

## CURRICULUM VITAE

**Complete Name:** Manfred Ferdinand Buchroithner  
**Date and Place of Birth:** 17 December 1950 in Wels, Austria  
**Nationality:** Austrian  
**Profession:** Cartographer, Remote Sensing Expert, Geologist  
**Family status:** Married, 2 children

### Education:

1969/70: Military service.

October 1970 - January 1977: Studies in Geology and Palaeontology as a Major and in Mineralogy and Petrology as a Minor at the University of Graz, Austria.

October 1973 - January 1974: Study stay at the University of Leyden, NL.

Ph.D. Thesis (topic: Palaeozoic geology of the Pyrenees) at the University of Graz with distinction. Graduation 26 January 1977.

1979/80: Applied work and post-doctoral studies in "Geological Survey Using Aerial Photography and Other Remote Sensing Techniques" and in cartography at the International Institute for Aerospace Survey and Earth Sciences (ITC) in Enschede, The Netherlands. Diploma Thesis in Central Spain. ITC Diploma with distinction. Graduation 29 August 1980.

1983: Post-doctoral Fullbright Scholarship for remote sensing: Fort Worth (Texas), Denver (Colorado) and Stanford (California).

### Professional Experience:

1971/72: 15 months Research Fellow ("Studienassistent") at the University of Graz: lecturing and research; field work in Austria and Yugoslavia.

Summer 1975: Geologist of an international scientific expedition to the Afghan Pamir and Eastern Hindu Kush (3 months).

1976/1977: Training Courses for the Fully Certified Austrian Mountain and Ski Mountaineering Guide; Professional Licence August 1977.

May 1977 - April 1979: Research Fellow at the Geological Institute of the University of Graz: field work and research in the whole Mediterranean, incl. Morocco, the Balears and Chios Island.

Summer 1979 and summer 1981: 4 months of field work for the Austrian Bleiberg Mining Company in southern Austria.

October 1980 - April 1984: Scientist-in-charge of the image processing system and Deputy Head at the Department for Satellite Cartography of the Austrian Academy of Sciences in Vienna.

May 1984 - March 1985: In charge of the remote sensing activities at the Institute for Image Processing and Computer Graphics of the Graz Research Center.

April 1985 - September 1992: Director of the Institute for Image Processing and Computer Graphics of the Graz Research Center (now Forschungsgesellschaft Joanneum Research).

Summer Semester 1989: Visiting Professor at the Geographical Institute of the University of Munich.

October 1992: Full Professor and Chair of Cartography at the Dresden University of Technology.

Summer Semester 2002: Visiting Professor at the Ecole Nationale Supérieure des Mines de Paris, Sophia Antipolis (France).

1990 – present: Reviewer of individual research projects in Austria, Sweden and Germany, of national research programmes in Belgium and Sweden as well as of projects submitted to the German Aerospace Establishment (DLR) and the European Space Agency (ESA). Equally reviewer of some internationally refereed journals with a high impact factor according to the ICI.

### **Research and Application Projects:**

Project Leader (Principal Investigator) and Co-Investigator of several - frequently international - projects with NASA, ESA, the European Union (EU), the Council of Europe (CEU), NATO (Programme Science for Peace), the Austrian Ministry of Science and Research (BMWf), the Austrian Science Foundation (FWF), the Alexander von Humboldt Fund (AvH), the German Foreign Academic Fund (DAAD), the German Research Council (DFG), the German Federal Ministry of Education and Research (BMBWF), the Saxonian Ministry of Environment and Traffic (SMUV), etc.

Most of these projects dealt - at least in part - with the (3D) visualisation and application of remote sensing to environmental problems, with special emphasis on natural hazards. Main geographic area of interest are high-alpine terrains, in particular the Alps, High Asia and the Andes.

### **Academic Honours:**

- 1979: Theodor Körner Prize for Promotion of Science and Arts.
- 1982: Junior Scientist Prize of the Federal State of Upper Austria.
- 1984: Inauguration (Venia Legendi) for "Geology and Remote Sensing" at the University of Graz (14 June).
- 1985: Appointed Permanent Guest Professor ("Gastdozent") for "Geo-Remote Sensing" at the Graz University of Technology (5 December).
- 1988: Invited Lecturer for the study course in "Environmental Protection" at the Graz University of Technology for "Digital Image Processing, Remote Sensing and Digital Elevation Models" (until in 1993).
- 1992: Appointed Scientific Advisor of the "Qomolungma Nature Preserve" (Mt. Everest National Park) in Tibet.
- 1993: Elected Vice Chairman of the European Association of Remote Sensing Laboratories (EARSeL; re-elected in 1995 until 1997).
- 1994: Elected Full Member ("Ordentliches Mitglied") of the German Geodetic Commission at the Bavarian Academy of Sciences.
- 1994: Appointed "Euro-Ingenieur" honoris causa (honorary).
- 1999: Elected Secretary General of EURO-STRIM (Association for the Establishment of a European Master and Doctorate in Space Technologies for Risk Management).

- 1999: Best Map Award "Excellence in Cartography" in the Category "Other Maps" at the ICA (International Cartographic Association) World Congress in Ottawa, Official Committee Evaluation.
- 2000: Invited for "IRC Lecture" at the Joint Research Centre Ispra of the European Commission.
- 2000: Selected best Conference Homepage world wide for 20<sup>th</sup> EARSeL Symposium 14-16 June 2000 in Dresden, Germany.
- 2001: Best Map Award "Excellence in Cartography" in the Category "Other Maps" at the ICA World Congress in Beijing, Japan.
- 2002: Elected Member of the Academy-like "Working-Group for Comparative High-Mountain Research" (Arbeitsgemeinschaft für vergleichende Hochgebirgsforschung), Munich.
- 2003: Best Map Award "Excellence in Cartography" in the Category "Other Maps" at the ICA World Congress in Durban, South Africa.
- 2004: Best Poster Award at the XXth ISPRS Congress, 12-23 July 2004 Istanbul, Turkey
- 2006: HMRSC Award of the HMRSC Group of the International Cartographic Association (ICA)
- 2006: Award of Appreciation of the FIG/Arabic Ligue of Surveyors
- 2006: Member of the Editorial Board of "Landscape Online" (Journal of the International Association for Landscape Ecology, Chapter Germany (IALE-D))
- 1985 – present: Invited Speaker at several international symposia and conferences.

#### **Patents:**

- 06.12.2004 Two patents granted on international level for "Topographische Karte" (Topographical Map), DE 10 2004 060 069.4, and "Dreidimensional visuell erfassbare topographische Karte" (Three-Dimensionally Visually Perceptive Topographical Map), DE 10 2004 060 070.8 (together with Thomas Gründemann and Klaus Habermann).

#### **Languages:**

Mother tongue German; medium command of French and Spanish; basic command of Dutch; "Certificate of Proficiency in English" of the University of Michigan, Ann Arbor (18 December 1968).

#### **Publications and Technical Reports:**

Over 290 papers (also maps), approx. 120 of them as single author; several papers in journals of the Scientific Citation Index; some (video) films about remote sensing, surveying, mapping and (3D) visualisation.