

Mattia Rossi, MSc

Location: Parma, Italy **E-mail:** mattia.rossi@unipr.it

Professional Experience

11/2020 - today

PhD student in Isotope Geochemistry

Unipr, Parma (Italy)

- The role of geology and geochemistry in the geographical traceability of wine using stable isotopes.

- Supervisor: Prof.ssa Paola Iacumin

Instrumentation: *TC/EA-IRMS (Temperature Conversion/Elemental Analyzer-Isotope Ratio Mass Spectrometry), HDO-IRMS (Hydrogen Deuterium Oxygen- Isotope Ratio Mass Spectrometry), CHN-IRMS (Carbon Hydrogen Nitrogen- Isotope Ratio Mass Spectrometry), MC-ICP-MS (Multi collector inductively Coupled Plasma Mass Spectrometer)*

08/2020-10/2020

Research grant in isotope analysis on ancient mammal bones from Georgia

Ca' Foscari and Unipr, Parma (Italy)

- Collagen extraction from ancient bones and subsequent determination of $^{13}\delta$.

Instrumentation: *TC/EA-IRMS (Temperature Conversion/Elemental Analyzer-Isotope Ratio Mass Spectrometry)*

11/2019-07/2020

Laboratory Supervisor and Quality Manager

LABGO S.r.l. (Spin-off at Unipr), Parma (Italy)

- IRMS analysis: determination of $^{13}\delta$, $^{18}\delta$, $^{2}\delta$ in different compounds (e.g. water, groundwater, meteoric water, wine, oil, vinegar)

- Management of all the documentation according to ISO 17025:2018

- Laboratory ISO 17025:2018 accreditation.

Instrumentation: *TC/EA-IRMS (Temperature Conversion/Elemental Analyzer-Isotope Ratio Mass Spectrometry), HDO-IRMS (Hydrogen Deuterium Oxygen- Isotope Ratio Mass Spectrometry), CHN-IRMS (Carbon Hydrogen Nitrogen- Isotope Ratio Mass Spectrometry)*

06/2019

Winner of a PhD scholarship

University of Warwick, Coventry (United Kingdom)

- Winner of a PhD scholarship at University of Warwick, department of Life Sciences.

06/2017-07/2019

Research Analyst

Flamma S.p.a., Chignolo d'Isola, (Italy)

- Development of analytical methods for HPLC-UV/Vis, GC-HD, GC-MS, K.F. according to US Pharmacopoeia for application in API manufacturing processes

Instrumentation: *GC-MS, GC-HD, HPLC UV-Vis, K.F. TITRATOR, POTENTIOMETRIC TITRATOR.*

01/2017-06/2017

QC Technician

Olon, Segrate, Milan (Italy)

- In-process control (IPC) testing of drug manufacturing facility.

Instrumentation: *GC-HD, HPLC UV-Vis, I.C., K.F. TITRATOR, POTENTIOMETRIC TITRATOR, TLC.*

08/2015-07/2016

QC Technician

Linphalab (Agro-Food laboratory), Verona (Italy)

- Determination of residual pesticides and heavy metal traces in vegetable substances, food, drinking water and waste water

- Analytical method development for HPLC-MS/MS e GC-MS/MS

Instrumentation: *ICP-MS, UPLC-MS/MS, GC-MS/MS, HPLC-MS/MS*

- 05/2015-07/2015 **Laboratory Technician (wort preparation process)**
SABMiller-Peroni S.r.l, Padua (Italy)
 ▪ Management of wort preparation plant
 ▪ Chemical analysis of water and wort (including COD, free acidity, nitrates, nitrites, phosphates, pH, and hardness testing)
- 05/2014-10/2014 **QC Technician (Undergraduate Internship)**
SABMiller -Peroni S.r.l, Padua (Italy)
 ▪ Analysis of beer: Diacetyl, 2,3 pentanedione, acidity, iron, calcium, colour, pH, turbidity, bittering units (Iso-alpha-acids), specific gravity, polyphenols, refractive index, microbiology testing (membrane filtration with subculture on an appropriate medium, yeast analysis).
 ▪ Chemical analysis of water (including COD, free acidity, Nitrates, Nitrites, Phosphates, pH, and hardness testing)
Instrumentation: UV-VIS, GC-ECD, HPLC-UV/Vis, EPR, DENSITY METTLER
- 10/2004 -09/2007 **Voluntary service**
Seminario Vescovile di Verona, Verona and Piccola Fraternità, Isola della Scala (Vr)
 Involving work and activity direction with disabled children as a social health operator
- Education & Training**
- 10/2013 -04/2014 **Environment and Safety Quality Auditor**
Uninform, Rome (Italy)
 Master Quality®, designer and evaluator of quality systems; ANGQ Course for Auditor / Audit Officers group of management systems for quality qualified by CEPAS (ISO series 9000, ISO 19011); evaluator Systems Designer and Environment (ISO series 14000, EMAS); Check Legislative environmental and waste management consultant; designer of systems for managing health and safety in the workplace (RSPP-RLS, OHSAS 18001)
- 10/2010 -03/2013 **MSc, Chemistry**
University of Padua (Italy)
 Quality control in analytical chemistry, statistical analysis of experimental data using Matlab. Numerical calculation. Inorganic, organic, physical chemistry and environmental chemistry (REACH), analytical chemistry of pollutants
Instrumentation: UV-VIS, IR, GC-MS, HPLC-MS, AA, ICP-MS, IC, NMR, EPR
Thesis: "Point and interval estimation of the detection limits. Application to data obtained with the ICP-MS technique"
- 10/2007 -09/2010 **BS, Chemistry**
University of Padua (Italy)
 Analytical, organic, inorganic, physical, biological, pharmaceutical and food chemistry. Laboratory training for each of these subjects
Instrumentation: UV-VIS, IR, GC-MS, HPLC-MS, AA, IC, NMR, EPR
Thesis: "Optical sensors for Oxygen: effect of temperature and aging on the response parameters"
- 09/1999 - 06/2004 **Diploma QC Chemist**
ITIS "G. Ferraris", Verona
 Analytical chemistry, organic chemistry, inorganic and physical chemistry.
 Analysis of water, wine, oil, milk, soil, biscuits

Skills

Languages

Italian: Native | English: B2 (IELTS TEST expiration date 09/2021) | French: A2

Communication

- Flexibility and adaptability in collaborative settings
- Demonstrated experience meeting deadlines in high-pressure environments

Computer

- MATLAB (advanced)
- Statistical analysis (e.g. ANOVA, Fischer, and Dixon tests)
- Microsoft Office (advanced)

Technical

- HPLC and GC systems
- Chemical analysis troubleshooting
- Proven track record of instrument maintenance
- Expertise in the validation of novel analytical techniques for API
- Different detectors (e.g. UV-Vis, MS, MS², FID)