

PERSONAL INFORMATION Fabrizio FELLETTI

POSITION Tenured Associate Professor
PERSONAL STATEMENT PhD Earth Sciences, MSc “Geological Sciences”

WORK EXPERIENCE

From 1994 - to 2019

Teaching activities

Since 2002, I have been Lecturer at the Earth Science Department of the Milan University for the BSC degree “geological sciences” and MSC degree “Geology: processes, resources, applications” . My teaching duties include:

2018-2020	Geology
2009-2016	Facies analysis;
2010-2016	Sedimentology;
1999-2016	Geological field excursions and field activities;
2008-2011	Introduction to Geologic Maps;
2003-2008	Geological survey of sedimentary rocks;
2002-2008	Geological and hydrogeological data modeling I;
2002-2008	Geological and hydrogeological data modeling II;
1998-2001	Lithology and geological map exercitation (laboratory);
2001, 2012	Geostatistics (Ph.D. courses and Master course);
2004-2008	Exercitation of hydrogeology (geostatistics);
2001-2003	Earth science, Lithology, Stratigraphy and Principle of Geology (IFTS course; sp Community and the Italian Ministry of Education, Universities and Rese University of Milan and the Archeological Centre of Capo di Ponte (BS), C Preistorici).

Member of the didactic staff of the PhD courses held at the Earth Sciences Department, being recently advisor (or co-supervisor) of 10 Ph.D. theses in Earth Sciences and of more than 40 Degree's theses in Earth Sciences.

He has organized numerous field excursions for: (i) ENI Corporate University, (ii) British Sedimentological Research Group (BSRG Postgraduate Field Trip), (iii) CARG (Italian Geological mapping project, scale 1:50000) and national and international sedimentological congress.

My publication record includes more than 50 papers in peer-reviewed books and journals; this is an average of 4 papers per year since 2001. Member of International Association of Sedimentologists (IAS), Italian Sedimentological Group (GEOSED). Associate Editor of Sedimentology and RIPS (Rivista Italiana di Paleontologia e Stratigrafia). Regular reviewer for a broad range of international Earth Science journals (incl. Sedimentology, Sedimentary Geology, Journal of Hydrology).

Research topics

Research interests focus on the study of sedimentary systems, from facies analysis to the geostatistical modelling of the basin fills, aiming also to characterize siliciclastic units both as groundwater repositories and as hydrocarbon reservoirs, within their stratigraphic framework. I am currently involved in three main projects:

- **characterisation and modelling of aquifers and aquitards:** the general aim of this project is a multidisciplinary approach aimed to characterize the geological complexity and the hydrogeological properties of the shallow aquifers of alluvial basin in order to adequately model groundwater flow at different scales and improve the methodology for reconstruction and characterisation of the sedimentary heterogeneity of the basin fill which host groundwater resources:
- **multi-disciplinary approach to understanding deep-marine clastic systems:** the general aim of this project is the improvement of the geological and geostatistical methods for modelling the architecture of siliciclastic turbidite units. The geostatistical approach is finalized to develop a forecasting method of analysis of turbiditic sedimentary bodies, at the reservoir scale, to allow predictions and simulations of the behaviour of the major sedimentological and petrophysical variables.
- **facies characterization in extensional continental basins:** the primary objective of this research is to examine the sedimentological features and the distribution of clastic facies (from coarse to fine-grained) in a continental setting, to develop a model that can be used to define rules to predict reservoir properties and, consequently, to help reservoir modeling. The model will rely upon field work and facies analyses. The final goal is to define “rules” that can be exported to different systems with appropriate input changes.

Financed research projects

Participant of research projects financed by the National Research Council (CNR), public administrations, public and private companies. Scientific participant of research programs of national interest (PRIN 2005 - "Integrating geophysical and geological data for modeling flow in some aquifer systems of alpine and apenninic origin between Milano and Bologna"; PRIN 2007 - "Integrated geophysical, geological, petrophysical and modeling study of alluvial aquifer complexes representative of the subsurface of the Po plain: relationships between the scale of hydrostratigraphic reconstruction and flow models") and international interest (EEC - Regione Basilicata - Basilicata University: POP-AGRIFLUID 1999-2001: "Evaluation, characterisation and monitoring of groundwater resources in the Agri basin", Nat. Coord. A. Colella, Potenza).

He also participated in the following research programs: National "CARG" Project for survey of the 1:50000 Italian Geological Map (Foglio 228, Cairo Montenotte. Nat. Coord. Prof. S. Seno - University of Pavia); EC-TMR, Panel E-10 Ore and Petroleum Geology; (1998): "Facies correlations in siliciclastic turbidite units, combining geology and geostatistics"; CNR Project (1997-2000): "Statistical and geostatistical modelling of sedimentary variables in siliciclastic units" (National Coord.. G. Nardi, University of Naples).

Institutional and organization tasks (earth science dept. university of milan and miur)

In the 2004-2019 period the writer took part in the following commissions:

- Member of the “Giunta Di Dipartimento” (2014-2017);
- Member of the “Comitato Di Direzione” (ex-Facoltà; 2014-2017);
- Member of the “Steering Comitee”, Dipartimenti di Eccellenza 2018 - 2022
- Member of the commission responsible for the course schedules (2002-2008);
- Evaluation committee for “orientamento dell’Area di Scienze della Terra” (2004-2010);
- Evaluation committee “Approvazione Piani Didattici” (2002-2019);
- responsible for the organization of departmental conferences (2012-2018);
- Third Mission committee (member) (2012-2018);
- Field teaching management board (2010-2019);
- Responsible (RADL) of the GIS laboratory (2012-2019).
- responsible for the vehicles of Department (2019)

EDUCATION AND TRAINING

From 1997 - to 2019

University studies, diplomas, research and professional experiences

2018-2019 Tenured associate professor SSD GEO 02 - Earth Science Department - University Of Milan

2005-2016 Research Scientist - University of Milan, Earth Science Department. Research Interests: geostatistics, groundwater modeling, subsurface characterization, sedimentology.

1999 - 2004 Italian Research Contract (Post-Doc)- University of Milan, Earth Science Department.

Subject of the Research: geostatistical characterisation of the geological complexity and the hydrogeological properties of the shallow aquifers along a N-S section of the Po plain alluvial basin, in order to adequately model groundwater flow at different scales.

1997 - 1999 European Research Contract (FMBICT97174) - Geostatistical Center - École National Supérieure des Mines de Paris - France. Subject of the Research: improving of geostatistical techniques to simulate facies heterogeneities in subsurface clastic reservoir. Used software: ISATIS, HERESIM, GSLIB, S-PLUS. Supervisor: Prof. A.Galli, Dr. H.Beucher.

1996 - 1999 Ph.D in Sedimentary Geology - University of Milan, Earth Sciences Department.

Subject of the Ph.D. thesis: study of facies heterogeneities in siliciclastic turbidite units, at the outcrop scale, in view of applications to reservoir geology and exploitation. The purpose is to develop a "traditional" (field based) approach to facies analysis accompanied by a statistical and geostatistical attempt to improve the correlation and modeling procedure. The thesis has been developed in cooperation with AGIP S.P.A and the Geostatistical Center of the École National Supérieure des Mines de Paris. Supervisors: Prof. R. Gelati, Dr. R. Bersezio, Dr.R.Potenza.

1996 - 1997 Master Course in Geostatistics (CFSG - Cycle de Formation Spécialisée en Géostatistique). Geostatistical Center (École National Supérieure des Mines de Paris). Fontainebleau, France. Supervisor: Prof. M.Armstrong, A. Galli.

1997 Eurobasin School - Royal Holloway University of London. Subject of the course: Structural and sequence stratigraphic modelling of sedimentary basin. Supervisor: Prof. D.J.Blundell.

- 1997 - 2002 Research activity in collaboration with ENI-AGIP S.p.A. Subject of the research: improve the procedure for integrating geological knowledge and geostatistical analysis on a sub-seismic scale, combining both deterministic and stochastic approaches. Tutor: Dr. M. Cafiero, Dr. M. Rossi.
- 1995 - 1996 Employed in a geophysical service company (GEOITALIA S.p.A - San Giuliano Milanese, Milano) operating in acquisition and processing of high resolution seismic reflection (2D and 3D) data, applied to hydrocarbons research. During this period it has been acquired a good experience with 2D and 3D seismic acquisition and processing, mapping and modelling, using work-stations with specific software.
- 1994 - 1995 Consulting activity about the following aspects: (i) Geological and structural reports on stability problems for landslides, (ii) Geological and geotechnical studies for evaluation of environmental risk of a new industrial site, (iii) survey research to prepare some geological and geomorphological maps for Public Local Administrations.
- 1994 Degree in Geology - University of Milan, Earth Sciences Department. Subject of the thesis: study of a calciclastic turbidite system in the Liassic rifted margin of Southern Alps (Italy), based on traditional stratigraphic methods (geological mapping, field facies analysis, paleocurrent analysis, compositional and microfacies analysis). Supervisor: Prof. R. Bersezio, Prof R. Gelati.
- 1994 Period of practical training in ENI-AGIP S.p.A. This apprenticeship has involved the geological and hydrogeological study of an area (near Milano) interested in hydrocarbons pollution as consequence of blow-out incident.
- 1991 - 1992 University Diploma in Petroleum Geology - University of Milan and ENI-AGIP S.p.A. (National Italian oil company). Subject of the course: concepts and methods of subsurface facies analysis applied to hydrocarbons research and reservoir evaluation.

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Good	Good	Good	Good	Good
French	Good	Good	Good	Good	Good

Communication skills 20 years-long teaching, research dissemination and scientific divulgation activity

Organisational / managerial skills 20 years-long design, organization and management of research and teaching activity. Long-lasting experience in evaluation of research and teaching profiles and activities. Long-lasting activity and responsibility in organization and management of field and laboratory activities, congresses, workshops and field-trips, health and safety management

Job-related skills 20 years long research and teaching activity in Sedimentary Geology

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Driving licence B

ADDITIONAL INFORMATION

Publications See the AIR - IRIS Institutional Data-base
Presentations See the AIR - IRIS Institutional Data-base

ANNEXES

Personal information

I authorize the handling of personal information in this curriculum, according to D.Lgs n. 196/03 and following modifications and Regulations EU 679/2016 (General Regulations concerning Data Protection or GRDP) and art. 7 of University Regulations concerning protection of personal information.

I authorize, according to D.lgs 14/03/2013 n. 33 concerning transparency, in case of conferment of the position and of the fellowship, the publication of this curriculum in the web site of Università degli Studi di Milano in the section "Amministrazione trasparente", "Consulenti e collaboratori".

Date 28 March 2019, Milano

Signature

