

## Europass Curriculum Vitae



### Personal information

**First name(s) / Surname(s)** Denis Sandron  
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**E-mail** dsandron@ogs.trieste.it  
**Nationality** Italian  
**Date of birth** 01.09.1975  
**Gender** Male

### Work experience

**Dates** July 2007 onwards  
**Occupation or position held** Temporary research fellow at "Istituto Nazionale di Oceanografia e di Geofisica Sperimentale –OGS "  
**Main activities and responsibilities** Local seismic responses and site effects, strong motion data inversion, intensity and ground shaking scenarios, earthquake localizations and magnitude estimations.  
**Name and address of employer** Istituto Nazionale di Oceanografia e Geofisica Sperimentale –OGS  
 Borgo Grotta Gigante, 42C - 34010 Sgonico, Trieste (Italy)  
**Type of business or sector** Seismology/Engineering seismology  
**Dates** January 2006 – July 2007  
**Occupation or position held** Collaboration with the Department of Earth Sciences of the University of Trieste  
**Main activities and responsibilities** Strong motion scenarios, ShakeMap, collaboration to the installation and maintenance of the Regional Accelerometric Network (RAF) and of the NE-Italy Broadband Network.  
**Name and address of employer** Department of Earth Sciences  
 Via Weiss, 1 – 34127 Trieste (Italy)  
**Type of business or sector** Seismology  
**Dates** September 2001 – July 2003  
**Occupation or position held** Collaboration with "Università Popolare di Trieste" for teaching Math and Physics at the high school ("Scuola Media Superiore Italiana") of the Italian language minority in Rovinj (Croatia).  
**Main activities and responsibilities** Teacher  
**Name and address of employer** "Scuola Media Superiore Italiana - Srednja Talijanska Skola", Via G. Carducci - 52210 Rovinj (Croazia)  
**Type of business or sector** Math and Physics

### Education and training

**Dates** January 2003 - December 2005  
**Title of qualification awarded** PhD in Geophysics of the Lithosphere and Geodynamics

Principal subjects/occupational skills covered Thesis title: *"Inversion of strong motion data for slip on extended faults: the case of the two M6.5 Iceland earthquake of June 2000"* [in English], supervisor Prof. P. Suhadolc

Name and type of organisation providing education and training Department of Earth Sciences  
Via Weiss, 1 – 34127 Trieste (Italy)

Dates October 1994- December 2001

Title of qualification awarded University degree in Physics

Principal subjects/occupational skills covered Thesis: *"Kinematic Modeling of the rupture process and of the radiation from a finite source"* [in Italian], supervisor Prof. G. F. Panza.

Name and type of organisation providing education and training University of Trieste  
Piazzale Europa, 1 -34127 Trieste, Italy

Dates September 1989- July 1994

Title of qualification awarded Scientific High School graduation

Principal subjects/occupational skills covered Liceo Scientifico Statale "XXV Aprile"  
Corso Martiri della Liberta', 13 - 30026 Portogruaro, Italy

**Personal skills and competences**

Mother tongue(s) **Italian**

Other language(s)

Self-assessment

European level (\*)

**English**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user

(\*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Team work: I worked in various types of teams both in Italy and abroad. For a little period, 1-29 August 2004 and from July, 15 to September, 3 2006, I worked with the seismology group at the Department of Earth Sciences, University of Oxford (UK).  
I participated in the following projects:  
- Research Project of National Interest: "Prediction of ground motion and generation of shaking maps In the near-fault region of an earthquake."  
- National Institute of Geophysics and Vulcanology and Italian Department of Civil Protection 2007-2009 Contract, Seismological Projects: Project S3 – "Fast evaluation of parameters and effects of strong earthquakes in Italy and in the Mediterranean."  
- National Institute of Geophysics and Vulcanology and Italian Department of Civil Protection 2004-2006 Contract, Seismological Projects: Project S4 – "Shake map estimation in real and quasi-real time for earthquakes in Italy."  
- INTERREG PROJECT ITALY-AUSTRIA 2000-2006 : "Seismological Networks without frontiers in the South Eastern Alps"  
- INTERREG IIIB Alpine Space Project "Sismoalp: Seismic risk in alpine valleys  
- PREPARED (EVG1-CT-2002-00073)

Technical skills and competences

During the collaboration with the Department of Earth Sciences of the University of Trieste, I participated in the installation of some new stations and in the maintenance of the Regional Accelerometric Network (RAF) and of the NE-Italy Broadband Network. I became familiar with the Antelope real time system for data collection and seismic data analysis.

Computer skills and competences

Familiar with Windows, Unix/Linux operative systems and with Fortran programming language. Competent with GMT, SAC and other commercial graphic tools (Grapher, Surfer, CorelDraw, Adobe Illustrator, Kaleidagraph).  
Some experience with Matlab and IDL.  
In the field of local effects familiar with: SHAKE2000, EERA/NERA, DEEPSOIL  
In the field of earthquake location: HYPO71

Other skills and competences

Enjoy all sports particularly tennis, ping pong and ski. I have a particular interest on history and art. Love to travel and experience different cultures.



## Additional information

### PAPERS:

M.F. Loreto, F. Zgur, L. Facchin, U. Fracassi, F. Pettenati, I. Tomini, M. Burca, P. Diviaco, C. Sauli, G. Cossarini, C. De Vittor, **D. Sandron** and THE EXPLORA TEAM OF TECHNICIANS, 2012  
*In search of new imaging for historical earthquakes: a new geophysical survey offshore western Calabria (southern Tyrrhenian Sea, Italy).*  
Bollettino di Geofisica Teorica ed Applicata, Vol. 53, n. 4, pp. 385-401; December 2012

**Sandron D.**, Sirovich L., Pettenati F., 2011

*Near-field Response of a 1D-structure Alluvial Site.*

Bulletin of the Seismological Society of America, Vol. 101, No. 6, pp. 2981–2997, December 2011, doi: 10.1785/0120100313

Loreto M. F., Facchin L., Zgur F., Pettenati F., Tomini I., Deponte D., De Vittor C., Cossarini G., **Sandron D.**, OGS-Explora Party, 2011

*Nuove immagini di vecchi terremoti: il rilievo geofisico nel Golfo di Sant'Eufemia (Calabria tirrenica).*  
Geotitalia, 34, 16-19. ISSN 1724-4285

Pettenati F., Sirovich L., **Sandron D.**, 2011

*Rapid simulation of seismic intensities for civil protection purposes: two recent cases in Italy.*

Seismological Research Letters, 82(3), 420-430. doi: 10.1785/gssrl.82.3.420

Sirovich L., Pettenati F., **Sandron D.**, 2009

*Source- and site-effects in the intensities of the M5.4 29 July 2008 Earthquake in South Los Angeles.*

Seismological Research Letters, 80(6), 967-976. doi: 10.1785/gssrl.80.6.967

**Sandron, D.**, Suhadolc, P., Costa, G., 2008

*Source complexity effect on ground shaking scenarios.* Bollettino di Geofisica Teorica ed Applicata, Vol. 49, n.2, June 2008 pp. 227-237. ISSN 0006-6729

Suhadolc, P., **Sandron, D.**, Fitzko, F. and Costa, G., 2004

*Seismic ground motion estimates for the M 6.1 earthquake of July 26, 1963 at Skopje, Republic of Macedonia.* Acta Geod. Geoph. Hung., Vol. 39(2-3), pp. 319-326. ISSN 1217-8977

### REPORTS:

**Sandron D.** and Loreto M. F.; 2011

*ISTEGE Project: modeling of seismogenic sources.* Report 2011/37 CRS 11.

**Sandron D.**, 2011

*Historic (since the beginning of 20th century) and instrumental (since 1977) seismicity recorded in NE Italy: a synthesis. Preliminary Report.* Rel. 2011/60 – CRS 12 RISK. 2011

Rebez A., Renner G., **Sandron D.**, Slejko D., Albin P., Camassi R., Caracciolo C., Castelli V., 2010  
*Protezione Civile Regione Autonoma Friuli Venezia Giulia Contratto n. 67/PC/2010 Progetto Interreg-IV : HAREIA: Historical and Recent Investigation in Italy and Austria. Prima Fase.* Rel. 2010/84 – CRS 15 RISK. 2010

Rebez A., Renner G., **Sandron D.**, Slejko D., Albin P., Camassi R., Caracciolo C., Castelli V., 2010  
*Provincia Autonoma di Bolzano Alto Adige. Convenzione di ricerca n. 65/2010. Progetto Interreg-IV. HAREIA "Historical and Recent Investigation in Italy and Austria". Prima Fase.* Rel. 2010/88 – CRS 17 RISK. 2010

Smerzini C., Paolucci R., Faccioli E., Sirovich L., and **Sandron D.**, 2010

*Numerical simulations of earthquake ground motion in near-fault conditions.* Deliverable D4 Research Programme PRIN 2007, December 22, 2010. <http://rtweb.units.it/prin07/deliverables.htm>, 96 pages.

**Sandron D.**, Sirovich L., Pettenati F., 2010

*Effetti di tarature empiriche (VS/profondita/litologia) di vario dettaglio sulla risposta sismica della piana Gemona-Osoppo-Tarcento* Relazione OGS 2010/50 GDL 19 SITAR. 2010

**Sandron D.**, Sirovich L., Pettenati F., 2009

*Is the strong motion response of a site with shallow alluvium in plain easily foreseeable with standard techniques?* Relazione OGS 2009/48 GDL 18 SITAR. 2009

L. Sirovich, F. Pettenati, **D. Sandron**, L. Petronio, M. Giorgi, P. Suhadolc, G. Costa, L. Moratto, 2009  
*Sintesi sullo scenario sismogenetico più plausibile per la scossa del 6/5/76.* Relazione OGS 2009/43 GDL 16 SITAR. 2009

Costa G., A. Delise, E. Furlanetto, M. Gergolet, L. Moratto, **D. Sandron**, P. Suhadolc, 2007  
*"Bollettino della Rete Accelerometrica del Friuli – Venezia Giulia Anno 2005"* /Dipartimento di Scienze della Terra, Università di Trieste./ (Relazione Interna, Marzo, 2006 e Marzo 2007)

PROCEEDINGS ARTICLES WITH REVIEW:

D. Giordani, S. Marcuzzi and **D. Sandron**, 2012

*SATCOM SUPPORT TO CIVIL PROTECTION ACTIVITIES IN EMERGENCY SITUATIONS: THE ALPSAR PROJECT.* Atti - Tema 2: Caratterizzazione sismica del territorio; 31st Nat. Congress GNGTS; Potenza 20-22 November 2012, ISBN 978-88-902101-2-9

**D. Sandron**, P.L. Bragato, F. Di Bernardo, N. Di Narda, D. Giordani, S. Grimaz, F. Miorin, D. Pesaresi, A. Primiero, A. Rebez and C. Trocca, 2012

*CIVIL PROTECTION MUNICIPAL EMERGENCY PLANS: EARTHQUAKE PROCEDURES IN THE FRAME OF THE REGIONAL PLAN OF EMERGENCIES IN FRIULI VENEZIA GIULIA.* Atti - Tema 2: Caratterizzazione sismica del territorio; 31st Nat. Congress GNGTS; Potenza 20-22 November 2012, ISBN 978-88-902101-2-9

R. Rouhollahi, P. Suhadolc, **D. Sandron**, F. YaminiFard, M. R. Ghayamghamian, M. Tatar  
Estimation of Fault released moment distribution by strong motion inversion of 2003 Bam earthquake. 6th International Conference on Seismology and Earthquake Engineering (SEE-6) and RELASAR Workshop, Tehran, 18-19 May 2011.

**D. Sandron**, A. Rebez, G. Renner, D. Slejko, 2011

*Magnitude computation for the March 18, 1964 Karst Earthquake*, 30th Nat. Congress GNGTS; Trieste 14-17 November 2011.

**D. Sandron**, Loreto M. F., U. Fracassi, P. Suhadolc, 2011

*Ground shaking scenarios: the 8 september 1905 earthquake in the gulf of Santaefemia, offshore weatern Calabria (Southern Tyrrhenian Sea, Italy)*, 30th Nat. Congress GNGTS; Trieste 14-17 November 2011.

M.F. Loreto, D. Civile, **D. Sandron**, M. Zecchin, F. Zgur, L. Facchin, I. Tomini, U. Fracassi, D. Ridente, 2011

Evidenze sismo-tettoniche nel golfo di Sant'Eufemia (Tirreno Meridionale) e possibili implicazioni sulla sorgente del terremoto dell'8 settembre 1905. 30th Nat. Congress GNGTS; Trieste 14-17 November 2011.

**Sandron D.**, Sirovich L., Pettenati F., 2010

Effects of empirical calibration (Vs/Depth/Lithology) on the modellino of the seismic response of the Gemona-Osoppo Plain. 29th Nat. Congress GNGTS; Prato 26-28 October 2010.

Cavallini F., Papaioannou C., Pettenati F., **Sandron D.**, Sirovich L., 2010

Distinguish successes and flops in validating source inversion; a case history in Greece. 29th Nat. Congress GNGTS; Prato 26-28 October 2010.

Smerzini C., **Sandron D.**, Faccioli E., Giorgi M., Maffione S., Petronio L., Paolucci R., Pettenati F., Pinna G., Sirovich L., 2010

Different approaches for generatine round shaking maps in near field: a case study in Friuli region. 29th Nat. Congress GNGTS; Prato 26-28 October 2010.

Pettenati F., **Sandron D.**, Sirovich L., 2010  
Scenari parametrici (intensità) ed effetti di sito; un prototipo per l'area di metropolitana di Salonicco. 29th Nat. Congress GNGTS; Prato 26-28 October 2010.

Loreto M. F., Caburlotto A., Cossarini G., Deponte D., De Vittor C., Facchin L., Fracassi U., Pelos C., Pettenati F., **Sandron D.**, Sauli C., Sormani L., Tomini I., Visnovic P., Cappelli G., Zgur F., 2010  
Progetto ISTEGE – Indagine sismotettonica del terremoto dell'8 settembre 1905 (Mw 7) nel golfo di Sant'Eufemia (offshore tirrenico calabrese)- risultati della crociera di acquisizione dati. 29th Nat. Congress GNGTS; Prato 26-28 October 2010.

Sirovich L., Pettenati F., **Sandron D.**, 2009  
*M5.4 July 29, 2008 Earthquake in South Los Angeles: Source and Site Effects in the Intensities.* 28th Nat. Congress GNGTS; Trieste 16-19 November 2009.

Sirovich L., Pettenati F., **Sandron D.**, 2009  
*Gli scenari rapidi (intensità) dei terremoti di Frignano (2008) e L'Aquila (2009) hanno funzionato ai fini di protezione civile?* 28th Nat. Congress GNGTS; Trieste 16-19 November 2009.

Pettenati F., Sirovich L., **Sandron D.**, Papaioannou C., 2009  
Sorgenti di terremoti greci da inversioni KF di dati macrosismici; 6,5 successi su 8 tentativi. 28th Nat. Congress GNGTS; Trieste 16-19 November 2009.

Sirovich L., Pettenati F., **Sandron D.**, 2008  
*South Los Angeles: Low Seismic Intensities from the July 29, 2008 Earthquake do not Imply Permanent Safety.* 27th Nat. Congress GNGTS; Trieste 6-8 October 2008.

**Sandron D.**, Sirovich L., Pettenati F., Bobbio M., 2008  
*The weak motion response of the Buia (Friuli) SMA-1 accelerometric site.* 27th Nat. Congress GNGTS; Trieste 6-8 October 2008.

Pettenati F., Sirovich L., **Sandron D.**, 2008  
*MMI and ShakeMap® intensities, plus a new back-predicted scenario of the Loma Prieta, 1989 earthquake.* 31st General Assembly of the European Seismological Commission ESC; Hersonissos, Crete, Greece, September 7-12, 2008.

**Sandron D.**, Sirovich L., Bobbio M., 2007  
*Risposta sismica complicata di un sito accelerometrico in pianura, apparentemente semplice: Buia (Friuli).* 26th National Congress GNGTS, Rome 13-15 November 2007.

Costa, G., Moratto, L., **Sandron, D.**, Suhadolc, P., 2007  
*Mappe di scuotimento del suolo in tempo reale e quasi-reale nell'area delle Alpi Sud-Orientali: calibrazione e validazione.* 26th National Congress GNGTS, Rome 13-15 November 2007.

Moratto L., G. Costa, A. Delise, **D. Sandron**, P. Suhadolc, 2006  
*Stime dello scuotimento in tempo reale e quasi-reale per terremoti significativi nell'area delle Alpi Sud-Orientali.* 25th National Congress GNGTS, Rome 28-30 November 2006

**Sandron, D.**, Suhadolc, P., Costa, G., 2006  
*Effetti di complessità di sorgente sugli scenari di scuotimento.* 25th National Congress GNGTS, Rome 28-30 November 2006.

#### POSTERS:

G. Renner, **D. Sandron**, A. Rebez, D. Slejko  
*A reappraisal of the instrumental seismicity of the early 20th century in north-eastern Italy.* 29th Nat. Congress GNGTS; Prato 26-28 October 2010.

Sirovich L., Pettenati F. **Sandron D.**, 2008  
*Achievements and doubts on the new use of Intensity: inversion for unknown sources, future scenarios, hazard, rapid information.* Special Session "Advances in Treating Macroseismic Intensity Data Qualitatively". Annual Meeting of the Seismological Society of America; Santa Fe, New Mexico, USA April 16-18, 2008

- Sirovich L., Pettenati F., **Sandron D.**, Bobbio M., 2008  
Advances in Treating Macroseismic Intensities Quantitatively - n.2, New Parametric Scenarios. 27th Nat. Congress GNGTS ; Trieste 6-8 October, 2008.
- Sirovich L., Pettenati F., **Sandron D.**, Bobbio M., 2008  
Advances in Treating Macroseismic Intensities Quantitatively - n.1, Source Inversions. 27th Nat. Congress GNGTS ; Trieste 6-8 October, 2008.
- Robinson D.P., **Sandron, D.**, Das, S., 2006  
*A Mw 8.1 Earthquake on a Fossil Fracture Zone: The December 23, 2004 Macquarie Ridge Earthquake.* AGU Fall Meeting 2006
- Sandron, D.**, Suhadolc, P., Das, S.; Costa, G., 2006  
*Rupture History and Slip Distribution for two June 2000 Mw 6.5 South Iceland Earthquakes from Strong Motion Inversion.* AGU Fall Meeting 2006