

# CURRICULUM VITAE ET STUDIORUM

## DATI PERSONALI

**Nominativo:** Vinciguerra Sergio Carmelo Guglielmo

**Nazionalità:** Italiana.

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**Lingue straniere:** Inglese (Ottimo), Francese (Scolastico)

## ESPERIENZE PROFESSIONALI

- 1 Novembre 2016-presente, **Professore Associato non confermato**, *Dipartimento di Scienze della Terra, Università di Torino*, SSD GEO/10, Geofisica (D.R n. 3467 del 14/10/2016).
- 1 Aprile 2015-31 Ottobre 2016, **Ricercatore Universitario Confermato**, *Dipartimento di Scienze della Terra, Università di Torino*, SSD GEO/05, Geologia Applicata (D.R n. 3008 del 04/09/2015).
- 1 Aprile 2013 – 31 Marzo 2015, **Reader (Equivalente PA)** in “Geological Physical Properties and Processes” al *Department of Geology, University of Leicester* e **Responsabile** del *Rock Physics Laboratory al British Geological Survey*, Keyworth, Nottingham, Regno Unito.
- 29 Dicembre 2011-29 Dicembre 2014, **Ricercatore Universitario** non confermato a tempo indeterminato, *Dipartimento di Scienze della Terra, Università di Torino*, SSD GEO/05, Geologia Applicata, D.R. n. 8122 del 23-12-2011 (in aspettativa senza assegni, legge Gelmini 240/10 da 1 Aprile 2013 a 31 Marzo 2015);
- 1 Settembre 2005-28 Dicembre 2011, **Ricercatore III livello** a tempo determinato (ex. Art. 23 DPR 171/91) presso *l'Istituto Nazionale di Geofisica e Vulcanologia, Sezione di Roma1* per lo svolgimento di attività di studio e di ricerca nell'ambito del *progetto MIUR-FIRB “Sviluppo nuove tecnologie per la protezione e la difesa del territorio dai rischi naturali”*;
- 16 Gennaio 2004-31 Agosto 2005, **Ricercatore III livello** a tempo determinato (ex. Art. 23 DPR 171/91) presso *l'Istituto Nazionale di Geofisica e Vulcanologia-Osservatorio Vesuviano, sezione di Napoli* per lo svolgimento di attività di studio e di ricerca nell'ambito dei *progetti PON-SI.MON.A e UE- Volcalert -n. EVG1-CT-2001-00047*;
- 1 Marzo 2003-15 Gennaio 2004, **Assegnista di ricerca** presso *l'Istituto Nazionale di Geofisica e Vulcanologia-Osservatorio Vesuviano, sezione di Napoli* per lo svolgimento di attività di studio e di ricerca nell'ambito del *progetto UE-Volcalert, n. EVG1-CT-2001-00047*;
- Marzo 2002-28 Febbraio 2003, **Contrattista** presso il *Dipartimento di Fisica e Astronomia, Università di Catania, Marie Curie Individual Fellowships, Categoria Return*, Contratto CEE n. HPMF-CT-2001-01225. Titolo del progetto di ricerca: An experimental study of long term time-dependent rock deformation in a deep-sea laboratory in the Ionian Sea;
- 1 Mag. 2001-Feb. 2002, **Post-Dottorato** presso il *Department of Earth and Atmospheric Planetary Sciences, Massachusetts Institute of Technology, Cambridge, USA, Fondazione Rotary Ambassadorial Fellowship*, titolo del progetto di ricerca: Experimental constraints on the mechanics of dyke emplacement in partially molten olivines;
- Novembre 2000-Aprile 2001, **Post-Dottorato** presso il *Department of Geological Sciences, University College London, Londra, Gran Bretagna. Borsa di studio CNR-NATO* per attività di ricerca all'estero (bando n. 215-32 del 23/07/1999), titolo del progetto di ricerca: Etna: un approccio sperimentale ai processi di sismogenesi;
- Dicembre 1998-Ottobre 2000, **Post-Dottorato** presso il *Department of Geological Sciences, University College London, London, GB. Contratto CEE n. ERBFMBICT98-3260. Marie Curie Individual Fellowships, Categoria 30*, titolo del progetto di ricerca: Experimental investigation of the interrelationships between seismicity clustering properties at Etna volcano and laboratory experiments simulating volcano stress conditions;
- Ottobre 1996 - Giugno 1998; **Dottorando di ricerca** ospite presso *l'Istituto Nazionale di Geofisica, Roma*, per approfondimento problematiche concernenti lo studio delle proprietà statistiche degli eventi sismici nell'area etnea;
- Novembre 1995 - Ottobre 1998; **Dottorando di ricerca** in *Evoluzione di Orogeni di Tipo Mediterraneo* presso *Dipartimento di Scienze Geologiche, Università di Catania* per attività di studio e ricerca sulle relazioni tra sismicità e processi eruttivi nell'area etnea.
- Gennaio 1993 - Ottobre 1995 **Contrattista** presso *Dipartimento di Scienze Geologiche, Università di Catania* per attività di studio e ricerca sulle relazioni tra sismicità e processi eruttivi nell'area etnea.

## **TITOLI DI STUDIO**

- **Dottorato di Ricerca** in “Evoluzione di Orogeni di Tipo Mediterraneo” X Ciclo, ottenuto al Dipartimento di Scienze Geologiche, dell’Università di Catania (Italia) il 28 Maggio 1999. Titolo della tesi: Proprietà di clustering della sismicità Etna.
- **Laurea in Scienze Geologiche**, con piano di studi ad indirizzo geofisico, conseguita all’Università di Catania (Italia) l’11 Dicembre 1992 con voti 107/110. Titolo della tesi: Analisi della sismicità del basso versante orientale Etna.

## **ALTRE POSIZIONI E QUALIFICHE**

- **Abilitazione Scientifica Nazionale** (Tornata 2012) per la posizione di *Professore Associato (II Fascia)* settore 04/04-Geofisica e 04/02 Geologia Strutturale, Geologia Stratigrafica, Sedimentologia, 2014-2020;
- **Research Associate**, British Geological Survey, Regno Unito, 2015-2018;
- **Honorary visiting fellow**, Department of Geology, Univ. of Leicester, UK, 2016-2018;
- **Associato di ricerca**, Istituto di Geoscienze e Georisorse, CNR, Turin, Italy, 2016-2017;
- **Candidato** per chiamata diretta per altissima qualificazione nel ruolo di *Dirigente di Ricerca* da Istituto Nazionale di Geofisica e Vulcanologia (Delibera n 231/2016 del 26/05/2016);
- **Qualificato** per il profilo di *Maitre de Conference* nelle università francesi nei settori 35 (Struttura ed evoluzione del sistema Terra) e 36 (Geodinamica), 2012-2015;
- **Professeur premiere classe a invito (Equivalente PO)**, Université de Cergy-Pontoise, Cergy-Pontoise, Francia, 1-31 Luglio 2011;
- **Professeur premiere classe a invito (Equivalente PO)**, Ecole Normale Supérieure, Parigi, Francia, 1-30 Giugno 2011;
- **Professore a contratto**, Università di Camerino, Marzo-Maggio 2011;
- **Idoneo a posizione di Ricercatore III livello tempo indeterminato**, settore “Fisica e Chimica delle Rocce”, Istituto Nazionale di Geofisica e Vulcanologia, 2011
- **Professore 2eme classe (Equivalente a PA)**, Université Louis Pasteur Strasbourg I, Strasbourg, Francia, 1 Gennaio - 28 Febbraio 2008 e 1-28 Febbraio 2011;
- **Associato di Ricerca**, ISMAR – Istituto di Scienze Marine, Sezione di Bologna, Consiglio Nazionale delle Ricerche (CNR), 2007-2009;
- **Maitre de Conferences (Equivalente a RU)** a invito, Université Louis Pasteur Strasbourg I, Strasbourg, Francia 1-30 Giugno 2007;
- **Idoneo a posizione di Primo Ricercatore II livello tempo indeterminato**, settore “Laboratori alte pressioni e alte temperature”, Istituto Nazionale di Geofisica e Vulcanologia, 2002

## **RESPONSABILITA' PROFESSIONALI**

- **Vice-Presidente** della Divisione “Earth Magnetism and Rock Physics” dell’ European Geosciences Union, 2015-presente;
- **Segretario Scientifico** della Divisione “Earth Magnetism and Rock Physics” dell’ European Geosciences Union, 2015-presente, 2011-2014;
- **Responsabile del Committee** del programma dell’American Geophysical Union Fall Meeting per la Divisione Mineral and Rock Physics, 2015-presente;
- **American Geophysical Union On-Demand Committee** per il Fall Meeting, 2016-presente;
- **Executive Committee** dell’American Geophysical Union Focus Group, Divisione Mineral and Rock Physics, 2010-presente;
- **Editorial advisory board** Eos news (American Geophysical Union), 2012- present;
- **Executive Committee** della Marie Curie Fellowships Association, 1999-2001;
- **Responsabile** del Rock Physics Laboratory del British Geological Survey, Regno Unito, 2013-2015
- **Responsabile** del Laboratorio di Fisica delle Rocce, INGV, Sezione di Roma1, 2006-2011
- **Valutatore progetti di ricerca:** PRIN-MIUR; COST-European Science Foundation Association, National Science Foundation (USA), Canada Foundation for Innovation, Natural Sciences and Engineering

Research Council of Canada, Helmholtz Association (Germania), NERC (Regno Unito);

- **Revisore per la Valutazione della Qualità della Ricerca (VQR)**, 2004-2010 e 2011-2014;
- **Referee per giornali ISI**: Geophysical Research Letters, Journal of Geophysical Research-Solid Earth, Geophysical Journal International, Earth and Planetary Science Letters, Journal of Volcanology and Geothermal Research, Earth Science Reviews, Pure Applied Geophysics, Journal of Structural Geology, Bulletin of the Seismological Society of America, Tectonophysics, Terra Nova, International Journal of Rock Mechanics, Rock Mechanics and Rock Engineering, Solid Earth
- **Editorial board**, International Scholarly Research Network (ISRN) Geophysics, 2012

### **CONFERENZE E SESSIONI ORGANIZZATE A PRINCIPALI MEETINGS INTERNAZIONALI**

- 1) **Convenor** della sessione 13460 - Precursory deformation before dynamic failure, *American Geophysical Union Fall Meeting*, San Francisco (USA), 12-16 Dicembre 2016;
- 2) **Convenor** delle sessioni EMRP1.1 (Open session on Rock Physics) e EMRP1.2/ERE3.9/GI3.10 (Thermo-hydro-mechanical couplings and deep geothermal energy), *European Geosciences Union*, Vienna (Austria), 18-22 Aprile 2016;
- 3) **Comitato Scientifico**, 11<sup>th</sup> *Euro-conference of Rock Physics and Geomechanics*, Ambleside (Inghilterra), 06-10 Settembre 2015;
- 4) **Convenor** della sessione EMRP1.2 (Thermo-hydro-mechanical coupling and physical properties: implications to natural hazards), *European Geosciences Union*, Vienna (Austria), 12-17 Aprile 2015;
- 5) **Comitato Scientifico**, 10<sup>th</sup> *Euro-conference of Rock Physics and Geomechanics*, Aussois (France), 12-15 May 2014;
- 6) **Convenor** della sessione EMRP1.2 (Thermo-mechanical coupling and physical properties: implications to natural hazards), *European Geosciences Union*, Vienna (Austria), 27Aprile-2Maggio, 2014;
- 7) **Convenor** della sessione EMRP1.3 (Thermo-mechanical coupling and physical properties: implications to natural hazards), *European Geosciences Union*, Vienna (Austria), 07-12 Aprile 2013;
- 8) **Convenor** delle sessioni EMRP2.6/GMPV6.10/NH4.1/SM5.5/TS2.9 (Thermo-mechanical coupling and physical properties: implications to natural hazards) e EMRP2.2/GMPV6.21/SM5.6/TS3.3 (A tribute to Luigi Burlini), *European Geosciences Union*, Vienna (Austria), 23-27 Aprile 2012;
- 9) **Comitato Scientifico**, 9<sup>th</sup> *Euro-Conference of Rock Physics and Geomechanics*, Trondheim (Norway), 17-22 Ottobre 2011;
- 10) **Convenor** della sessione EMRP14/GMPV30/NH10.5/TS2.8 (Rock Physics and Natural Hazards), *European Geosciences Union*, Vienna (Austria), 04-08 Aprile 2011;
- 11) **Convenor** delle sessioni MPRG13 (Rock Physics and Natural Hazards) e TS8.1 (One year after the Abruzzo 2009 earthquake), *European Geosciences Union*, Vienna (Austria), 03-07 Maggio 2010;
- 12) **Comitato Scientifico** della 8<sup>th</sup> *Euro-Conference of Rock Physics and Geomechanics*, Ascona (Svizzera), 13-18 Settembre 2009;
- 13) **Convenor** delle sessioni GMPV3 (Volcano deformation, dynamics, and deep structure) e MPRG6 Thermo-Hydro-Mechanical coupling in stressed rock, *European Geosciences Union*, Vienna (Austria), 20-24 Aprile 2009;
- 14) **Convenor** delle sessioni IS19 - GMPV26/TS10 (Volcano-Tectonics) e MPRG3 Thermo-hydro-mechanical coupling and imaging in rock deformation), *European Geosciences Union*, Vienna (Austria), 14-18 Aprile 2008;
- 15) **Direttore** dell'Euro-Conference of Rock Physics and Geomechanics: Thermo-hydro- mechanical processes in rocks: Implication for Natural Hazard and Geotechnical applications, Erice, 25-30 Settembre 2007;
- 16) **Convenor** delle sessioni GMPV6 (Volcano-Tectonics) e MPRG15 (The role of fluids in faults and fracture zones-mechanical aspects), *European Geosciences Union*, Vienna (Austria), 16-20 Aprile 2007;
- 17) **Convenor** della sessione VGP9 (Volcano-Tectonics), *European Geosciences Union*, Vienna (Austria), 3-7 Aprile 2006;
- 18) **Convenor** della sessione V04 (Volcano-Tectonics), *American Geophysical Union*, San Francisco, 5-9 Dicembre, 2005;
- 19) **Convenor** della sessione VGP1 (Volcano-Tectonics), *European Geosciences Union*, Vienna (Austria), 25-30 Aprile 2005;
- 20) **Comitato Scientifico** 'Workshop on New Technologies in Geophysics, Geomechanics and Volcanology', Napoli, 18-20 Settembre 2003;

## **SEMINARI A INVITO**

Università di Macaè, Brasile 2015; University of Dublin, Irlanda, 2014; University of Portsmouth, UK, 2013; IUSS, Pavia, 2012; GeoForschungsZentrum, Germania, 2003,2009,2012; University of Liverpool, UK, 2011; University of Durham, UK, 2011; University of Cergy-Pontoise, Francia, 2011; Ecole Normal Superieure-Parigi, Francia, 2011; University of Utrecht, Olanda, UK, 2011; TU Delft, Olanda, 2011; Università delle Azzorre, Portogallo, 2011; Università di Camerino, 2006, 2011; Erice, Italy, 2010; CSIRO, Perth, Australia, 2009; LMU, Univ. of Munich, Germany 2009; Univ. of Vancouver, Canada, 2008; Ecole Normal Superieure, Paris, France 2007, 2011; Università di Roma3, 2007; Università di Perugia, 2007; Université Louis Pasteur Strasbourg I, France, 2005, 2007, 2008, 2009; Lassonde Institute, University of Toronto, Canada, 2005; ETH, Swiss Federal Institute of Technology Zurich, 2004; MIT, USA, 2002; Università di Catania, 2002.

## **PROGETTI DI RICERCA E FINANZIAMENTI**

*In corsivo progetti di cui responsabile*

- 1) *Ciencias sem frontieras, Programa Pesquisador Visitante Especial, Process n. 888887.114991/2015-00 – CAPES/CNPq, Thermo-hydro-mechanical processes in carbonatic rocks, implications for reservoirs integrity and mechanical behavior, Università di Macaè, Brasile, 2015-2017, kEuro 50;*
- 2) *FP7-PEOPLE-2013-Career Integration Grant, Detecting slow deformation signals preceding dynamic failure: A new strategy for the mitigation of natural hazards, Grant n. 618346, 2014-2017, kEuro 100;*
- 3) *Università di Torino/Compagnia San Paolo, Bando d'ateneo 2012, EU-Accelerating Grant, Multiscale geophysical monitoring and mechanical characterization of unstable rock masses, 2013-2015, kEuro 90;*
- 4) *Università di Torino, Incentivo una tantum ai sensi dell'art. 29, comma 19, legge 240/10, 2013, kEuro 1;*
- 5) *Università di Torino, Ricerca Locale 2012, Caratterizzazione degli indicatori di localizzazione della deformazione pre-collasso di edifici vulcanici. Ruolo delle proprietà geomeccaniche degli ammassi rocciosi, 2013-2014, kEuro 3;*
- 6) *Programma di Ricerca di Interesse Nazionale (PRIN) – 2009: Caratterizzazione e modellizzazione di serbatoi naturali di geofluidi in alcune tipologie di rocce carbonatiche deformate, 2011-2013, kEuro 7;*
- 7) *FREEROCK - Fracture Evolution and Solid-Fluid Interaction in Igneous Rocks at Atlantic Volcanic Edifices, Fundacao para a Ciencia e a Tecnologia, Portugal, 2009-2012, kEuro 3;*
- 8) *ENEL-Porto Tolle, Identification of CO2 storage sites for electrical power plants in Upper Adriatic Sea, 2008-2010, kEuro 10;*
- 9) *FP6-2005-NEST-PATH Proposal N. 043386-TRIGS, (Triggering mechanisms in metastable complex systems), 2007-2009, kEuro 50;*
- 10) *Programma Galileo, Accordo bilaterale INGV, Sezione di Roma1-EOST Strasbourg, 2009, kEuro 7;*
- 11) *INGV-DPC V4 FLANK 07-09, Hazard from Etna's flank instability, 2008-2010, kEuro 10;*
- 12) *CNR/CNRS, Accordo Bilaterale, INGV, Sezione di Roma1-EOST Strasbourg, 2005-2007, kEuro 4;*
- 13) *British Council, Young researchers italian-british collaboration, 2003, kEuro 4;*
- 14) *Marie Curie Individual Fellowship, Categoria 'Return', contr. n. HPMF-CT-2001-01225 (12 mesi), kEuro 60;*
- 15) *Rotary Foundation ambassadorial fellowship (9 mesi), 2001-2002, kEuro 15;*
- 16) *Borsa di studio CNR-NATO per attività di studio all'estero, 2000-2001, kEuro 12;*
- 17) *Marie Curie Individual Fellowship, Categoria 30 (post-doctoral), contratto n. FMBICT983260 (24 mesi), kEuro 120;*
- 18) *Università di Catania, Anisotropy sismica del basalto Etno, 2002, kEuro 3;*
- 19) *University College London, Graduate School Equipment Fund. Nov. 1999, kEuro 5.*

## **INTERESSI DI RICERCA**

I miei interessi di ricerca sono interdisciplinari e abbracciano i campi della Sismologia, Vulcanologia, Geologia Strutturale e Tettonofisica e sono finalizzati alla comprensione dei processi deformativi in aree vulcaniche, ma anche in zone di faglia, integrando osservazioni geologiche e geofisiche alla scala del terreno con misure di proprietà fisiche in laboratorio e analisi microstrutturali.

Dopo aver approfondito nella prima parte della mia carriera (1993-1999) le relazioni tra patterns di sismicità e processi eruttivi con tecniche sismologiche e statistiche mi sono interessato ai processi fisici responsabili dell'innescio di eruzioni vulcaniche e terremoti, specializzandomi sullo studio delle proprietà fisiche delle

rocce (1999-presente) e sulla determinazione della variazione delle stesse in funzione di pressione, temperatura e pressione dei fluidi, al fine di interpretare in termini litologici quanto emerge dalle indagini geofisiche e comprendere i processi termo-idro-meccanici che si attivano nelle rocce in occasione di eventi vulcanici, ma anche sismici.

Questo obiettivo è perseguito mediante misure di laboratorio attraverso apparati di deformazione triassiali che consentono una valutazione quantitativa dell'evoluzione di diversi parametri fisici (es. Distribuzione microterremoti, imaging microtomografico, velocità di onde sismiche, permeabilità) in relazione ai processi deformativi e pre-rottura a pressioni litostatiche e idrostatiche e temperature tipiche di crosta superficiale. Attraverso l'integrazione analisi microstrutturali e chimiche post-mortem è possibile di individuare i meccanismi di deformazione che hanno agito (es. rottura fragile o flusso plastico). Questo consente di sviluppare metodologie di monitoraggio microsismico alla mesoscala calibrate sui processi deformativi in atto, che sono state messe in atto con successo su fratture attive in zone dinamicamente instabili.

## **ATTIVITA' DIDATTICA**

- **Docente Titolare del corso** Fisica Terrestre (CFU 9 crediti) per il corso di di Laurea in Scienze Geologiche, Università degli studi di Torino, anno accademico 2016-2017;
- **Docente Titolare del corso** Geomeccanica e applicazioni geologiche (CFU 6 crediti) per il corso di Laurea Magistrale in Scienze Geologiche Applicate, Scienze e Tecnologie Geologiche, Facoltà di Scienze M.F.N., Università degli studi di Torino, anno accademico 2016-2017;
- **Docente Titolare** del corso in Fisica delle Rocce (GEO/05, CFU 6 crediti) per il corso di Laurea Magistrale in Scienze Geologiche Applicate, Scienze e Tecnologie Geologiche, Facoltà di Scienze M.F.N., Università degli studi di Torino, anni accademici 2012-2013 e 2015-2016;
- **Docente Titolare del corso** Sistema terrestre e aspetti applicativi (CFU 9 crediti) per la Scuola di Dottorato in Scienze della Natura e Tecnologie Innovative, Università degli studi di Torino, anno accademico 2015-2016;
- **Docente Titolare** del corso in Reologia dei Geomateriali, (CFU 6 crediti) per la Scuola di Dottorato in Scienze della Natura e Tecnologie Innovative, Università degli studi di Torino, anni accademici 2012-2013 e 2015-2016;
- **Docente titolare** del corso in Plate Tectonics, (10 credits), Department of Earth Sciences, University of Leicester, United Kingdom, anni accademici 2013-2014 e 2014-2015;
- **Docente titolare** del corso in Rock Physics and Natural Hazards, (10 crediti), Department of Earth Sciences, University of Leicester, United Kingdom, anno accademico 2013-2014 e 2014-2015;
- **Docente titolare** del corso in Advanced Field Techniques (Sicily), (10 credits), Department of Earth Sciences, University of Leicester, United Kingdom, anni accademici 2012-2013 e 2014-2015;
- **Docente Titolare** del corso in Rock Mechanics (GEO/03, CFU 8 crediti) per il Corso di Laurea in 'Geoenvironmental resources and risks, Scuola di Scienze e Tecnologie dell'Università di Camerino, anno accademico 2010/2011;
- **Professeur 1st class (equivalente PO)** all' Université de Cergy-Pontoise, Cergy-Pontoise, Francia dal 1 al 31 Luglio 2011 (Ciclo di seminari per studenti di terzo e quarto anno);
- **Professeur 1st class (equivalente PO)** all' Ecole Normale Superieure, Paris, Francia, da 1 al 30 Giugno 2011 (Ciclo di seminari per studenti di terzo e quarto anno);
- **Professeur 2nd class (equivalente PA)** all' Université Louis Pasteur Strasbourg I, Strasbourg, Francia, dal 1 Gennaio al 28 Febbraio 2008 (Ciclo di seminari per studenti di terzo e quarto anno);

## **TESI DOTTORATO**

- Università di Leicester, *Angela Castagna*, Transition from seismic to aseismic slip in flank faults, 2014-2017
- Università di Portsmouth, *Marco Fazio*, Volcano seismicity and fluid-rock coupling: Laboratory simulations of fluid-induced seismicity and implications for eruption forecasting, 2013-2015
- Università di Milano Bicocca, *Francesca Bolognesi*, Brittle deformation in phyllosilicate-rich mylonites: implication for failure modes, mechanical anisotropy, and fault weakness, 2013-2015
- Università di Torino, *Chiara Colombero*, Multiscale geophysical characterisation of unstable rock masses, 2013-2015
- Università di Roma3, *Giulio Speranza*, Rheological behaviour of Messinian Halite: experimental and field analysis and analog modelling, 2011-2013

- Università di Bologna, Italy, *Matteo Maggi*, Fault structure and fluid circulation for the Tenda shear zone, Corsica, France, 2008-2010.
- University of Camerino, Italy, *Riccardo Di Lorenzo*, Petrophysical and mechanical properties of platform-to-basin carbonates, Majella Mountain (Italy), 2008-2010
- University College London, *Michael J. Heap*, Time-dependent brittle deformation in rocks, 2005-2009

### **TESI DI LAUREA**

- University of Leicester, *Lawrence Phillipot*, Physical properties of shallow subvolcanic bodies, pillow lavas and hyaloclastic breccias: Acicastello, Mt. Etna Volcano, Italy, 2014
- University of Leicester, *Thomas Elliot*, Mechanical properties of shallow subvolcanic bodies, pillow lavas and hyaloclastic breccias: Acicastello, Mt. Etna Volcano, Italy, 2014
- Università di Camerino, *Namat Amat*, Physical and mechanical property measurement on tonalite and grainstone samples in dry and wet conditions, 2013;
- Università di Camerino, *Giuseppe Rizzo*, Laboratory analysis for the physical characterisation of porous grainstones, 2009

### **ATTIVITA' ISTITUZIONALI, ORGANIZZATIVE E DI SERVIZIO PER LA DIDATTICA**

- **Collegio Docenti** “Dottorato in Scienze della Terra”, Università di Torino, Cicli 32 (anno accademico 2016-2017), 31 (anno accademico 2015-2016) e 28 (2011-2012);
- **Commissione (Membro) Concorso di ammissione** al “Dottorato in Scienze della Terra”, Università di Torino (Dr 2073 del 08/07/2015), Ciclo 31
- **Commissione (Membro) di Laurea Magistrale** in Scienze Geologiche applicate, Università di Torino, anno accademico 2015-2016
- **Commissione (Presidente) Valutazione candidati per Visiting Professor**, Università di Torino, Progetto “Teaching Mobility” AA 2016-2017
- **Responsabile Progetto Erasmus**, Department of Earth Sciences, University of Leicester, 2013 e 2014
- **External Examiner** Ph.D, Abigail Hackston, Activation of faulting under controlled stress conditions, University of Manchester, UK, Novembre 2013
- **External Examiner** Ph.D, Nicholas Roberts, Earthquake distributions at volcanoes models and field observations, University of Edinburgh, UK, Giugno 2016

### **VOLUMI PUBBLICATI**

1. Rock Physics and Natural Hazards, Eds. **Vinciguerra S.**, Bernabè Y., 166, 5-7, Pure Applied Geophysics, 2009
2. Understanding stress and deformation in active volcanoes, Eds. Gudmundsson A., Acocella V., **Vinciguerra S.**, 471, Issues 1-2, Tectonophysics, 2009

### **PUBBLICAZIONI SU RIVISTE “PEER REVIEWED” (75 articoli: H-index=24; Citazioni=1796)**

#### **Submitted**

Panza E., Agosta F., Rustichelli A., **Vinciguerra S.**, Dobbs M., Ougier-Simonin A., Prosser G., Micro to mesoscales fracture porosity in tight limestones, insights from an integrated field and laboratory investigation, AAPG Bulletin, submitted

#### **2017**

- 1) Fazio M., Benson P., **Vinciguerra S.**, On the generation mechanisms of fluid-driven seismic signals related to volcano tectonics, Geophysical Research Letters, DOI: 10.1002/2016GL070919

#### **2016**

- 1) Rustichelli A., Di Celma C., Tondi E., Baud P, **Vinciguerra S.**, Fibrous gypsum veins as diffuse features and within fault zones: the case study of the Pisco Basin (Ica desert, southern Peru), Journal of the Geological Society of London, 173, 405-418, doi:10.1144/jgs2015-084
- 2) Colombero C., Comina C., **Vinciguerra S.**, Umili G., Multiscale geophysical characterization of an unstable rock

mass, *Tectonophysics*, 675, 275-289.

- 3) Speranza G., Vona A., **Vinciguerra S.**, Romano C., Relating natural heterogeneities and rheological properties of rocksalt: New insights from microstructural observations and petrophysical parameters on Messinian halites from the Italian Peninsula, *Tectonophysics*, 666, 103-120
- 4) Zhu W., Baud P., **Vinciguerra S.**, Wong T.-f., Micromechanics of brittle faulting and cataclastic flow in Mount Etna basalt, *J. Geophys. Res. Solid Earth*, 121, doi:10.1002/2016JB012826.

#### **2015**

- 1) Rustichelli A., Tondi E., Korneva I., Baud P., **Vinciguerra S.**, Agosta F., Reuschlé T., Janiseck J.M., Bedding-parallel stylolites in shallow-water limestone successions of the Apulian Carbonate Platform (central-southern Italy), Special Issue on "Fractured carbonate reservoirs and fluid flow", 134 (3), 513-534.
- 2) Bakker R., Violay M., Benson P., **Vinciguerra S.**, Ductile flow in sub-volcanic carbonate basement as the main control for edifice stability: New experimental insights, *Earth and Planetary Science Letters*, 430, 533-541.
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