CURRICULUM VITAE Sergio CROCETTI - GEOLOGIST

GENERAL INFORMATION



SERGIO CROCETTI,

Born on the 7th March 1970, C.F. CRC SRG 70C07 E625C Lives in Via Le Case 56 –Collesalvetti (Livorno) -Italy Office: in Via Palestro 49 – 57014 a Collesalvetti (Livorno) Ph. +39 0586 963040 – cell. +39 335 391926 – e-mail: - *scroce@sysnet.it* – *info@studiocrocetti.it* web: *www.studiocrocetti.it* skype: *Sergio Crocetti* VAT number 00981290497

INSTRUCTION

- Scientific studies high school Diploma, 1989 in Livorno.

- Graduated as **Geologist** on the 22nd Nov. 1996 at Pisa University . Degree thesis on vulcanology/petrography : "*1631 Vesuvius eruption: studio dei litici e reazioni termometasomatiche ai margini della camera magmatica*"; relatore: Prof. Mauro Rosi.

Experienced studies at C.N.R. (Geochronology and isotopic geochimics Institute) of Pisa – under supervision of doct. Claudia Principe-

Specializeation in: geological survey of quaternary volcanic sediment, in microscopic petrographic of termo-metasomatic associate minerals, risk analysis related to volcanic activity and to possible scenaries. The result of this university study have been published by - M.Rosi, C.Principe, I.Cerbai, S.Crocetti (1996): "The 1631 eruption", in CEV-CMVD Workshop on Vesuvius Decade Volcano, September 17-23-1996.

WORK EXPERIENCES /QUALIFICATION

- Since 1990 salesman and technical referent for Company *IDRODEPURAZIONE srl*' in Tuscany. They design and produce water treatment systems and machinery, primary and foul/waste water strippers. Development and production of ecological systems as phytotreatment and flora water getting.

I have taken part to development and installation of more than 400 systems (active foul waters, waste water filters, SBR, phytostrippers, systems for drinkable water, oil elimination systems, car wash systems, pumping systems, weather water collect systems etc.).

I am technical adviser for choosing water treatment solutions and to get the right documentation for water wasting according to laws in force.

- Summer 1997: I worked as geological adviser for Company *CHEMGEO s.a.s.*, (Pisa), regarding "*Geological study and analysis of S. Calogero thermal waters area, in Lipari Island*". Purpose of the analysis and of all geothermic-volcanic-structural studies was the public opening of the ancient romanic thermal park. New detailled maps were made: 1) geological map (scale 1:2.000 and 1:4.000).

2) tectonics-volcanic map of western and central part of the Island (scale 1:10.000).

- 1997 worked as Geologist by Dott. Rafanelli Antonio (Via del Mare 34- Via Borra 38, Livorno) in the following technical analysis:

bed plan and settlement of preloaded areas;

➢ Hydrogeologic survey at Vallin dell'Aquila-Pian dei Pinoli, waste storage area of Livorno for the town municipality. (Maps created: piezometric, of conductivity, of ammonium ion and of chloride).

> Piezometres development in order to improve the monitoring net of underground water quality at Vallin dell'Aquila-Pian dei Pinoli, waste storage area for the Municipality of Livorno.

➢ Geological and geotechnical survey for Livorno Municipality before building of an office block in the industrial area of Livorno called Darsena Toscana .

> Feasibility study with related map regarding the town-planning scheme for Municipality of Livorno.

> Enviroment restoration of ex clay cave of loc. Vallin dell'Aquila, Propriety of Company Cementir s.p.a.

Geotechnical and geologic survey for underground parking place (n.98 car places /n.25 motocycle places in Livorno, Piazza Guerrazzi.

Geologic technical analysis in order to improve road net conditions in Stagno with attention to divide industrial and civic traffic.

> Geotechnical and geologic analysis before building block of flats at La Scopaia, Municipality of Livorno.

- Qualification to practise **profession GEOLOGIST** awarded on the 23rd June 1997 (First Session 1997). I belong to the geologist professional register since the **dal 04th September 1997**, **N°988**.

- Since Nov. 1998: I am Director of my GEOLOGY ENVIROMENTAL OFFICE in Collesalvetti, Via Palestro 49 a-

N.3 geologists work in my office, one of them is GIS expert.

Stereoscopy instrument is usually used in this office in order to elaborate, process and create thematic maps throw GIS software, for pilotage A0, for measurement of water-bearing stratum and the related water sampling (also in wells and piezometers) .(bailer samplers and low capacity pump sampling).

Pocket penetrometer and torvane are used to measure geotechnical paremethers.

Specialization, references and experience of my office:

- Geological and technical analysis related to urban planning (dangerousness maps feasibility maps, emergency planning etc.) and land geological survey
- > Geological and geotechnical analysis of hydrogeologic restraint areas
- > Technical and geologic analysis supporting projects and plans of buildings.
- > Enviromental analysis to charachterize, improve and drain waters and earth in polluted areas.
- > Hydrogeologic analysis to search hydric sources and resources.
- > Riestoration of enviroment and cave projects
- > Technical support for proceedings
- > Technical planning for making shafts and reinforcing
- > G.I.S. and creation of thematic maps
- > Planning of waste water treatment systems (urban and industrial)
- > Enviromental education

- Since November 2010: **foundation member** of *A.R.S. Geologica Snc*, in Via Palestro 49 Collesalvetti (Li). The Company have own one seismograph MAE (24 channels), of one 3 components drilling geophone and of special softwares (PS Lab, Ryafract, GeoStru) in order to deliver geologic and geophysic services (both private and public) (for example: seismic analysis MASW,HVSR, Down-hole wave refraction P e S, micro-quaking).

-- Since 1999: member of Expert Register of Livorno Court of justice.

- dal 2002 Building Commissioner at Municipality of Monteverdi Marittimo (Pi);

- May 2004 till 2010 Technical adviser for geology at Monteverdi Marittimo Municipality (Pi) regarding to Hydrogeologic restraint;

-- since 2009 **Adviser and member of Commission for Hydrogeologic restraint at** Municipality of Castelnuovo Val di Cecina (Pi).;

-- since December 2014 Adviser for Hydrogeologic at Municipality of Crespina-Lorenzana (Pi).

-- Driver licence "tipo B" (n.LI5145626N) since 20th September 1988.

TRAINING AND COURSES

- 7th March 1998: Qualified as **GUARDIA GIURATA PARTICOLARE** (SECURITY GUARD) by Circolo Legambiente of Livorno about hunting supervision, wood and environmental preservation, animal and fish preservation.(Certificated by Prefect of Livorno)

- 14th December 1998: qualified as **G.A.V.** (Environmental security guard – Administrative officer) by Province Authority of Livorno.

- 23rd Sept-30th Nov 1998- 80 hours full immersion course by Pisa Province Authority regarding "SOIL PROTECTION BY TECHNICAL NATURALISTIC STRATEGIES".

- June-Dec.2000 – Qualified as "EXPERT FOR SAFETY AND HEALTH CARE IN BUILDING YARDS ACCORDING TO ART. 10 DEL D.L. 494/96 AND MOD". 120 hours training by Engineers Association of Livorno Province.

- April May 2001 - Training for **"Enviromental analysis, bio-architecture and electric magnetism**". 30 hours course by "Architettura & Natura" Association in Milano.

- 18th-20th March 2001 - Professional training "**Reclaiming of polluted areas**". 24 hour training by SIGEA and by Enviroment Ministery (Roma).

- June 2002 – Training by Circolo Legambiente of Livorno and Civil Defence "**Safety of goods and cultural assets by seismic and hydrogeologic risks**" (Livorno). In order to save work of arts (books, sculptures, pictures, etc.) in case of natural calamity (floods, earthquakes, explosions etc.)

- June 2004: Professional training for "Geomorpholgy applied to planning"- 40 hour course by Geologist Association of Tuscany.

- 2005- Professional training for "Quality procedures according to UNI EN ISO 9001:2000". 40 hour course by T-Prisma.

- 2009 Professional training "Low enthalpy geothermics – closed circuit systems at vertical sonds". 16 hour course by geologist association of Tuscany..

- 2009 - Update training "**New technical laws about buildings**". 8 hour course by Geologist Association of Tuscany dei Geologi della Toscana.

- 2010 - Cartography teacher at GAV course (Circolo Legambiente di Livorno).

- 2010 - Update training "Criteria for application of simply procedures related to management of small polluted area sas to art.249 of D.Lgs. 152/2006. 8 hour course by Atlante Srl.

-2010 - Professional training **"Management of ground and rocks from excavation– laws in force, and administrative proceeds for a correct managementaccording to artt.185 e 186 D.Lgs 152|06"** 8 hour course by Atlante Srl and Forti Spa.

- Sept 2010 - Teacher of training "**Development of geomorphologic process round Livorno**". 8 hour course by Foundation of Geologists of Tuscany

- 2011 - Update Training "First Aid procedures and emergency management" 4 hour course by ANFOS.

- 2011 Training "Firefightinh expert, fire emergency managent (low risk)" 4 hour course by ANFOS.

- 2011 Training "**seismic microzones at first level according to DPGR 53/R Tuscany**" 8 hour course by Foundation of Geologists of Tuscany.

- 2011 – Professional training "**Evaluation of seismic action according to D.M. 14/01/2008**" 8 hour course by Foundation of Geologists of Tuscany.

- 2013 - "**Co-ordinators for safety in work projects and execution**" – 40 hour course as to attachment XIV del D.Lgs 81/2008 by ANFOS.

PUBBLICATIONS

- M.Rosi, C.Principe, I.Cerbai, S.Crocetti (1996): "THE 1631 ERUPTION", in CEV-CMVD Workshop on Vesuvius Decade Volcano, September 17-23-1996.

- F.Stoppa, M.Schiazza, P.Giosa, Y.Liu, C.Principe, S.Crocetti, I.Cerbai (2015): "MAGMA EVOLUTION INSIDE THE 1631 VESUVIUS MAGMA CHAMBER AND ERUPTIVE TRIGGERING", in Bulletin of Vulcanology,.

ELECTRONIC AND TECHNUCAL INSTRUMENTS

Hardware, software and instruments actually used (regularly patented softwares):

- AutoCAD LT 2005-2011, Office 97, ARcGIS 8.3, ArcMap 9.0, ProgramGEO.

PRINTERS:

- Plotter HP Designjet 500, Laserjet HP 2550L, Epson Stylus color 1520, Ricoh Aficio 2016

P.C. e Hardware;

- n°3 desk stations

Fotocamera, Scanner A4 colour ed A3 B/N

Technical Instruments for geology:

- n.2 freatimeters, sampler water Bailer, dynamic sampler (low capacity).

- Stereoscopy instrument Topcon for photo interpreting

- Pocket Penetrometer and compass.

- Seismograph MAE (24 channels), geophone (3 components), triaxial geophone.

INFORMATICS

Software system: MS Windows ('98/2000/XP Pro, 7)

Web systems: Explorer, Mozilla, Safari

Software Packages:

- Microsoft Office, Software GIS (Esri ArcInfo, Arcview 8.3, 9.0), Software graphics and pictures (PhotoShop,Corel Draw),

Autocad LT /elements of AutoCADMap, Acrobat Reader, Adobe Reader, Geology and geotechnic Softwares (QSB, Lithos, IPK, Piena, Soils, etc.)

TRAVELS

- 1987-88: London-England-Scotland 1994: Austria-Germany 1995: Eolie Islands (Vulcano, Lipari, Salina, Panarea, Stromboli, Vulcano) 1996: Gran Canaria (Spain) 1997: Egadi Islands (Levanzo, Favignana, Marettimo), Paris - France 1998: Lampedusa e Linosa Islands 1999: Ecuador - Galapagos 2000: Costarica – Corse 2001: Australia (East-Center) and Tasmania 2002: Guatemala-Honduras - Switzerland 2003: Croazia (Krk, Cres, Lessini, Istria), Barcellona-Spain 2004: Capo Verde (Isola di Sal) 2005: Trentino parks 2006: Corse Island (France) 2007: Oman - Arabian Emirates 2008: South Africa and Swaziland (Parks and naturalistic riserves: Kruger, Timbavati, Infoluzi, Santa Lucia) 2009: United States : Alaska - Elba Island 2010: Tanzania and Kenya (nturalistic parks Lushoto, Tarangire, Ngoro, Ngoro, Manyara, Masai Mara), Monaco 2011: United States (western parks: Death Valley, Grand Canyon, Monument Valley, Bryce Canyon, Salt Lake, Grand Teton, Yellostone) - Pianosa Island (It) 2012: Indonesia (Giava, Bali, Rinca, Komodo, Flores, Borneo, Sulawesi) 2013: Greece (Creta, Santorini, Kos, Nysiros)
- 2014: Namibia Botswana Zimbabwe Isola di Capraia (It)
- 2015: Lisboa Azzorre Islands (Terceira, Sao Miguel, Pico, Faial)

FOREIGN LANGUAGES

- Able to speak and write English (Course in English: Briar school in Lowestoft - England in 1987, Euro Students Organisation in Edimburgh - Scotland in 1988, Wall Street Institute in Livorno in 2015-2016)

- Able to speak Spanish

Update: 11 January 2016

SIGNATURE

Geol. Sergio Crocetti

