

EUROPEAN  
CURRICULUM VITAE  
FORMAT



Name

Address

Telephone

E-mail

Nationality

Date of birth

WORK EXPERIENCE

PERSONAL INFORMATION



**CORNARO, UGO**

Italiana

**2024**

Amministrazione comunale di Seriate (BG). Consigliere comunale di minoranza per il Partito Democratico. Capogruppo.

**2023**

Bergamo Brescia 2023 - Capitale Italiana della Cultura. Volontario

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**2022, August - Retired.**

**2022 ,January-July - Eni, Downstream Product and Process Technologies, Program Manager**

Assessment and presentation of 4 project proposals

- E-fuels. Granted
- Pyrolysis of End Use Tires. Granted
- Base lube from bio feedstocks. Granted
- Lignin valorization. Dismissed

**2020- 2021, ADNOC Refining (UAE), Catalysis Team leader**

Working within Eni Abu Dhabi Refining and Trading services. Seconded at ADNOC refining Research Center. Leading a team of 13 peoples.

Providing technical assistance on catalysts and catalytic process for ADNOC Refining refineries with a total refining capacity in excess of 900 thousand barrel per day. Continuous interaction with major catalysts and technology providers.

- Contribution to the reorganization of the working team
- Leading labs for daily analyses of RFCC e-cat
- Facilitating interaction with ADNOC and Eni shareholder

Designated by UAE as technical expert within ICAO (International Civil Aviation Organization) /CAEP (Civil Aviation Environmental Protection).

- Working in FTG (Fuel Task Group) and LTAG (Long term aspirational goals task group).
- Contributing to the "Report on the feasibility of a long term aspirational goal for international civil aviation CO2 emission reduction.

**2013- 2019, Eni Downstream R&D, Program Manager**

Leading working teams, in collaboration with scientific managers, aiming to reach projects

targets, respecting time and budget constraints, ensuring valuable results. I communicate and report results to R&D management, suggesting deployment strategies, maintaining contacts with universities, research groups, external companies.

- Project Manager for Short Contact time catalytic partial oxidation of lean/acid natural gas.
- Project Manager for Glycerol valorization to advanced additives for gasoline fuel. In cooperation with a major European Chemical Industry.
- Project Manager for applications of Bulk Hydrotreating catalyst to Hydrogenation of vegetable oil process.
- Project Manager for industrial deployment of Bulk Hydrotreating catalyst. Catalyst advisor during the startup of the first industrial application, supervising catalyst loading, activation procedure and providing troubleshooting assistance.
- Project Manager for Direct methane to methanol oxidation process. In cooperation with a network of Italian Universities and a major US research center.
- Catalysts advisor in the frame of Eni Technology Validation Process and internal Project Technical Review Process.

### **2006-2013, Eni Refining and Marketing R&D, Scientific Area Manager**

I was responsible of laboratories dedicated to the preparation and functional characterization of catalysts, assuring the adoption of the most advanced techniques. I promoted the professional growth of the assigned personnel. I've been tutor in the process of training and integration of new hires. I kept contacts with Universities and external companies

- Development of catalyst and reactor with intensified heat exchange properties and its application to Fischer-Tropsch reaction. (52,53,54)
- Development, in team with European partners, of a catalyst for Fisher-Tropsch GTL in slurry bubble column reactor. (51)
- Development and industrial production of a catalyst for Short Contact time catalytic partial oxidation process.
- Application of advanced chemical-physical investigation techniques. EXAFS spectroscopy in synchrotron light in collaboration with Elettra Trieste (44)
- Participation to an European Project aimed to develop a technology for H<sub>2</sub> production from natural gas with inherent CO<sub>2</sub> sequestration. Catalyst development and bench scale production with external partner (50)
- MTBE Cracking to isobutene technology: Identification of technological partners for the industrial production of the catalyst. Catalyst production. Troubleshooting assistance to industrial plant startup.

### **2003-2006, Enitecnologie, Eni R&D, Scientific Area Manager**

I was responsible of laboratories dedicated to the preparation and functional characterization of catalysts.

- Work Package leader in the European project "Improvement of diesel quality by catalytic processes". Development of a process for the oligomerization of linear olefins.
- Participation to a project aiming to develop Eni Slurry Technology process, with the responsibility to propose and validate technological solutions for side streams valorization. (101,107)
- Participation to Fischer Tropsch-Gas to liquid project. Coordination of Eni R&D activities aiming to improve the catalyst. Catalyst advisor during pilot plant test.

### **1988-2002, Enitecnologie, Eni R&D, Senior researcher**

I was in charge of new catalytic materials design, synthesis and industrial development. I started a new thermoanalysis laboratory developing techniques of mass spectrometry analysis of the effluent species. I developed a network of collaboration within Eni, with external companies and with Universities.

- Processes for the production of hydrogen from natural gas with an inherent separation of CO<sub>2</sub> (37,38,42,43,44,105)
- Energy production processes on oxygen carriers with CO<sub>2</sub> emissions mitigation (41)
- Oxidation processes: Propane and propylene Ammoxidation (26-32, 34,36, 39, 104)
- Oxidative paraffin dehydrogenation C<sub>2</sub>-C<sub>3</sub> (33,35,40)
- Fe-zeolites: Preparation of catalysts
- Catalytic systems for: Fluid Catalytic Cracking (12), Hydrotreating (13,15), DeSO<sub>x</sub>-DeNO<sub>x</sub> (17), Synthesis of alcohols from Syn-gas (102), Skeleton isomerization of olefins (16, 18-

25, 101)

- New Materials: Synthesis and characterization of zeolites (3,4,7,8,9,10,11,12,14); Basic carbonates with lamellar structure; Introduction of compositional defects in Zeolitic, Spinel and Zirconia structures.
- Catalyst design of materials for acid catalysis, (16, 103)
- Applications of the Kinetic Theory of catalyst decay (5,6).

I was Scientific leader for the projects:

- Natural gas enhancement - Ammoxidation of light paraffins. (1998-1999). In collaboration with: University of Bologna, Dept. of Industrial Chemistry and Materials
- New catalysts for the production of acrylonitrile from Propylene" (1997-1999). In collaboration with: University of Bologna, Dept. of Industrial Chemistry and Materials; Solutia (formerly Monsanto). USA
- New zeolitic and zeolite-like materials (1990-1992)

I was coordinator of the group "New catalytic materials, techniques and methods for preparing catalysts, Development of industrial preparatory procedures" for the Center for Catalysis and Catalytic Processes (1993)

#### **1985-1988, Snamprogetti Engineering and main contracting, Researcher**

After a training program on theoretical and practical aspects of heterogeneous catalysis, I was assigned to the ongoing research activities. I was asked to start laboratories for zeolites and catalyst preparation.

- Project "Methanol and higher alcohols from syngas as gasoline and diesel extenders"
- Synthesis, post treatment modification and characterization of Zeolites

#### **EDUCATION AND TRAINING**

1992: Habilitation to chemical profession

1989: Zeist, Holland, Pre-conference school on zeolites, Synthesis, structure, characterization, and zeolite applications, 1 week

1987: Queen's University, Chem.Eng. Dept., Kingston, Ontario, Canada. Catalytic characterization of zeolitic catalysts. Applications of kinetic theory of catalyst decay, 4 months

1986: The Heyrovsky Institute of Physical Chemistry, Prague, Physical chemical characterization of zeolitic catalysts. 1986, 2 weeks.

1985: Snamprogetti, Milano, Training course: Heterogeneous catalysis, theory and practice. 2 years.

1984. Università degli Studi, Department of inorganic and metallorganic chemistry Milan, Synthesis and electrochemical characterization of Fe-organic compounds, 2 months.

1984: Università degli Studi, Milano, Master degree in chemistry, 110/110 with honors

1977: Technical College, ITIS A.Natta, Bergamo: Secondary School Diploma in Chemistry 54/60

**PERSONAL SKILLS  
AND COMPETENCES**

*Acquired in the course of life and career  
but not necessarily covered by formal  
certificates and diplomas.*

MOTHER TONGUE

ITALIANO

OTHER LANGUAGES

ENGLISH

- Reading skills
- Writing skills
- Verbal skills

Good  
Good  
Good

FRENCH

- Reading skills
- Writing skills
- Verbal skills

Basic  
Basic  
Basic

SOCIAL SKILLS  
AND COMPETENCES

Team working attitude. Networking capabilities.

ORGANISATIONAL SKILLS  
AND COMPETENCES

Organizational skills, team building skills.

TECHNICAL SKILLS  
AND COMPETENCES

Office package. User of specialist software (Mathcad, HSC thermodynamics calculation).  
Users of tools for literature searching and aggregation. Basic use of R language

ARTISTIC SKILLS  
AND COMPETENCES

Theater, film, natural photography, reading. Choral singing. Social and political activities .

DRIVING LICENCE(S)

Yes

ADDITIONAL INFORMATION

Practice of outdoor sports. Mountaineering, hiking, cycling, skiing.

ANNEXES

[BIBLIOGRAPHY](#)

