#### **CURRICULUM VITAE**

FORMATO EUROPEO/EUROPEAN FORMAT

### INFORMAZIONI PERSONALI/ PERSONAL INFORMATION

Name, Surname Francesco d'Acapito

Address: House number, street CNR-IOM-OGG c/o ESRF 71, Avenue des Martyrs CS40220 38043 Grenoble

name, postcode, city, country Cedex 9 France.

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Sito web/Website http://www.cnr.it/people/francesco.dacapito

Nationality Italian

Place and Date of birth Roma May 27th 1966

## ESPERIENZA PROFESSIONALE /WORK EXPERIENCE

Se dipendente CNR indicare: N. MATRICOLA 27197 QUALIFICA RICERCATORE (PERMANENT POSITION) LIVELLO II

In ordine di data /Dates (from – to) Jan 2017-Present

Name and address of employer Consiglio Nazionale delle Ricerche

Type of business or sector Project Responsible

Occupation or position held

Responsible of the LISA project (DFM.AD006.072)

Main activities and responsibilities Coordinator of the financial, technical and scientific activities of the LISA project.

Se dipendente CNR indicare: n. matricola 27197 qualifica Ricercatore (permanent position) livello II

In ordine di data /Dates (from – to)

Mar 2016

Name and address of employer Consiglio Nazionale delle Ricerche

Type of business or sector Declared eligible (Idoneo) at the selection N° CNR.364.172 for a Research Director position

(Dirigente di ricerca).

Se dipendente CNR indicare: n. matricola 27197 qualifica Ricercatore (permanent position) livello II

In ordine di data /Dates (from – to) Jan 20

Name and address of employer Consiglio Nazionale delle Ricerche

Type of business or sector Appointed Responsible of the LISA CRG in the operation contract of LISA with ESRF.

Se dipendente CNR indicare: N. MATRICOLA 27197 QUALIFICA RICERCATORE (PERMANENT POSITION) LIVELLO II

In ordine di data /Dates (from – to)

Jan 2011-Present

Name and address of employer Consiglio Nazionale delle Ricerche
Type of business or sector Participation to Executive Board

Occupation or position held Appointerd Member of the Italian delegation at the European Synchrotron Radiation Facility

(ESRF) Administrative and Finance Committee and Purchase Advisor.

Main activities and responsibilities Member of the Administrative Finance Committee (AFC), Member of the Purchase Advisor

committee, Advisor for the Members of the ESRF Council.

Se dipendente CNR indicare: n. matricola 27197 qualifica Ricercatore (permanent position) livello II

In ordine di data /Dates (from – to) Oct 2010

Name and address of employer Consiglio Nazionale delle Ricerche

Type of business or sector

Occupation or position held Declared eligible (Idoneo) at the selection N° CNR.364.86 for a Research Director position

(Dirigente di ricerca).

Main activities and responsibilities -

Se dipendente CNR indicare: n. matricola 27197 qualifica Ricercatore (permanent position) livello II

In ordine di data /Dates (from – to) Jan 20

Name and address of employer Consiglio Nazionale delle Ricerche

Type of business or sector Appointed responsible of the GILDA CRG in the operation contract of GILDA with ESRF.

Se dipendente CNR indicare: N. MATRICOLA 27197 QUALIFICA RICERCATORE (PERMANENT POSITION) LIVELLO II

In ordine di data /Dates (from – to) Jan 2006-Present

Name and address of employer

Type of business or sector

Consiglio Nazionale delle Ricerche
Responsible of operative Group

Occupation or position held Appointee responsible of the Operative Group in Grenoble (OGG) (Jan-2006 Oct-2008) and

(Mar-2010 present) in the IOM institute

Main activities and responsibilities Responsible of the OGG operative group.

INFM QUALIFICA RICERCATORE (PERMANENT POSITION) LIVELLO II

Dates (from – to) Feb 2004

Name and address of employer Istituto Nazionale per la Fisica della Materia

Type of business or sector Synchrotron Radiation Research

Occupation or position held Winner of the selection INFM-688-2002 for a position of Senior researcher (Primo ricercatore, II

livello).

Main activities and responsibilities Coordination of the scientific and technical staff of the GILDA beamline

Coordination of the scientific activity of the GILDA beamline

INFM RICERCATORE (PERMANENT POSITION) LIVELLO III

Dates (from – to) Sept-1998-Feb 2004

Type of business or sector
Occupation or position held
Main activities and responsibilities

Synchrotron Radiation Research
First scientist of the GILDA beamline
Scientific staff of the GILDA beamline

Coordination of the scientific activity of the GILDA beamline

Se dipendente CNR indicare: N. MATRICOLA 00971 QUALIFICA TECNOLOGO (FIXED TERM POSITION) LIVELLO III

Dates (from – to) Sept-1995-Sept 1998

Name and address of employer Consiglio Nazionale delle Ricerche
Type of business or sector Synchrotron Radiation Research

Occupation or position held GILDA beamline staff
Main activities and responsibilities Running the beamline

Se dipendente CNR indicare: QUALIFICA DOCTORATE STUDENT (CNR FELLOSHIP)

Dates (from – to) Nov 1993-Sept 1995

Name and address of employer Istituto Nazionale di fisica della materia

Type of business or sector Synchrotron Radiation Research

Occupation or position held GILDA beamline staff

### ISTRUZIONE E FORMAZIONE / EDUCATION AND TRAINING

Dates (from – to) May - 2005

Name and type of organisation Universite' Joseph Fourier

providing education and training

Principal subjects occupational skills X-ray Absorption Spectroscopy, applications to semiconductor technology

covered

Title of qualification awarded DHDR, Diplôme d'Habilitation à diriger des Recherches (Habilitation to direct Research

activities)

Level in National classification

In ordine di data /Dates (from – to) July - 1997

Name and type of organisation Université Joseph Fourier

providing education and training

Principal subjects occupational skills X-ray Absorption Spectroscopy, x-ray small angle scattering, applications to metal doped

covered glasses

Title of qualification awarded Doctorat

Level in National classification Très honorable avec félicitations du Jury

In ordine di data /Dates (from – to) Jan - 1992

Name and type of organisation Università "La Sapienza" Roma

providing education and training

Principal subjects occupational skills Time resolved X-ray Absorption Spectroscopy, applications to metallic glasses

covered

Title of qualification awarded Degree

Level in National classification 110/110 cum laude

ATTIVITA' DI RICERCA /
RESEARCH ACTIVITIES

Research sectors Synchrotron Radiation instrumentation, Materials Science, Ab-initio Structural Modeling,

Management.

Recent Activities.

The activity of dr F. d'Acapito can be divided in different fields:

- Development of instrumentation and experimental methods in the field of synchrotron radiation.
- Structural studies of advanced materials using X-ray Absorption Spectroscopy (XAS) coupled to ab-initio studies.
- Management of scientific structures and participation to management boards of large scale facilities.
- Didactic activity and tutoring

Development of instrumentation F. d'Acapito is active since the beginning of his scientific career in the development of synchrotron radiation instrumentation. He has participated to the installation of the GILDA beamline at ESRF and he has coordinated its activity as local responsible from 1997 to the end of the project (2014). In 2012 has was member of the committee of the Italian Society for Synchrotron Radiation (SILS) reviewing the proposed synchrotron radiation activities at the super B ring and of the panel reviewing the SAMBA beamline at SOLEIL. Recently he has conceived and designed the evolution of GILDA, the LISA project and he is currently coordinating its realization. He is specialized in surface analysis techniques based on X-ray total external reflection. Within the GILDA project he has realized and operated a peculiar instrument for XAS experiments in total reflection (the Refl-Exafs outstation) and he has developed an original analysis code for the analysis of the related XAS data incidence mode (CARD code). He has a solid international reputation in the field as he is the author of book chapters about this technique. Recently he has contributed to develop a method for electrochemistry to follow the Voltammetric cycles in cells with X-rays (FEXRAV technique). As a consequence of his participation to projects focused on time resolved studies (PIK-2012 EXPROREL, PRIN 2016 NEWLI) he is presently developing a stroboscopic time-resolved XAS methodology for the investigation of light-sensitive materials and processes.

**Structural studies** He is been active as a XAS expert in several fields with particular attention to the semiconducting and insulating materials in collaboration with several international (CEA-LETI -Grenoble, Kepler Univ.-Linz, Demokritos Institute -Athens, Polish Academy of Sciences, -Warszaw, ICFO -Barcelona, IST, Lisboa) and national (Dip Fisica Univ Bologna, Dip Chimica Univ. Milano, Dip Chimica Univ Pavia, CNR-ISM, CNR-ICCOM) institutions. He has studied the incorporation site of magnetic dopants in different matrices (bulk GaAs, GaN, GaAs nanowires, PbS nanodots, Silica) and the structure of advanced materials for (opto-)electronics (Germanene, GeTe-based phase change materials, chalcogenides for Nonvolatile Memories, optic fibers). In particular these studies have permitted to understand the relationship between local structure (local symmetry around dopants, ligands, valence state) and macroscopic properties (optical absorption/emission, electrical activation, ferromagnetism, ..). He has developed expertise in abinitio structural modelling for the interpretation of the experimental data. Using Density Functional Theory (DFT) and DFT-based Molecular Dynamics (MD) he has developed a procedure for the full ab-initio simulation of XAS data. In this way it was possible to solve problems of determination of the local site of dopants in complex structures. He has a solid international reputation as a XAS and semiconductors expert and he is author of several book chapters and invited papers/conference talks on these topics. He has frequently exploited his expertise also in different fields like chemistry, environmental science (participation to PRIN 2010-2011 2010MKHT9B 007 "Minerals-biosphere interaction: environmental and health consequences") and cultural heritage. He acts as referee for journals of several editors (American Institute of Physics, American Chemical Society, Nature group, Elsevier, ...).

Management. Since 1997 he is the local coordinator of the GILDA beamline and since 2009 he has been appointed as project responsible on the operation contracts with ESRF of GILDA and LISA. At present he is responsible of the LISA project at CNR (N DFM.AD006.072, Budget 1.0 M€). For this activity his tasks are the coordination of the technical and scientific activity of the beamline, manage the funding and reporting to the governing bodies (CNR and ESRF). Since Jan 2006 he is the responsible of the Operative Group in Grenoble of the INFM first and of the IOM institute later. In this case the tasks are the responsibility of the personnel activity and the supervision of administrative acts (occupational and personal health, purchases, contracts,...) in an international environment. Since Jan 2011 he is member of the Italian delegation to the ESRF management boards, in particular as member of the Administrative and Finance Committee (AFC), as Purchase Advisor and advisor of the Council Delegation. His tasks are reviewing the ESRF accounts and financial operations, promote the participation of Italian industries to ESRF Calls For Tender and advise the Italian council members about the different issues discussed in the meetings. A relevant result of this activity has been the considerable increment of the participation of Italian companies to ESRF calls, raising the return level of Italy (i.e. ratio between

the share of purchase value of Italian companies and the share of contributions of Italy to ESRF) from 40% in 2011 to above 80% in 2016.

**Didactic activity and tutoring** He participates as lecturer since 1993 at the HERCULES school in Grenoble and he has been tutor of several Master and PhD students having carried out their activity at the beamline. Being HDR, he has been member of jury committees of PhD theses of French academic institutions.

#### **ADDITIONAL INFORMATION**

Languages: Italian (mother tongue) French fluent (written, spoken, read), English fluent (written, spoken, read).

Publications: 203 entries in the ISI database, h-index 28 (Feb 2017).

# TRATTAMENTO DEI DATI PERSONALI, INFORMATIVA E CONSENSO

Il D.Lgs. 30/6/2003, n. 196 "Codice in materia di protezione dei dati personali" regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all'identità personale e al diritto di protezione dei dati personali; l'interessato deve essere previamente informato del trattamento. La norma in considerazione intende come "trattamento" qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l'organizzazione, la conservazione, la consultazione, l'elaborazione, la modifica, la selezione, l'estrazione, il raffronto, l'utilizzo, l'interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente curriculum vitae e nella documentazione della quale fa parte integrante

(barrare la casella) X Si, acconsento