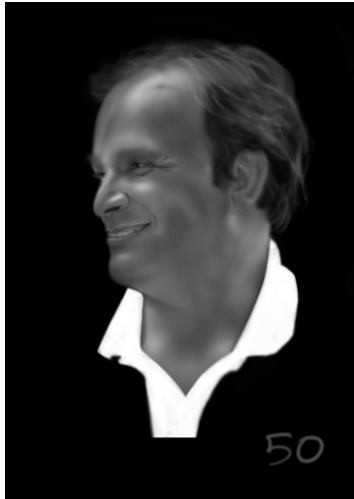


Luís Chambel

Exploration & Research

Curriculum Vitae

January 2018



Luís Manuel Chambel Filipe Rodrigues Cardoso

Economic Geology, exploration, evaluation, mining
Data Analysis, Information Systems, modeling, evaluation, marketing
Southern Africa, South America

Mining Engineer, MBA, MSc Engineering Geology, PhD Engineering Sciences
Fellow of the SEG – Society of Economic Geologists
European Geologist – EUR GEOL
European Engineer – Eur Ing
Senior Engineer - OE

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Brief personal and professional profile

Exploration & Research - my current professional activity revolves around Economic Geology (primarily) and Data Analysis. I am currently partner and general manager of Sínese, a consulting company created in 1995. In this quality, I coordinated and executed many projects in Angola, the Republic of Congo, Portugal, Brazil and Ecuador, among others.

I hold degrees in Mining Engineering (Applied Geology), Engineering Geology (MSc), Business Administration (MBA) and Engineering Sciences (PhD) and a postdoc in Mining Engineering.

I was born in Lisbon, Portugal in August 29, 1963. I currently live in Lisbon, Portugal; during part of my childhood I also lived in Mozambique and Angola. I have also had multiple short-term stays in Brazil and Angola during the last twenty years.

I am fluent in Portuguese (native language), English, Spanish and French.

I am a Fellow of the Society of Economic Geology and I hold the qualifications of European Engineer – EUR ING, European Geologist – EUR GEOL and I am a Senior Engineer (*Ordem dos Engenheiros*).

I am member of the following professional societies and organizations:

- SEG – Society of Economic Geology (Fellow since 2015). Membership number 895669 since 2009.
- SME – The Society for Mining, Metallurgy, and Exploration. Member number 4164745 since 2010.
- Associação Portuguesa de Geólogos – Portuguese Geologists Association (member O1375 since 2013).
- PDAC – The Prospectors and Developers Association of Canada. Member ID Number: 223133.
- Ordem dos Engenheiros – Portuguese Engineers Professional Association. Member n.º 21590 (since 1986), with the qualification of Senior Engineer since 2011.

Professional activity

My professional activity in the field of Economic Geology has been diversified, although most major projects I have been involved in are related to diamond deposits in Angola and Brazil, precious and base metals (Au, Sn, Fe, Nb – Ta, Mn) and industrial minerals and natural stone in Portugal, Republic of Congo, and Brazil and other mineral resources elsewhere (oil, underground water, etc.).

In a more distant past, my professional activity also included work as a manager of an IT company (OCTOPUS, Sistemas e Informação Geográfica, S.A.) and as Technical manager of SPE – Sociedade Portuguesa de Empreendimentos, a Portuguese diamond mining company active in Angola.

In an earlier stage of my professional life, I was university teacher at Instituto Superior Técnico (Universidade de Lisboa) in the domains of Economic Geology and Mining Engineering. I have since then maintained continuous research and teaching activities in several universities and research centers in different areas: Evaluation and Exploration of Mineral Deposits, Diamonds, Data Analysis, Marketing and Circular Economy.

Projects

The scope of the projects I have been involved in ranges from technical and feasibility studies, market research, exploration, geological and deposit modeling, design of specialized information systems to exploration, mining plans and support to negotiation. Some of the projects I have been involved in are:

- Update of the Penedono gold deposit resources (veins 1 to 13) (Portugal).
2017 – Portugal. Consórcio Penedono.
- Technical report on the Chiumbe alluvial diamond exploration concession (Lunda Norte, Angola).
2017 – Angola. Global Inn Investments.
- Preliminary report and exploration and trial mining programs for the Moquita alluvial mining concession in Angola (Lunda Norte province).
2017 – Angola. SAFRIPAR.
- Preliminary report and exploration and trial mining programs for one alluvial and one alluvial and kimberlite exploration concessions in Angola (Lunda Norte and Moxico provinces).
2015-2017 – Angola. Undisclosed clients.
- Valuation and evaluation of mineral deposits and other mineral assets – co-author and teacher (with Jorge Sousa) of a three-day specialization course at the University of Lisbon.
2016 – Portugal. FUNDEC-IST.
- Implementation of the Kimberley Process Certification Scheme in Portugal.
2012-2015 – Portugal. Portuguese Government.
- Due diligence of the Uruaçu (GO) manganese deposit.
2015 – Brazil. Tricos SGPS.
- St.º António - Penedono mine , veins 7 to 13 - evaluation of the gold resources.
2014 – Portugal. Consórcio Penedono.
- St.º António - Penedono mine , veins 1 to 6 (upper levels) - evaluation of the gold resources.
2014 – Portugal. Consórcio Penedono.
- *Kimberlite Provinces of Angola – a map.*
2014 – Angola.
- Projecto Lulué – evaluation of the claim's diamond mineralization potential.
2014 – Angola. Confidential client.
- Geological exploration log codification and procedure for the Santo António – Penedono claim.
2014 – Portugal. Consórcio Penedono.
- Tantalite and gold deposit: trial mining and exploration plans.
2013-2014 – Republic of Congo (Brazzaville). ESCOM Congo.
- Resampling plan of the St.º António mine gold tailings.
2013 – Portugal. CONTÉCNICA.
- One century of Angolan diamonds – a report.
2013 – Angola. Sínese and Eaglestone.
- Exploration, geological and mining information system of the St.º António – Penedono gold and tungsten concession – data compilation, review, reorganization, management procedures and workflow.
2013 – Portugal. CONTÉCNICA.
- US market research for natural stone – 2013.
2013 – Portugal. ASSIMAGRA.
- Evaluation and exploration plan of a tantalite and gold deposit in the Mayoko area.
2013 – Republic of Congo (Brazzaville). ESCOM Congo.
- Geophysical and hydrographic survey and diamond potential evaluation of the Luando River (Bié province, Angola).
2012 – Angola. SOMIPA.
- Due diligence of a gold and other metals' concession in northern Portugal.
2012 – Portugal. Undisclosed client.
- Market research for the Portuguese natural stone in the Americas.
2011 – Portugal (with field work in USA, Canada, Brazil, Uruguay and Argentina). ASSIMAGRA.
- The future of mining. Rapporteur and spokesman of the workgroup on Geology and Exploration.
2010 – Brazil. Workshop organized by ITV – Instituto Tecnológico VALE (CVRD – Companhia Vale Rio Doce).
- Evaluation and (3D, structural and economic) modeling of the Sabacheira ornamental limestone deposit.
2010 - Portugal. GARCOGEL Ld.ª.
- Diamond mineralization favorability and geological modeling of the Quirima, Sautar, Luando, Caipupa, Sauanga and Zonde concessions (center of Angola).
2009 - Angola. SOMIPA – Sociedade Mineira Angola.
- Chicapa riverbed diamond deposits exploration plan - Chinguvo concession.
2009 - Angola. ESCOM Mining.
- Luembe riverbed diamond deposits exploration plan - Chimbongo concession.
2008 - Angola. ESCOM Mining.
- Evaluation of the ESCOM Mining diamond assets in Angola.
2008 – Angola and South Africa. ESCOM.
- Tuela Sn-W deposit exploration plan.
2007 - Portugal. MTI.

- Feasibility study of the International Cuango concession.
2006 – Portugal, Angola, DRC and South Africa. OMV.
- Angolan diamond populations – post-doc project.
2002-2004 – Brazil, Angola. UFMG.
- Design and implementation of the Mufuto, Calonda and Lucapa information systems for exploration and mining planning and control in alluvial diamond deposits.
2000-2002 - Angola. SPE – Sociedade Portuguesa de Empreendimentos, S.A.
- Reserves evaluation and environmental recovery plan of the Brechal ornamental limestone quarries in the São Brás de Alportel region (Algarve – Portugal).
2000 - Portugal. BRECHAL.
- Technical and economical feasibility studies of the Calonda, Lucapa, Mufuto, Saccir, Tchipoia and Yetwene projects.
2000 – Angola. SPE – Sociedade Portuguesa de Empreendimentos S.A./Sociedade Mineira do Lucapa.
- SML Exploration Plan.
2000 – Angola. SPE – Sociedade Portuguesa de Empreendimentos S.A./Sociedade Mineira do Lucapa.
- Mathematical and geological modeling of aquifers and oil deposits in the Ecuadorian Amazon basin, PETRAMAZ project.
2000 – Ecuador and Portugal. European Union and Ecuador Government.
- Discussion of a strategy for the Portuguese diamond cluster – Phd project.
1996-2000 – Portugal, Angola. IST-UTL.
- Summary studies of the Sangamina kimberlite and of the Camútuè kimberlite cluster.
2000 – Angola. SPE – Sociedade Portuguesa de Empreendimentos S.A.
- SIDIAMA conception and implementation, ENDIAMA's mineral and geological information system.
1998 - Angola. ENDIAMA – Empresa Nacional de Diamantes de Angola.
- Prix e salaires dans le monde.
1997 and 2000 – Portugal. Union de Banques Suisses.
- Statistical support to the BIoSTER Consortium, analysis of medical devices sterilization techniques.
1997-1999 – Portugal. ITN – Instituto Tecnológico Nuclear.
- Catoca kimberlite (Lunda, Angola): evaluation of DIAMANG exploration works. Exploration costs analysis.
1997 - Portugal. Hidromineira Ld.ª.
- Feldspar summary market study in Portugal.
1995 – Portugal. PROMINEX, Mineração Ltda. (Belo Horizonte, Brasil).
- SML – Sociedade Mineira do Lucapa Emergency Plan.
1992 - Angola. Sociedade Mineira do Lucapa.
- Diamond reserves evaluation of the Sociedade Mineira do Lucapa concession.
1992 – Brazil, Angola and Portugal. SPE – Sociedade Portuguesa de Empreendimentos, S.A.
- SML – Sociedade Mineira do Lucapa feasibility study and negotiation with the Angolan Government.
1992 – Portugal and Angola. SPE – Sociedade Portuguesa de Empreendimentos, S.A.
- Naturally Fractured Reservoirs: Development of New Techniques and Mathematical Models to Improve the Confidence in Simulation Input Data.
1990-1992 - Portugal. PARTEX, Companhia Portuguesa de Serviços, S.A.
- Geophysical prospecting of fractures in crystalline massifs, using VLF, resistivity and magnetic methods.
1989 - Portugal.

Positions held

The professional and academic positions I have held include:

- President of the Rough Diamond Expert Evaluators Exam Committee (INCM - *Imprensa Nacional Casa da Moeda*) since 2015. The Exam Committee prepares and conducts the examinations for the certification of the expert diamond evaluators (*perito-classificador-avaliador*) by the Portuguese Government under the Kimberley Process procedure.
- Advisor of the Center for Entrepreneurial Geosciences (CEG) since 2015. The Center is established at UTEP (January 1, 2014). The Center is built on the assets of the Department of Geological Sciences, University of Texas @ El Paso, UTEP.
- Partner and general manager of Sínese since 1995 (with interruptions during the post-doc and PhD periods).
- Portuguese Judo Federation (FPJ) Board member (Treasurer) (2011-2013).
- ADJL (Judo Association of the Lisbon District) Board member (2007-2010).
- CVRM – Geo-systems Center (Instituto Superior Técnico), research member 2004-2014.
- Post-doc scholarship from FCT – Fundação para a Ciência e Tecnologia, 2002-2004.

- Geotechnique Center (Instituto Superior Técnico), research member, 2000-2003.
- Lecturer (Statistics and Quantitative Methods) at ISPA – Instituto Superior de Psicologia Aplicada (2000-2002).
- AAMBA, MBA Alumni Association. Elected Board member in 1995/98 and reelected in 1998/2001.
- PhD scholarship from FCT – Fundação para a Ciência e Tecnologia, 1996-2000.
- Executive Director (Finance and New Business Development) at OCTOPUS – Sistemas e Informação Geográfica, 1995-1996.
- Technical Director (Diamonds) at SPE – Sociedade Portuguesa de Empreendimentos S.A., 1992-1994.
- Independent professional (as a mining engineer) from 1989 to 1994.
- Lecturer (Geology, Mineral Deposits, Geophysical and Geological Exploration) at Instituto Superior Técnico – Technical University of Lisbon from 1984 to 1992.

Results obtained – highlights

As consultant within Sínese

- Implementation of the KPCS – Kimberley Process Certification Scheme in Portugal. I promoted and supported the implementation of the KPCS between 2012 and 2015 in the Finance and Economy ministries of the Portuguese Government. The national legislation was published in January 2015, complemented afterwards and finally published at the European Union Official Journal in August 11, 2015. The first KP certified diamond import was finalized in September 2015.
- Creation and development since the second semester of 2013 of a bilingual blog (Portuguese and English) on Economic Geology – xmbl.wordpress.com. The blog published 334 articles and contains several webpages with specialized information (with a special focus on the deposits and markets of diamonds, gems and natural stone, conflict minerals and mineral exploration and production in Angola, Brazil, Portugal and Mozambique). The blog has had over 62.000 views and 21.500 visitors until October 2017.
- Creation and execution of an annual questionnaire on the competitiveness of the Portuguese natural stone industry. The questionnaire was distributed online since 2013 (concerning the respective previous years).
- Tantalite and gold exploration and trial mining plans (2013 - 2014). This is a plan to develop a Nb-Ta and gold alluvial and pegmatite exploration and trial mining deposits' project in the Mayoko region (Niari district, Republic of Congo).
- One century of Angolan diamonds – a report (2013). This is a major report about the Angolan diamond industry, including previously information either unpublished or only previously available in Portuguese. The report has had a wide international impact with excerpts published in Mining Journal, Diamond World and elsewhere and interviews with CNBC (TV), Deutsch Welle (Radio) e fDi (a Financial Times publication).
- Exploration of diamond deposits in the river bed of the Luando River (Bié, Angola) (2012). This project included the design, fieldwork and data analysis of an hydrographic and geophysical survey of the riverbed in a 30 km stretch (upstream of the Luando waterfalls). As a result, several potentially mineralized morphological traps were identified. Diamonds were recovered from the margins of studied river stretch.
- EUROROC – as representative of the ASSIMAGRA within EUROROC, coordinated in Portugal the data collection and analysis of the EPD Natural Stone project. This project is integrated in a pan-European legal framework for sustainable construction (2011-2012).
- Design of a favourability model for a group of diamond concessions in the centre of Angola (2009-2010). In this project, data concerning six concessions more than 20.000 km² in the centre of Angola was analysed to build a diamond deposits' occurrence favourability model. The results obtained in the model were later confirmed with the recovery of diamonds and kimberlite indicator minerals in predicted locations. Current accumulated exploration investment in these concessions is of the order of a few tens of million USD.
- Rediscovery of the N'Dumba/Damba kimberlite. The N'Dumba/Damba kimberlite, a mineralized deposit with 30+ ha of the BHP ESCOM JV located in the right margin of the Chicapa river was

rediscovered by a team which I led using a methodology based on the fusion of 50 years old exploration data and new technologies (hi-res satellite imagery). This project, developed in Portugal, resulted in the (re)discovery of the kimberlite, later confirmed in the field by the BHP ESCOM JV.

- Evaluation of the Angolan diamond assets of ESCOM Mining (2008). This evaluation project included the individual evaluation of sixteen diamond concessions in Angola, including two operating mines (one alluvial, one kimberlitic) and 14 exploration concessions of the BHP ESCOM JV with a global area more than 20.000 km². The assets' value was determined at the time to be more than several hundred million USD.
- Coordination of the technical and economical components of the *Cuango Internacional* feasibility study (2005). This project had a particularly complex nature: it involved an alluvial diamond concession along a stretch of the Cuango river that materializes the border between Angola and DRC. This area has a huge potential, probably being the largest remaining untapped alluvial resource in Angola and DRC.
- Design and implementation of specialized information systems. I have coordinated and implemented numerous geological and mining information systems for companies and institutions in Portugal (gold and diamonds), Angola (diamonds) and Ecuador (underground water and oil in the Amazon basin).

As Board member (Treasurer) of FPJ – Portuguese Judo Federation

- I was the Board member responsible for the finance management of the Portuguese Judo Federation between May 2011 and March 2013. In that period, under extremely difficult financing restrictions, managed to balance the Federation results and to eliminate past accumulated negative results.

As director of OCTOPUS

- Financial management of the company and development of new businesses and products, namely ArcPortugal.

As consultant and technical director of SPE

- Emergency plan for SML. In late October 1992 civil war resumed in Angola. The basis for the development of the SML diamond project shattered and the company's investment plan and mining activity had to be completely reshaped, a task I coordinated in Angola and Portugal.
- Evaluation of the resources and reserves of the SML – Sociedade Mineira do Lucapa's 35.000 km² concession. This complex project, which I coordinated in 1992, included a data collection stage in NE Angola, the development of a methodology (integrating kriging – for gravel and overburden volumes estimation and the Sichel method – for diamond number, grade and value estimation) in Portugal and Brazil and data digitalization and analysis in Brazil.
- Participation in SML's feasibility study and diamond concession negotiation with the Angolan Government. This study and the concession negotiation was developed in the last semester of 1991 and in the first half of 1992. SML's concession encompassed the Luachimo and Chicapa hydrographic basins in Angola, an area over 35.000 km².

As independent professional

- Design of mining and environmental rehabilitation plans of some dozens of natural stone quarries and factories, mostly in ornamental limestone in the *Maciço Calcário Estremenho* (Portugal).
- Exploration for underground water in fractured massifs.

As a researcher

- Co-supervisor of three (1 completed, 2 ongoing) MSc and one (ongoing) PhD thesis.
- Author and co-author of several journal articles, thesis and book namely on diamonds and other gemstones and their deposits, applied geophysics, natural stone, their deposits and markets, underground water and information systems applied to geology, exploration and mining.

Academic curriculum

My academic curriculum includes:

- Post-doc in Mining Engineering at UFMG – Universidade Federal de Minas Gerais, Belo Horizonte, MG – Brazil (2002-2004).
- Phd in Engineering Sciences at IST-UTL – Universidade Técnica de Lisboa, Lisboa, Portugal (1996-2001).
- MBA – Master in Business Administration at FE-UNL – Universidade Nova de Lisboa, currently the Lisbon MBA (1990-1993).
- MSc in Engineering Geology at FCT-UNL – Universidade Nova de Lisboa (1986-1989).
- Graduation (five-year course) in Mining Engineering (Applied Geology specialization) at the IST-UTL – Universidade Técnica de Lisboa, Lisboa, Portugal (1981-1986).

Other courses

- **Metodologia integrada para prospeção, avaliação de reservas e planeamento da exploração: aplicação a recursos minerais não metálicos.** VI Jornadas APG – Associação Portuguesa de Geólogos, Departamento de Ciências da Terra da Faculdade de Ciências e Tecnologia da Universidade de Coimbra, 9-10 November 2016.
- **Best practice for assessment and Reporting of Exploration Results, Mineral Resources and Mineral Reserves.** EFG/PERC MIN WIN-WIN conference, Brussels, 19th November 2014.
- **From the core barrel to a resource estimate: A review of current best practices.** March 4-7, 2012, Toronto, Canada. Prospectors & Developers Association of Canada.
- **NI 43-101: The new version and what you need to know.** March 4-7, 2012, Toronto, Canada. Prospectors & Developers Association of Canada.
- **Mine to Mill Process Optimization.** Seattle, 19-22 February 2012. SME – Society for Mining, Metallurgy and Exploration.
- **NI 43-101 Technical Reports: How to avoid running aground.** March 9, 2010, Toronto, Canada. Prospectors & Developers Association of Canada
- **Sonar Systems Training Course in Operations and Field Maintenance.** L-3 Communications Klein Associates, Inc. Salem, New Hampshire, USA, 27-28 January 2009.
- **Diamond Loupe Grading.** GIA - Gemological Institute of America. Porto, 27 September 2008
- **High Resolution Reflection Seismology.** Reynolds Geo-Sciences Ltd., Reino Unido, 18-20 February 2008.
- **Sistemas de Informação Geográfica Aplicados às Ciências da Terra (GIS Applied to Earth Sciences).** (post-grad update course). Faculdade de Ciências da Universidade de Lisboa, 6-8, 13-15 Feb 2008.
- **Análise de Dados para as Ciências Sociais e do Ambiente (Data analysis for the Social and Environment Sciences).** Instituto Superior Técnico, 14 – 25 July 2003.
- **CARIS GIS (Sistemas de Informação Geográfica).** Universal Systems, Fredericton, New Brunswick, Canadá, Setembro de 1997.
- **Negociação para Gestores (Negotiation for Managers).** Faculdade de Economia da Universidade Nova de Lisboa, Lisboa - 9, 10, 14 and 15 May 1991.
- **Natural Hazards and Engineering Geology - Prevention and Control of Landslides and Other Mass Movements.** European School of Climatology and Natural Hazards. Laboratório Nacional de Engenharia Civil, Lisboa, 28th March – 5th April 1990.
- **Formação Pedagógica (Pedagogical Training).** Instituto Superior Técnico, Lisboa, 13-24 Feb 1989.

Thesis supervision:

Co-supervisor of the following thesis:

- **Modelação e avaliação de recursos de depósitos aluvionares diamantíferos: um caso de estudo em Angola,** MSc dissertation in Geological Engineering. **Duarte Nuno da Silva Latas,** FCT – Universidade Nova de Lisboa, December 2016.
- **Competitividade internacional das minas de diamantes angolanas – o caso da mina do Catoca,** MSc dissertation in Geological and Mining Engineering. **Manuel Ndanji Borges Dos Santos Bravo,** Instituto Superior Técnico, Universidade de Lisboa, October 2017 (estimated conclusion).

- **Valor de Corte na Exploração de Jazigos Aluvionares de Diamantes em Angola**, MSc dissertation in Geological and Mining Engineering. **Adriano Cauanda Xavier**, Instituto Superior Técnico, Universidade de Lisboa, October 2017 (estimated conclusion).
- **Políticas para a próxima década no sector diamantífero em Angola**, PhD in Georrecursos. **José Paulo Abranches** Instituto Superior Técnico, Universidade de Lisboa, 2021 (estimated conclusion).

Selected publications

Thesis

- **Discussão dum estratégia para a fileira dos diamantes em Portugal (A strategy for the diamond cluster in Portugal)**. PhD thesis in Engineering Sciences, Instituto Superior Técnico, Universidade Técnica de Lisboa (2001).
- **Estudo da atractividade do investimento na produção de diamantes de origem aluvionar (Study of the attractiveness of the investment in alluvial diamond production)**. MBA thesis, Faculdade de Economia, Universidade Nova de Lisboa (1993).
- **Prospecção geofísica de fracturas em maciços cristalinos (Geophysical prospecting of fractures in crystalline massifs)**. MSc thesis in Engineering Geology, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa (1989).

Books and book chapters

- Chaves, M. e Chambel, L. **Diamante: a pedra, a gema, a lenda (Diamond: the stone, the gem, the legend)**. Oficina de Textos, São Paulo (Brasil), 232 pp. ISBN: 85-86238-25-2. The diamond geology and mining are the main subjects of this book. The Brazilian deposits (especially those occurring in Minas Gerais) and mineralization potential are discussed in the international context.

Journal articles (with peer review)

- Chaves, Mario Luiz de Sá C. and Chambel, Luís. **Diamantes do médio rio Jequitinhonha, Minas Gerais: qualificação gemológica e análise granulométrica**. *Rem: Rev. Esc. Minas*, Oct./Dec. 2004, vol.57, no.4, p.267-275. ISSN 0370-4467.
- Cardoso, Margarida G. M. S. & Chambel, Luis (2005). **A valuation model for cut diamonds**. *International Transactions in Operational Research* **12** (4), 417-436. doi: 10.1111/ j.1475-3995.2005.00516.
- Mario Luiz De Sá Carneiro Chaves, Mauro César Geraldês, Yuji Sano & Luis Chambel (2005). **Primeiros resultados da datação Pb-Pb em diamantes carbonados da Chapada Diamantina (Ba) e rio Jequitinhonha (MG), Serra do Espinhaço**. *Revista Brasileira de Geociências* 35(3):419-422, Setembro de 2005.
- Chaves, M.; Karfunkel, J.; Stasiulevicius, R.; Brandão, P. & Chambel, L. **Discussão sobre a natureza das cores verde e marrom (em "capas" ou "verdadeiras") em diamantes do SE-Brasil (Minas Gerais) e NE-Angola (Lunda)**. *Revista Brasileira de Geociências*, Vol. 31 - Geologia do Diamante, nº 4, pp. 575-582
- Chambel, L. (2000). **Evolução do peso dos diamantes ao longo do rio Chicapa (Lunda, Angola)**. *REM, Revista da Escola de Minas, Ouro Preto*, 53(3), jul-set 2000.

Complementary teaching activity

- Co-author and teacher of the three-day specialization course **Valuation and evaluation of mineral deposits and other mineral assets** – (with Jorge Sousa) at the University of Lisbon, September 2016.
- Teacher of the **Marketing** discipline (in coordination with Prof. Margarida Cardoso) – Master in Operations Research and Systems Engineering, Instituto Superior Técnico (2001 e 2003).
- Teacher of **Statistics** – Master in Environmental Systems Management, Instituto Superior de Ciências do Trabalho e da Empresa (2002).
- Teacher of the **Operations Management** and **Market Intelligence** disciplines for managers (NEGOTIA and AERLIS), Lisboa, May and June 1998.

- Teacher of Introdução aos Sistemas de Informação Geográfica and Tópicos avançados de SIG, directed to top managers of GEOROM-Informação Sistematizada Lda (Brasil) and ENDIAMA-Empresa Nacional de Diamantes de Angola UEE, September 1997.
- Teacher of Operations Management for middle and top managers (AERLIS), Torres Vedras, October 1997.
- Teacher of the Introduction to Project Analysis and Analysis of Diamond Projects disciplines of the post-graduate course in Geology and Exploration of Diamonds. Universidade Moderna, 1994/95.
- Teacher of Subsoil Resources of the Environmental Economy and Resources Management discipline - post-graduate course in Land and Environment Management, Dept.º de Ciências e Engenharia do Ambiente da Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa (1990).

Prizes and scholarships

- III World Judo Conference 2003, OSAKA (Japan) prize awarded to the poster: **The Judo Fight Dynamics: Male and Female Characteristics**, in co-authorship by Monteiro, L. & Chambel, L.
- Post-doc scholarship - Fundação para a Ciência e Tecnologia.
- PhD scholarship - Fundação para a Ciência e Tecnologia

Lisbon, January 2018



Luís M. Chambel F. R. Cardoso