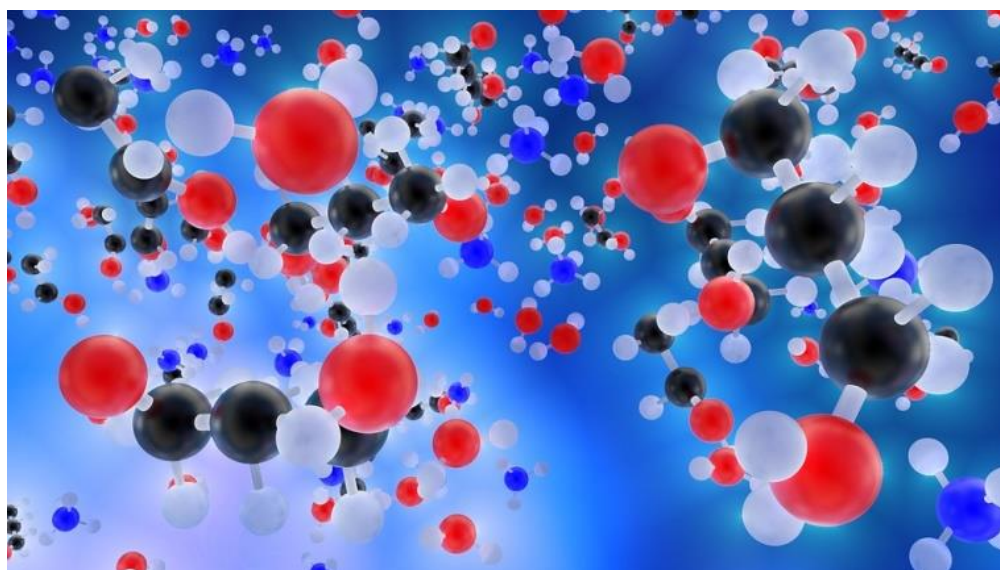


Università
Ca' Foscari
Venezia

Joint Doctoral Program in Chemistry

3rd Winter School

February 19th, 2021
9.30 a.m.



<https://unive.zoom.us/j/87326888506>
passcode: winter3

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Program

9.30 **Welcome opening**

9.40 **Conference**

Prof. Robert Pullar

*Dipartimento di Scienze Molecolari e Nanosistemi,
Università Ca' Foscari Venezia*

Cork-based Ecoceramics: Lightweight porous 3-DOM oxide ceramics based on sustainable cork templates for magnetic and energy applications

10.40 **Conference**

Dr. Lisa Vaccari

ELETTRA Sincrotrone Trieste

Synchrotron Radiation colours: from medical and environmental sciences to cultural heritage

11.40 coffee break

12.00 **Conference**

Dr. Arianna Traviglia

IIT Centre for Cultural Heritage Technology CCHT@Ca'Foscari

Cultural Heritage: where science and humanities collide, connect, intersect

13.00 **Lunch**

14.30 **Conference**

Prof. Davide Bonifazi

Institut für Organische Chemie, Universität Wien

From molecules to complex systems

15.30 **Conference**

Dr. Andrea Locatelli *ELETTRA Sincrotrone Trieste*

Unveiling nanoscale materials and their amazing properties using synchrotron radiation

16.30 **Concluding remarks**



Robert Pullar obtained a PhD in Materials Engineering from the University of Warwick (UK) in 2000. Afterwards he was a research fellow in the UK from 2000-2008 at LSBU and Imperial College London, and then in 2008-2009 he was in Crete on a Marie Curie Fellowship. From 2009 to 2020 he was a Principal Researcher at the Department of Materials and Ceramics Engineering of the University of Aveiro in Portugal, and since autumn 2020 an Associate Professor at the Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice.

His main research interests are the synthesis and processing of ceramics, oxides and nanomaterials, and include sustainable and green chemistry & nanotechnology; magnetic, dielectric and ferroelectric ceramics & nanomaterials; multiferroic and magnetoelectric ceramics & composites; ceramic fibers; bioceramics and bioglasses; photocatalysts; electrochromic and photochromic materials (smart windows); solar energy materials for splitting H₂O and CO₂; waste remediation and valorisation; wood-based ecoceramics; cork derived materials; combinatorial and high-throughput ceramics processing; 3D printing and robocasting; and sustainable materials for the preservation of Cultural Heritage. Dr. Pullar has published over 170 papers, with over 5300 citations and an H index of 37, has presented at over 85 conferences on 5 continents, including over 30 invited presentations, and delivered ca. 30 invited lectures worldwide.

<https://www.unive.it/data/persone/24258468/curriculum>



Arianna Traviglia is the Coordinator of the Centre for Cultural Heritage Technology (CCHT), part of the Italian Institute of Technology. Dr Traviglia's work is placed at the intersection of technology and humanities and most of her research focuses on mediating the inclusion of technologies within the study and management of cultural heritage. Her expertise lies mainly in multi and hyperspectral image processing, close and far range.

Lecturer in Computing Applications to Archaeology and Cultural Heritage (since 2003) at the University Ca' Foscari, from 2006 to 2015 she held positions as Postdoctoral and as Research Fellow at the University of Sydney and Macquarie University (Sydney). She re-entered European academia in 2015 as recipient of a H2020 Marie Curie Fellowship, held until 2018. She is part of the Executive Steering Committee of the International Computer Application and Quantitative Methods in Archaeology (CAA) association. She is also the co-Editor of the Journal of Computer Application in Archaeology (JCAA). She has chaired the 41st Computer Application and Quantitative Methods in Archaeology Conference (CAA2013 Perth Across space and time), co-organised the 2016 International Congress of Underwater Archaeology (IKUWA 6), the 2018 International Aerial Archaeology Group (AARG) conference, and chaired a number of sessions on technological applications in archaeology at major international conferences. She is currently a member of the Management Committee of the COST Action CA15201 'Archaeological practices and knowledge work in the digital environment (Arkwork)' and one of its Core Team Members, a PI on the H2020 project NETCHER (focused on protection of cultural heritage) and CI on the H2020 project REPAIR (on reconstruction of Pompeii's frescoes). She also co-direct a project (CLS) funded by European Space Agency and is a co-investigator of the LARICI project of the Italian Space Agency.



Davide Bonifazi was born in Guastalla (Italy) in 1975. After obtaining the “Laurea” in “Industrial Chemistry” from the University of Parma working with Prof. Enrico Dalcanale, he joined the group of Prof. François Diederich as PhD student at the ETH Zürich (2000-2004). He was awarded the Silver Medallion of the ETH for his doctoral dissertation (2005). After a one-year postdoctoral fellowship with Prof. Maurizio Prato at University of Trieste, he joined the same University as part-time researcher and Professor (2007-2015). In 2006, he joined the University of Namur (BE) as Junior Professor (2006-2011) and as Professor of Organic Chemistry (2012-2015). From 2016 to 2020 he was Chair Professor of Organic Supramolecular Chemistry in the School of Chemistry at Cardiff University (UK), since April 2020 Chair Professor in Organic Chemistry, Institute of Organic Chemistry, Faculty of Chemistry, University of Vienna. His activities are focused on the creation of functional organic architectures in interdisciplinary projects through targeted organic synthesis, self-assembly, and self-organization of organic architectures in solution and on surfaces, physical-organic studies, material- and bio-based design.



Andrea Locatelli graduated in physics at the University of Trieste in 1994 under the supervision of Prof. R. Rosei. 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 material 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 200 papers in international referred journals and gave more than 60 presentations at international workshops, conferences as well as in various universities and research centers.



Lisa Vaccari obtained MSc in Chemistry at Trieste University in 1999 and the PhD in Pharmaceutical Science in 2005 from the same University. Since her undergraduate years she has worked at Elettra Sincrotrone Trieste, where she still continues her scientific activity nowadays. During 2000-2006 she worked at the INFM lithography beamline, building her expertise on micro-

nanofabrication approaches and characterization tools, with special emphasis of biomaterials and their applications. In October 2006 she was appointed scientist at infrared beamline at Elettra, SISSI and in 2010 became manager of the Life Science bio-branch, SISSI-Bio. Since 2019, she coordinates the Elettra group IDEAS, that groups Imaging, Diffraction, Emission, Absorption and Scattering beamlines at laboratories at Elettra.

Her main research interests are biospectroscopy for molecular biology and medical science, ultrasensitive FTIR spectroscopy and multi-technique analyses for the characterization of biological systems. Recently, a focus has been put on heritage science. Collaborative activities with biologists, medical doctors, as well as with chemists and archeologists were established during the years, proven by more the 100 papers and several national and EU grants.