

CURRICULUM VITAE et STUDIORUM GAIA FENOGLIO

PERSONAL INFORMATION

Surname/Name	Fenoglio Gaia
Address	Torino, 10025, Italia
E-mail	gaia.fenoglio@unito.it
Nationality	Italian
Place and Date of Birth	Torino, 29/12/1983

EDUCATION AND TRAINING

2012	PhD in Chemical and Materials Science , Ciclo XXVII, attending the first year at <i>Università degli studi di Torino</i> . Phd project on protocols development and validation for p-XRF analysis applied to Cultural Heritage.
2006-2009	Master Degree in Science and Technology for Cultural Heritage , <i>Università degli studi di Torino</i> , mark 110/110. Thesis title: "Quantitative analysis of painting layers with portable X-ray Fluorescence. Problems and outlooks". Field of study: XRF, quantitative analysis models for multilayer materials, Egyptian findings. Relators: Maurizio Aceto, Co-relator: Angelo Agostino
2002-2006	First Cycle Degree in Science and Technology for Cultural Heritage , <i>Università degli studi di Torino</i> , mark 107/110. <i>Thesis title</i> : "Iconography and materials of Yoruba masks of the Antropology and Ethnography Museum of Turin". Field of study: XRF, XRD, Raman, painting materials, ethnography.
2002-1997	School-leaving certificate in European and Classical studies at "Liceo Classico Europeo Umberto I" (high school) in Turin. Graduated in July 2002, mark 97/100. Further certificates obtained: 'Esame di Stato' Classique, à option internationale (Français) issued by the French Embassy of Rome for bilingual schools, qualified for the admission in French Universities..

WORK EXPERIENCE

February 2011-present	ASP grant at the Chemistry Dep. of University of Torino, under the supervision of Dr. Angelo Agostino. *Experimental studies to assess a protocol for portable XRF in particular geometrical conditions involved when working on situ. *Participating on different projects: <ul style="list-style-type: none">- Decorated manuscripts covers (Vercelli, Ariberto (MI) and Chiavenna covers)- The "Nereide" silver plate of Gualino Collection. * Co-Supervisor of a BS thesis about a IX century Crucifix of Casale Monferrato: Non invasive analysis applied to the study of the about the medieval crucifix of Duomo di Sant'Evasio. * Co-administration of the teamwork website (www.arc.unito.it) My work deals both with protocols development and with practical application to objects of different nature (metals, glass, painting layers). The XRF analysis range from qualitative to quantitative analysis. When applied in the non-invasive approach projects it is frequently associated with Optical Fibers Reflectance Spectroscopy (FORS) and Raman Spectroscopy. Other projects XRD recently included an increase in my competences on structural analysis using MAUD program. Recent project on "Nereide" byzantine plate is deeply characterized by an interdisciplinary teamwork.
May – December 2010	Student grant (Borsa di avviamento alla ricerca) at the Chemistry Dep. of University of Torino, under the supervision of Dr. Angelo Agostino. * Experimental studies to assess a protocol for quantitative XRF analysis associating standard and fundamental parameters methods. *Participating on different projects: <ul style="list-style-type: none">- Colors in Egyptian archaeological findings from the Egyptian Museum of Turin. Pigments identification with a non-invasive approach trough X-ray Fluorescence, Raman spectroscopy and

reflectance spectroscopy (FORS).

- Ancient Egyptian pigments characterization (Egyptian Blue and Green)
- Inks on medieval manuscripts (CODEX A and Vercelli Book)
- Decorated manuscripts covers (Vercelli, Ariberto (MI) and Chiavenna covers)
- Limoges enamels
- * *Co-Supervising a Master Degree thesis about decorated manuscripts covers*

The Egyptian Blue project resulted in a significant improvement in my XRD competences, especially regarding Rietveld refinement, and the use of SEM-EDS analysis and Raman Spectroscopy. Metals and glass analysis improved my competence in quantitative XRF and chemometrics. The inks project added more information to my knowledge about XRF analysis on complex multilayer substrates.

Jan-Feb 2010

Conservation scientist assistant, short-term work contract at the General and Organic Chemistry Dep., University of Torino, research project MEMIP09 "Medieval Enamels, Metalworks And Ivories In Piedmont: Art Historical And Scientific Methods For Their Evaluation" .

- *Prosecution of the previous work on Egyptian Colours.
- *Opening of a project focusing on the characterization of Egyptian Blue and Egyptian Green pigments, due to the presence of a set of colour cakes in the collections of the Egyptian Museum of Torino.
- *Participating to analysis campaigns on medieval objects.
- *Co-supervising two MS Degree Thesis about painting materials palette in XVIII-XIX paintings.

I applied XRF analysis on a variety of cultural materials, ranging from archaeological Egyptian glasses and metal fragments to Medieval manuscripts covers and painting materials. I reached a good autonomy in the use of X-ray Diffraction instrumentation and programs (EVA), especially applied to unlabored samples or directly on the object.

Oct 2009-Dec 2010

Conservation scientist assistant, at the Chemistry Dep. of University of Torino, volunteer.

- * Participating to the project "Colors in Egyptian archaeological findings from the Egyptian Museum of Turin. Pigments identification with a non-invasive approach trough X-ray Fluorescence, Raman spectroscopy and reflectance spectroscopy (FORS)."
- *Co-Supervising a Bachelor Degree thesis about Egyptian Pigments.

Egyptian cartonnages painting materials characterization using portable X-Ray Fluorescence spectrometer (THERMO NITON, data analysis via WinAxil), FORS spectroscopy, XRD and optical microscopy.

Assistant conservator, Ditta Rava s.r.l. , Torino, in the following field works:

- August 2002 - "Lombroso": uncovering of stucco works on 19th century ceiling.
- August 2001 - "Palazzo Carignano": pointing and repairs on 18th century external brick walls.
- June-July 2000 - "Chiesa di Sant'Agostino": uncovering of 20th century washes.
- June-August 1999 - "Vittorio Emanuele II": fills and repairs on late 19th century bronze statue.

KNOWN LANGUAGES

MotherTongue

Italian

Other language(s)

Self-assessment

Understanding

Speaking

Writing

European level (*)	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
English	C1	advanced	C1	advanced	C1	advanced	C1	advanced	C1	advanced
French	C1	advanced	C2	advanced	C2	advanced	C2	advanced	C1	advanced
Spanish	A2	elementary	A2	elementary	A1	elementary	A1	elementary	A1	elementary

PERSONAL SKILLS AND COMPETENCES

INFORMATIC SKILLS AND COMPETENCES

Very good knowledge of MS Office pack (Word, Excel, PowerPoint, Access).
Competences in website administration (Joomla)

	<p>Good autonomy in the use of programs for:</p> <ul style="list-style-type: none"> - interface and running of XRF (LabLithos, Niton 6.5.5, WinAxil) and XRD (EVA, MAUD 2.26) instruments. - data analysis: Origin, XLSTAT. - image analysis: ImageJ
TECHNICAL SKILLS AND COMPETENCES	<p>Competences in the use of advanced instrumentations applied to the analysis and characterization of Cultural Heritage materials.</p> <ul style="list-style-type: none"> - optical microscopy (Leica Mz16, DM2500M) - portable X-ray Fluorescence instrumentation (Assing, Niton XL3TGOLDD), - X-ray diffraction (Philips Expert) - SEM-EDS analysis (Leica Stereo Scan 420), <p>Acquiring competences in:</p> <ul style="list-style-type: none"> - microRaman spectroscopy. - FORS spectro
SOCIAL SKILLS AND COMPETENCES	<p>Good team work and ability to cooperate with people from different fields. The collaboration experience with figures from the scientific, humanistic and conservation areas comes both from the current work and previous experiences in the conservation field.</p>
ORGANISATIONAL SKILLS AND COMPETENCES	<p>Ability to handle and finish a project both individually and in a team work. Good organization and problem-solving attitude.</p>
ARTISTIC SKILLS AND COMPETENCES	<p>Good hand dexterity and freehand drawing coming both from personal experience and courses and workshops at the "Primo Liceo Artistico" College and "Ricerche visive" art study.</p>
OTHER INFORMATION	<p>Experiences abroad: I lived 6 months in the UK (2009), 1 month in France (2001).</p> <p>Good hand dexterity and freehand drawing;</p> <p>1st level LIS (Italian Sign Language) course, Istituto dei Sordi di Torino</p>
PARTECIPATION TO TRAINING COURSES	
Settembre 2011	<p>1st Thematic School on Metallic Materials for Cultural Heritage . European Chemistry and Chemical Engineering Education Network; European Chemistry Thematic Network Association; Euromediterranean Cooperation in Research and Education; DCCI (Dipartimento di Chimica e Chimica Industriale), Genova, Italia.</p>
Maggio 2011	<p>Operational Aspects of Radioprotection, Certification course, INFN Torino.</p>
Giugno 2010	<p>Raman microspectroscopy. Certification and training course, PhD School in Natural Sciences and Innovative Technologies, Università degli Studi di Torino</p>
Maggio 2010	<p>SEM-EDS certification and training course, NIS Centre of Excellence, Università degli Studi di Torino.</p>

PUBLICATIONS

Submitted.

"First analytical evidences of precious colorants on Mediterranean illuminated manuscripts" di Aceto M, Agostino A, Fenoglio G, Baraldi P, Zannini P, Hofmann C, Gamillscheg E, *inviato ad Analyst*;

"The mural paintings of Ala di Stura (Piedmont, Italy): a hidden treasure investigated" di Aceto M, Agostino A, Fenoglio G, Giordano V, Varetto M, Castagneri G, *inviato a Journal of Raman Spectroscopy*;

"Identification of colorants on XVIII century scientific hand-coloured print volumes" di Zannini P, Baraldi P, Aceto M, Agostino A, Fenoglio G, Bersani D, Canobbio E, Zanichelli G, De Pasquale A, *inviato a Journal of Raman Spectroscopy*;

"Non invasive analysis of miniature paintings: proposal for an analytical protocol", di Aceto M, Agostino A, Fenoglio G, Gulmini M, Bianco V, Pellizzi E, *inviato a Spectrochimica Acta Part A*.

The oral contributions at the 2010 AIAR conference should be published in short term as conference proceedings.

"I pigmenti blu e verdi degli egizi. Nuove ricerche ed analisi al museo egizio di Torino" Fenoglio G, Aceto M, Agostino A, D'Amicone E, Vigna L, (VI Convegno Nazionale Archeometria AIAR, Pavia, February 15-18 2010).

"Caratterizzazione di opere di oreficeria medievale di area piemontese lombarda mediante tecniche non invasive." Aceto M, Agostino A, Riccardi MP, Maggioni C, Lomartire S, Fenoglio G, (VI Convegno Nazionale Archeometria AIAR, Pavia, February 15-18 2010).

CONFERENCE TALKS AND CONTRIBUTIONS

"Non invasive analysis of manuscript covers: portable X-ray Fluorescence enlightening medieval jewellery masterpieces " Fenoglio G, Aceto M, Agostino A, Operti L (*VI Journées Franco-Italiennes de Chimie, Marseille, 16-17 avril/aprile 2012*)

"I codici purpurei: dal mito alla scienza" (*The purpureus codexes: from myth to science*) Aceto M, Agostino A, Fenoglio G, Crivello F, Baraldi P (*VII Convegno Nazionale Archeometria AIAR, Modena, 22-24 Febbraio 2012*)

"Le pitture murali di Ala di Stura (Piemonte): un tesoro nascosto" (*The mural paintings of Ala di Stura: a hidden treasure*) Aceto M, Agostino A, Fenoglio G, Giordano V, Varetto M, Castagneri G (poster *VII Convegno Nazionale Archeometria AIAR, Modena, 22-24 Febbraio 2012*)

"Carta, pigmenti e storia: il Ms95 dell'Archivio De Paoli" (*Paper, pigments and history: the manuscript Ms95 of Archivio de Paoli*). Bruzzone R, Aceto M, Borsano E, Agostino A, Fenoglio G (poster *VII Convegno Nazionale Archeometria AIAR, Modena, 22-24 Febbraio 2012*)

"*The mural paintings of Ala di Stura (Piedmont, Italy): a hidden treasure investigated*" M. Aceto, A. Agostino, G. Fenoglio, V. Giordano, M. Varetto, G. Castagneri. Oral Contribution in "6th International Congress on the Application of Raman Spectroscopy in Art and Archaeology (RAA 2011)", 5 - 8 Settembre 2011, Parma.

"Analisi non invasive sul Crocifisso di Vercelli e sul piatto con Nereide della Collezione Gualino", (*Non invasive analysis on the Vercelli Crucifix and the Nereide Plate of Gualino Collection*) Aceto M, Agostino A, Fenoglio G, (*"Arti Preziose Del Medioevo. Attività di studio e ricerche del progetto MEMIP", Torino, 5 maggio 2011*)

"Non invasive characterization of the palette of two VI century Byzantine Manuscripts", Aceto M, Agostino A, Fenoglio G, Baraldi P, Zannini P, Hofmann C, Gamillscheg E (*TECHNART 2011, Berlin, April 26 - 29 2011*)

"Un cielo di lapislazzuli. Informazioni dalla diagnostica sugli affreschi di San Mauro." (*A lapislazzuli sky. Results from diagnostic on San Mauro frescoes*) Aceto M, Agostino A, Fenoglio G, (*L'Abbazia di Santa Maria di Pulcherada. Un importante monumento romanico. Il ciclo pittorico ritrovato. 30 marzo 2011*)

"Gli inchiostri del Vercelli Book e del Codice A" (*The inks of Vercelli Book and Codex A*), Aceto M, Agostino A, Fenoglio G (*III Giornata nazionale per lo studio multidisciplinare dei manoscritti miniati, Vercelli, June 10-11 2010*)

"I pigmenti blu e verdi degli egizi. Nuove ricerche ed analisi al Museo Egizio di Torino" (*Blue and green pigments of Egyptians. New researches and analysis at the Egyptian Museum of Torino*) Fenoglio G, Aceto M, Agostino A, D'Amicone E, Vigna L, (*VI Convegno Nazionale Archeometria AIAR, Pavia, February 15-18 2010*).

"Caratterizzazione di opere di oreficeria medievale di area piemontese lombarda mediante tecniche non invasive." (*Medieval jewelry in Piedmont, characterization using non invasive analysis*) Aceto M, Agostino A, Riccardi MP, Maggioni C, Lomartire S, Fenoglio G, (*VI Convegno Nazionale Archeometria AIAR, Pavia, February 15-18 2010*).

"The cartonnage on papyrus: plasters, colours and inks. Excavations of Museo Egizio of Turin at Assiut (1905-1910)", D'Amicone E, Aceto M, Agostino A, Fenoglio G, Pozzi M, Vigna L (*4th International Congress " Cultural Heritage Cairo 2009", 6-8 dicembre 2009, Cairo, Egypt*).

"On the pigments of Egyptians: blue and green. New researches and analysis at the Museo Egizio Of Torino", Agostino A, Aceto M, Fenoglio G, D'Amicone E, Pozzi M, Vigna L (*4th International Congress " Cultural Heritage Cairo 2009", 6-8 dicembre 2009, Cairo, Egypt*).