### Roberto Compagnoni

Dipartimento di Scienze della Terra Università degli Studi di Torino Via Valperga Caluso, 35 10125 TORINO (Italy)

#### **UNIVERSITY STUDIES**

Laurea in Scienze Geologiche (M. Sc. equivalent) - University of Turin (Italy), 1964. Supervisor: dr. Giulio I. ELTER.

Thesis: Geological study of the upper Italian Val Ferret, Val d'Aosta (Italy). March 1964.

#### **PREVIOUS POSITIONS**

- 1964 1965 Field geologist of the Italian Geological Survey c/o Institute of Geology University of Turin
- 1965 1967 Assistente incaricato (Tutor demonstrator equivalent), Institute of Mineralogy and Petrology University of Turin
- 1967 1977 Assistente ordinario (Lecturer equivalent) Institute of Petrology University of Turin
- 1977 1980 *Professore incaricato* (Assistant Professor equivalent) of Applied Petrology Institute of Petrology University of Turin
- 1980 1983 *Professore straordinario* (Associate Professor equivalent) of Petrology Dept. of Earth Sciences University of Calabria
- 1983 1984 Professor of Petrology (Chairman) Dept. of Earth Sciences, University of Calabria
- 1984 1985 Full Professor, Petrology Dept. of Earth Sciences University of Calabria
- 1985 1991 Full Professor, Petrology Dept. of Earth Sciences University of Turin
- 1992 1995 Full Professor, Petrology Dept. of Mineralogical and Petrological Sciences-University of Turin
- 1995 2002 Full Professor, Metamorphic Petrology Dept. of Mineralogical and Petrological Sciences- University of Turin
- 2003 2009 Full Professor, Petrology Dept. of Mineralogical and Petrological Sciences-University of Turin
- 2009 2011 Emeritus of Petrology and charged of the courses of Metamorphic Petrology and Rock-forming minerals and microstructures Dept. of Mineralogical and Petrological Sciences- University of Turin
- 2012 to date Emeritus of Petrology Dept. of Earth Sciences University of Turin

# TEACHING EXPERIENCE

- 1965 1977 Responsible for courses of Rock Forming Minerals at the University of Turin
- 1977 1979 Responsible for the courses of Applied Petrology of the University of Turin
- 1979 1980 Gave courses in Petrology at the University of Calabria and of Applied Petrology at the University of Turin
- 1981 1983 Responsible for courses of Petrology at the University of Calabria
- 1984 1995 Responsible for courses of Applied Petrology at the University of Turin
- 1995 2009 Responsible for courses of Metamorphic Petrology at the University of Turin

- 1990 1998 Member of the teaching staff of the Ph.D. degree in Earth Sciences, union of the Universities of Cagliari, Genoa and Turin
- 1991 2006 Gave short courses on HP and UHP metamorphism at national and international PhD schools.
- July 2003 Scientific Director of the Fifth EMU School and Symposium, organized in Budapest (Hungary), July 21-25, sponsored by the European Mineralogical Union, and Editor of Vol. 5 of EMU Notes in Mineralogy.
- 2003 2009 Responsible for courses of Igneous Petrology (2<sup>nd</sup> year), Sedimentary and Metamorphic Petrology (2<sup>nd</sup> year), Laboratory of Microscopic Petrography (3<sup>rd</sup> year), Metamorphic petrology (4<sup>th</sup> year), and Excursions on Crystalline Basement areas (4<sup>th</sup> year) at the University of Turin
- 2009 2011 Charged of the courses of Metamorphic Petrology and of Rock-forming minerals and microstructures Dept. of Mineralogical and Petrological Sciences- University of Turin

# OTHER RESPONSIBILITIES

1982-1983	Member of the Calabria University Budget Committee
1983-1984	Chairman of the Dept. of Earth Sciences, the University of Calabria, and
	Chairman of the Corso di Laurea in Scienze Naturali (advisory committee M. Sc.
	Degree in Natural Sciences courses), University of Calabria
1984-1990	Chairman of the Corso di Laurea in Scienze Geologiche (advisory committee M. Sc.
	Degree in Geological Sciences courses), University of Turin
1992 & 2008	Chairman of the Piedmont board of the state examiners, qualifying the graduates in
	Geology as practitioners
1996-1998	Chairman of the Corso di Laurea in Scienze Geologiche (advisory committee M. Sc.
	Degree in Geological Sciences courses), the University of Turin
1997- 2004	Vice-head of Dept. of Mineralogical and Petrological Sciences, the University of
	Turin
1997-2009	Department co-ordinator for the Erasmus student and staff exchange with the
	Universities of Bucharest and Iasi (Romania), Huelva (Spain), Stockholm (Sweden),
	and Utrecht (Nederland)
2001-2005	Member for the Earth Sciences Area in the International School of Advanced Study
	of the University of Turin (ISASUT)
2000-2005	Head of the PhD in Earth's Sciences, the University of Turin
2006-2009	Head of the specialization branch in Earth's Sciences of the Ph.D. School in Science
	and High Technology, the University of Turin
2001-2007	Member of the Editorial Advisory Board of Island Arc
2001-2008	Vice-head of the "G. Scansetti" Interdepartmental Centre for Studies on Asbestos
	and other Toxic Particulates, the University of Turin
2001-2004	Member of the Scientific Program Committee of the IGC 2004 Florence
2001-2004	Italian Representative in the Steering Committee for the preparation of a coordinated
	European curriculum in Petrology
2001-2003	Vice-president of the Italian Mineralogical and Petrological Society
2004-2005	President of the Italian Mineralogical and Petrological Society
2007	Member of the Scientific Committee of the Journées scientifiques "Serpentines",
	10-12 October, Grenoble (France)
2007-2009	Member of the Editorial Advisory Board of <i>Elements</i>
2007-2009	Italian Representative in the International Eclogite Conference Co-ordinating

Committee (I.E.C.C.C.)

2009-2015 President of the "G. Scansetti" Interdepartmental Centre for Studies on Asbestos and other Toxic Particulates, the University of Turin
 2015 to date Past-President and Collaborator of the "G. Scansetti" Interdepartmental Centre for Studies on Asbestos and other Toxic Particulates, the University of Turin

#### SCIENTIFIC AWARDS AND HONORIFICS

2002	Honorary professor of the "Alexandru Joan Cuza" University, Iaşı (Romania)
2004	Awarded the prize «Prof. Luigi Tartufari» for Geology, Paleontology, Mineralogy of
	Accademia Nazionale dei Lincei, Rome
2008	Awarded the « Grand Prix Léon Lutaud » of Académie des Sciences de l'Institut de
	France in Paris
2010	Socio Corrispondente della Accademia delle Scienze, Turin
2013	National member of the Academy delle Scienze, Turin
2014	Secretary of Accademia delle Scienze, Turin
2015	Awarded the "Plinius Medal 2015" of the Italian Society of Mineralogy and
	Petrology.
2016	Awarded the "International Prize" of the Geological Society of Japan for
	contributions in geological research.
2017	Socio Corrispondente of Accademia Nazionale dei Lincei, Rome
2021	Socio Nazionale of Accademia Nazionale dei Lincei, Rome

# REVIEWER FOR THE FOLLOWING SCIENTIFIC JOURNALS

Bollettino della Società Italiana di Mineralogia e Petrologia

Bollettino della Società Geologica Italiana

Canadian Mineralogist

Contributions to Mineralogy and Petrology

Earth and Planetary Science Letters

European Journal of Mineralogy

Island Arc

Journal of Metamorphic Geology

Journal of the Geological Society

Journal of Petrology

Journal of Structural Geology

Lithos

Lithosphere

Mineralogical Association of Canada, Short Course Handbook "Geology of Gem Deposits"

Ofioliti

Periodico di Mineralogia

Rendiconti Lincei - Scienze Fisiche e Naturali

Rocks Mechanics and Rock Engineering

Schweizerische mineralogische und petrographische Mitteilungen

**Tectonics** 

Terra Nova

# INTERNATIONAL COLLABORATIONS AND RESEARCH ACTIVITY

- 1973–1975 Member of the American-Italian Working Group on the HP Sesia-Lanzo Zone, Western Alps, including R.G. Coleman (USGS), W. G. Ernst (Stanford University) and G.V. Dal Piaz, G. Gosso and B. Lombardo (Torino).
- Scientific collaboration with Takao Hirajima (*Kyoto University*) on the study of the UHPM in the southern Dora-Maira Massif, Western Alps.
- 1993–2007 Scientific collaboration with Xu Shutong, *Anhui Institute of Geology*, Anhui Province (China) on the study of UHPM in the Dabie Mountains and in the Su Lu orogen, for the understanding of petrology, *P-T* evolution and fluid–rock interaction during deep subduction of continental crust.
- Participant in the SARTUCYA campaign from 19.11.1995 to 5.12.1995 (Leaders: G. Mascle and P. Tricart, CNRS/UJF Grenoble), with the French CYANA submersible to observe and sample, on the floor of the Sardinia Channel, at a depth of c. 2500 m below sea level, the rocks of the submerged portion of the Apenninic-Maghrebian branch of the Alpine range.
- 1994-2009 Member and active scientist in the following research groups on the Ultrahigh-Pressure Metamorphism (UHPM) of the International Lithosphere Program (ILP), sponsored by UNESCO:
- 1994-1998 Task Group III-6: "*Ultrahigh-pressure Metamorphism and Geodynamics in Collision-Type Orogenic Belts*" (Chairperson: Cheng Yuqi)
- 1999-2004 Task Group III-8: "Processes and Geodynamics in the Formation and Exhumation of the Ultrahigh-Pressure Metamorphic Terrains" (Chairperson: J. G. Liou)
- 2005-2009 Task Force IV "*Ultra-Deep Continental Crust Subduction*" (UDCCS) (Chairperson: Larissa Dobrzhinetskaya)
- 2013–2015 Scientific collaboration with Tetsumaru ITAYA (*Okayama University of Science*) on geochronological dating of UHPM phengites from the Lago di Cignana Unit, Valtournenche, Aosta Valley.

# **RESEARCH ACTIVITY** mainly in the fields of:

- 1) Stratigraphy, igneous petrology and metamorphic evolution of the meta-ophiolites of the Piemonte Zone of western Alps, with special reference to the high-pressure and ultrahigh-pressure metamorphism;
- 2) Stratigraphy and metamorphic evolution of the crystalline basement of the western Alps, (including tectonic units belonging to the Helvetic, Penninic and Austro-alpine domains) and of the Calabrian-Peloritanian Arc in southern Italy;
- 3) Metamorphic reactions and evolution of the high-pressure and ultra-high-pressure metamorphism in the continental crust units of the western Alps, and Dabie Shan and Su Lu orogens in China;
- 4) Ore petrology of magnetite mineralization occurring in ultramafic rocks;
- 5) Petrology of serpentinized ultramafic rocks with special reference to rodingites and metasomatic reaction rocks;
- 6) Investigations on asbestos and asbestos-like minerals of petrographic and environmental interest in metamorphic ophiolites from the western Alps;
- 7) Fluid-rock interaction during subduction with special attention to the origin of "whiteschists" (continental crust), jadeitites (oceanic lithosphere), and microdiamonds;
- 8) Archaeometry of south European "jades *s.l.*" and studies on rock deterioration and conservation of Italian monuments;
- 9) Investigations on the new rock-forming minerals: balangeroite, carlosturanite, magnesiobeltrandoite, and Fe-rich antigorite;
- 10) Popularization of geology and petrology of the western Alps and Calabrian-Peloritanian Arc, southern Italy.

- 11) Asbestos fiber quantification and new tools for the evaluation of asbestos-related risks during excavation in NOA-rich geological settings.

  12) Mineralogical study of vein serpentines.

The research activity is documented by over **250 articles** mostly published in International Journals, and **5 geological maps**.