

FERRERO®



Alessandro Guglielmetti

R&D Raw Materials Specialist

26/11/2021

CONFIDENTIAL

This document must be disclosed only to authorized individuals. Any reproduction and/or disclosure must be subject to Information Owner prior consent.

1. Master's Thesis - Pharmaceutical Chemistry and Technology

March 2013 – October 2013

Pharmaceutical Biology and Food Chemistry
(Prof. Cagliero, Prof. Bicchi)

- Analytical chemistry
- GC-MS
- Sampling methods (SBSE, HS-SPME)
- Statistical analysis (PCA)

Project management

Analytical approach

Office



CORSO DI LAUREA MAGISTRALE IN
CHIMICA E TECNOLOGIA FARMACEUTICHE

TESI DI LAUREA MAGISTRALE

Sviluppo di un metodo per la quantificazione di marker di qualità di matrici alimentari a base di pesca: accoppiamento di tecniche di campionamento ad alta capacità di concentrazione (SBSE) con analisi quantitativa mediante gascromatografia chirale veloce con fasi a base ciclodextrinica

Relatore:

Dott.ssa Cecilia Lucia Cagliero

Candidato:

Alessandro Guglielmetti

Anno Accademico 2012-2013
Sessione Autunnale

2. PhD in Agricultural, Forest and Food Science

January 2014 - February 2017

Dept. of Agricultural, Forest and Food Science (Prof. Zeppa, Prof. Gerbi)

- Overview on coffee processing
- Development of functional food products
- Sensory and chemical analysis of food products (HPLC-MS/MS)

Project management

Resilience

English

Paper writing

Presentation



UNIVERSITÀ DEGLI STUDI DI TORINO



SCUOLA DI DOTTORATO IN SCIENZE
DELLA NATURA E TECNOLOGIE INNOVATIVE
DOTTORATO IN
SCIENZE AGRARIE, FORESTALI ED AGROALIMENTARI

CICLO: XXIX

“EVALUATION OF COFFEE SILVERSKIN AS SOURCE OF
BIOACTIVE COMPOUNDS AND ITS POSSIBLE APPLICATION
IN NOVEL FOODS”

Alessandro Guglielmetti

Docente guida:
Prof. Giuseppe Zeppa

Coordinatore del Ciclo:
Prof. Aldo Ferrero

ANNI
2014; 2015; 2016

3. Visiting PhD Student

February 2016 - July 2016



Consejo Superior de Investigaciones Científicas

Institute of Food Science Research – CIAL, Madrid, Spain

“Development of a gluten-free bread using coffee silverskin as functional ingredient” (Dr. Maria Dolores del Castillo)

- Polyphenols (Folin), antioxidant capacity (DPPH, ABTS)
- Melanoidins, chemical gross composition
- Spectrophotometric enzyme assays, sensory analysis

Spanish

Project management

Resilience

*Flexibility/
Adaptability*

4. Post Doc Research

March 2017 - December 2017

Pharmaceutical Biology and Food Chemistry
(Prof. Cordero, Prof. Bicchi)

“Screening of volatiles in high quality chocolate using Comprehensive GCxGC and data mining in view of mapping them”

- Overview on cocoa processing
- Comprehensive two-dimensional gas chromatography (GCxGC-TOF-MS)

English

Presentation

Analytical approach

Project management



Comprehensive two-dimensional gas chromatography coupled with time of flight mass spectrometry featuring tandem ionization: Challenges and opportunities for accurate fingerprinting studies^{*}

Chiara Cordero^{a,*}, Alessandro Guglielmetti^a, Carlo Bicchi^a, Erica Liberto^a, Lucie Baroux^b, Philippe Merle^b, Qingping Tao^c, Stephen E. Reichenbach^{c,d}

^a Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, Turin, Italy
^b Analytical Innovation, Corporate R&D Division, Firmenich SA, Geneva, Switzerland
^c GC/MS/MS, Lincoln, NE, USA
^d Computer Science and Engineering Department, University of Nebraska - Lincoln, NE, USA



Odorants quantitation in high-quality cocoa by multiple headspace solid phase micro-extraction: Adoption of FID-predicted response factors to extend method capabilities and information potential

Chiara Cordero^{a,*}, Alessandro Guglielmetti^a, Barbara Sgorbini^a, Carlo Bicchi^a, Elena Allegrucci^b, Guido Gobino^b, Lucie Baroux^c, Philippe Merle^c

^a Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, Turin, Italy
^b Guido Gobino Srl, Turin, Italy
^c Analytical Innovation, Corporate R&D Division, Firmenich SA, Geneva, Switzerland

5. Food Safety Process/Product - Central Quality Department

March 2018 - August 2018

- Food safety
- HACCP plan
- Organic Certification



*Cross-cultural
communication
skills*

Networking abilities

*Business
mindset*

*Flexibility/
Adaptability*

6. Raw Materials Quality & Suppliers Qualification

Fats, Oils & Emulsifiers

September 2018 - September 2019

- Auditing & Supplier Qualification
- Supplier management
- SAP Data Management System

Quality

English

Networking abilities

*Cross-cultural
communication
skills*

*Flexibility/
Adaptability*

Resilience

7. R&D Raw Materials Specialist

Coffee, Tea, Coconut Biscuit granules, extruded cereals, other compounds for decoration & inclusion

October 2019 - Present

- R&D Project management
- Semi-finished product development
- Suppliers management
- Raw material specification definition

*Business
mindset*

English

*Flexibility/
Adaptability*

Networking abilities

Innovation

FERRERO®

Scientific and Technical Department (DTS) - Soremartec

NUTRITION

GLYCEMIC RESPONSE
Eating habits
Basal metabolic rate

FIBER

FILIERE

TECHNICAL SUPPORT

PRODUCT INTEGRITY

Standards
Ferrero CSR Requirements
REGULATORY
Food Law
IP
PRODUCT INTEGRITY
Compliance
Safety

R&D Raw materials & semi-finished products



R&D Raw Materials Specialist – core activities

- R&D project management with internal/external partner (University, Research Center, suppliers etc..)
- Scouting of new raw materials / suppliers
- Shelf-life monitoring / sensory evaluation
- New semi-finished product development
- Specification definition (sampling plan, regulatory compliance)

Raw materials – focus on the process



Manufacturing site /
Transport (freshness)



Roasting/extraction

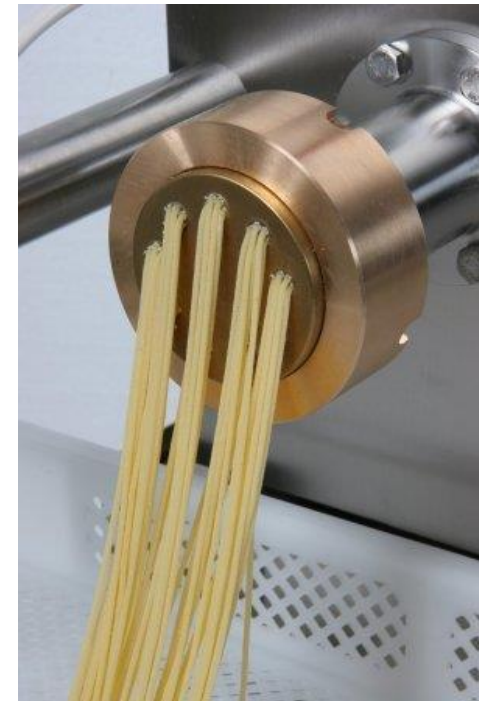


Grading/infusion

Semi-finished products - Meringues



Technology: cold extrusion and cooking, coating



Application: external decoration

Semi-finished products - Biscuit granules

Technology: biscuit cooking and grinding



Application: external decoration;
inclusion (crunchiness)



Semi-finished products - Biscuit granules

Technology: hot extrusion, coating



Application: external decoration;
inclusion (crispy)





THANK YOU
FOR
YOUR
ATTENTION
ANY QUESTIONS?