

Curriculum Vitae

GEORG FLORIAN ZELLMER

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PERSONAL DETAILS

Date of birth: 3 September 1972
Nationality: German
Marital status: Married

ACADEMIC QUALIFICATIONS

- PhD Igneous Geochemistry, The Open University, UK, 1999
- MA (Cantab), University of Cambridge, U.K., 1999
- BA (Hons) Earth Sciences, University of Cambridge, UK, 1995

CURRENT POSITIONS

Since 05/2009 Associate Research Fellow, Institute of Earth Sciences, Academia Sinica, Taipei, Taiwan
Adjunct Research Scientist, Lamont-Doherty Earth Observatory, New York, USA

PROFESSIONAL EXPERIENCE

Sabbatical leaves

2011 (Fall) Isotope Imaging Laboratory, University of Hokkaido, Sapporo, Japan
2010 (Summer) GFZ German Research Centre for Geosciences, Helmholtz Centre Potsdam, Germany
2009 (Summer) Institute for Frontier Research on Earth Evolution, JAMSTEC, Japan
2007 (Summer) GeoForschungZentrum Potsdam, Germany
2006 (Fall) Centre of Excellence in Ore Deposits, University of Tasmania, Hobart, Australia

Previous positions

2005 - 2009 Assistant Research Fellow, Institute of Earth Sciences, Academia Sinica, Taipei, Taiwan
2004 - 2009 Adjunct Associate Research Scientist, Lamont-Doherty Earth Observatory, New York, USA
2004 - 2005 SOEST Postdoctoral Research Fellow, University of Hawai'i at Mānoa, Honolulu, USA
2002 - 2004 Lamont Postdoctoral Research Fellow, Lamont-Doherty Earth Observatory, New York, USA
2001 Manager of the Isotope Geochemistry Laboratory, University of Bristol, UK
1999 - 2001 Postdoctoral Research Assistant, Department of Earth Sciences, University of Bristol, UK

EDUCATION

1999 Participation in an International Advanced Studies Course in Hydrogeology and Engineering Geology of the Tropical and Subtropical Regions, University of Tübingen, Germany
1995 - 1998 PhD Igneous Geochemistry, Department of Earth Sciences, The Open University, Milton Keynes, UK.
Thesis advisors: Chris J. Hawkesworth and Simon P. Turner
1992 - 1995 BA (Hons) Earth Sciences, Natural Science Tripos, Trinity College, University of Cambridge, UK
1982 - 1991 German Abitur, Landgraf-Ludwig-Gymnasium, Giessen, Germany

SELECTED HONOURS AND AWARDS

2010 Global Centre of Excellence Visiting Professorship, Tohoku University, Sendai, Japan
2009 Japan Society for the Promotion of Science Conference Grant as invited participant, Japan Geoscience Union meeting, Japan
2002 - 2004 Lamont-Doherty Postdoctoral Fellowship, Columbia University, New York, USA
2000 Royal Society Conference Grant as invited participant, State of the Arc meeting, New Zealand
1995 - 1998 Graduate Fellowship, The Open University, UK

PROFESSIONAL SKILLS

- Leadership in international scientific collaborations with researchers from five continents
- Laboratory management, and analysis and interpretation of geochemical and mineralogical data
 - Major and trace elements: XRF, INAA and ICPMS, EPMA, LA-ICPMS, and SIMS
 - U-series and Sr-Nd-Hf isotopes: TIMS and MC-ICPMS
 - Melt inclusion preparation and analysis (FTIR, EPMA, LA-ICPMS)
 - Nomarski differential interference contrast (NDIC) imaging, and micromilling of crystal growth zones
- Ground- and air-based COSPEC and open-path FTIR spectrometry; direct and remote analysis of volcanic gases, volcanic aerosol collection and analysis

TEACHING AND MENTORING EXPERIENCE

Lecturer	Convergent plate boundary volcanism in the Trans-Mexican Volcanic Belt, EHz University Consortium graduate-level volcanology course (Spring Semester 2008) Rates of Magmatic Processes (within 20449070 Geochemistry), Department of Geosciences, National Taiwan University (2006-2008) W4113 Introduction to Mineralogy, Department of Earth and Environmental Sciences, Columbia University (2003)
Mentor	Academia Sinica postdoctoral research fellow Sébastien Jégo (2008-2010), now postdoc at Rice University.
Supervisor	Instruction of undergraduate and graduate students in micromilling and isotope laboratory work, Lamont-Doherty Earth Observatory, Columbia University (2003) Instruction of graduate students in isotope laboratory work, Department of Earth Sciences, University of Bristol (2001)
Teaching Assistant	G8884 Advanced Geochemistry, Department of Earth and Environmental Sciences, Columbia University (2002) S236 Geology, Earth Science Summer School, The Open University (1996-1998)

FIELDWORK EXPERIENCE

2011	Fieldwork and sample collection in the Auckland Volcanic Field and the Taupo Volcanic Zone, New Zealand
2009	Fieldwork and sample collection in Kyushu and western Honshu, Southwest Japan Volcanic Arc
2008	Fieldwork and sample collection in Krafla, Iceland, and in the Central and Southern Andes (Chile and Bolivia)
2007 - 2009	Fieldwork and volcanic gas and aerosol sampling in the Tatun Volcanic Group, Northern Taiwan
2002	Fieldwork in the Altiplano, Northern Chile, in collaboration with the Chilean Geological Survey
1999	Fieldwork, monitoring, and sample collection on Montserrat, West Indies, in collaboration with the Montserrat Volcano Observatory
1998	Fieldwork and sample collection on St. Kitts, West Indies
1996	Fieldwork and sample collection on Santorini, Nisyros, Milos and Methana, Greece
1994	Mapping the geology of the Saint John area, New Brunswick, Canada
1993	Fieldwork on Stromboli, Italy

SELECTED KEYNOTE AND INVITED TALKS

2011	IUGG General Assembly, Melbourne, Australia (<i>Keynote address</i>)
2010	Department of Earth and Planetary Materials Sciences, Tohoku University, Sendai, Japan
2009	Geophysical Institute, University of Alaska at Fairbanks, Alaska, USA Japan Geoscience Union Meeting, Chiba City, Japan
2008	Goldschmidt Conference, Vancouver, Canada (<i>Keynote address</i>)
2007	Geochemistry Department, Geoforschungszentrum Potsdam, Germany
2006	IAVCEI International Conference on Continental Volcanism, Guangzhou, China
2005	Department of Earth Sciences, University of Cambridge, UK
2004	Department of Earth Sciences, University of Oxford, UK
2003	State of the Arc Conference, Mount Hood, Oregon, USA (<i>Keynote address</i>)

FUNDED RESEARCH

Active grants

- National Science Council, R.O.C. (2010-2012; NSC 99-2116-M-001-010, NSC 100-2116-M-001-007), "Stress-field controls on magma dynamics and associated volcanic emissions: I-II" (TWD 3,297,000); lead-PI.
- Academia Sinica research, instrument and conference grant (2012; TWD 525,000); lead-PI.

Selected previous grants

- Miscellaneous Academia Sinica research, instrument and conference grants (2006-2011; TWD 5,680,000); lead-PI.
- Academia Sinica postdoctoral fellowship grant for Dr. Sébastien Jégo (2008-2010), "Investigating adakite petrogenesis and associated ore deposits through experimental petrology" (TWD 1,615,000); lead-PI.
- National Science Council, R.O.C. (2006-2010; NSC 95-2116-M-001-006, 96-2116-M-001-006, 97-2628-M-001-027-MY2), "Constraining magmatic processes through geochronology and volcanic gas geochemistry: I-III" (TWD 7,773,000); lead-PI.
- National Science Council, R.O.C. (2007-2008 & 2009-2010; NSC 96-2811-M-001-023, NSC 98-2811-M-001-052), "Constraining magmatic processes in the Trans-Mexican Volcanic Belt" (TWD 1,456,000); lead-PI for visiting researcher Dr. Susanne Straub of the Lamont-Doherty Earth Observatory.
- National Science Council, R.O.C. (2009; NSC 98-2918-I-001-014), "Testing a new model for the genesis of adakitic rocks at global volcanic arcs: the case of SW Japan" (TWD 408,000); lead-PI.
- National Science Council, R.O.C. (2007 Conference Grant), "International Conference on Evolution and Transfer of Magmas and Volcanic Gases" (TWD 300,000); lead-PI.
- National Science Foundation, U.S.A. (2007 Conference Grant), "International Conference on Evolution and Transfer of Magmas and Volcanic Gases" (USD 25,000); co-PI with lead-PI Tobias Fischer.
- Lamont-Doherty Earth Observatory, U.S.A. (2002-2004; Lamont Fellowship), "Processes and timescales of crystallization in magmatic environments determined by diffusional modification of trace element profiles in plagioclase crystals" (USD 200,000); lead-PI.
- National Environmental Research Council, U.K. (1999-2001; NERC ion microprobe and U-series facility grants IMP/159/0400, IP/633/0999), "Magmatic evolution of Soufriere Hills volcano, Montserrat, W.I." (GBP 27,000); lead-PI.

PUBLIC SERVICE

- Editorial Board Member, *Journal of Volcanology and Geothermal Research*
- Guest Editor for the *Geological Society of London* and the *Journal of Volcanology and Geothermal Research*
- Principle organizer of the International Conference on Evolution, Transfer and Release of Magmas and Volcanic Gases, Institute of Earth Sciences, Academia Sinica, Apr. 22-27, 2007
- VGP (Volcanology Geochemistry Petrology) representative of the 2010 AGU Western Pacific Geophysical Meeting, Taipei.
- Co-organizer, convener, and chair at international conferences (2006 AGU Fall Meeting; 2007 International Conference on Gas Geochemistry; 2008 IAVCEI General Assembly; 2009 AGU Fall Meeting; 2010 Western Pacific Geophysics Meeting; 2011 Japan Geoscience Union Meeting; 2011 IUGG General Assembly)
- Reviewer for over 15 Science Citation Index journals, including *Earth and Planetary Sciences Letters*, *Geochimica Cosmochimica Acta*, *Geology*, *Journal of Petrology*, *Journal of Geophysical Research (Solid Earth and Atmospheres)*, *Contributions to Mineralogy and Petrology*, *Lithos*, *Geophysical Research Letters*, *Journal of Metamorphic Geology*, *Journal of the Geological Society*, and *Journal of Volcanology and Geothermal Research*
- Reviews for funding agencies: National Science Foundation (USA), National Environmental Research Council (UK), The Leverhulme Trust (UK), FONDECYT (Chile)
- Judge, 2005 Hawai'i State Science and Engineering Fair and 2011 AGU Outstanding Student Paper Awards, and participation at a variety of public outreach events, including the Open University Open House and the Lamont Open House

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- International Association of Volcanology and Chemistry of the Earth's Interior (*Life Member*)
- American Geophysical Union (*Life Member*)
- Geochemical Society

LANGUAGES AND OTHER SKILLS

- German (mother tongue), English (fluent), French (basic, taken for 5 years in high school)
- MS Windows, Mac OS and UNIX based modelling, FORTRAN and Borland Delphi programming experience
- Certified Rescue Diver (Professional Association of Diving Instructors)
- Work experience with the German Red Cross (1991-1992), qualifying as an assistant paramedic

List of publications

EDITED BOOKS / SPECIAL ISSUES

- Zellmer G.F.**, Fischer T.P., Chen C.-H. (eds) 2008. Evolution, transfer and release of magmas and volcanic gases. *Journal of Volcanology and Geothermal Research* 178, issue 4.
- Annen C., **Zellmer G.F.** (2008) Dynamics of crustal magma transfer, storage, and differentiation. *Geological Society, Special Publications*, 304. ISBN 978-1-86239-258-8.

PEER-REVIEWED ARTICLES (> 540 citations, h index 12)

- Zellmer G.F.**, Dulski P., Iizuka Y. (2012) Combined major and trace element LA-ICP-MS analysis of compositional variations in simple solid solutions through cross-correlation with an EPMA-characterized working standard. *Microscopy and Microanalysis*, in press.
- Zellmer G.F.**, Iizuka Y., Miyoshi M., Tamura Y., Tatsumi Y. (2012) Lower crustal H₂O controls on the formation of adakitic melts. *Geology*, in press.
- Shellnutt J.G., Wang K.-L., **Zellmer G.F.**, Iizuka Y., Jahn B.-M., Pang K.-N., Qi L., Zhou M.-F. Three Fe-Ti oxide ore-bearing gabbro-granitoid complexes in the Panxi Region of the Permian Emeishan Large Igneous Province, SW China. *American Journal of Sciences*, in press.
- Straub S.M., **Zellmer G.F.** Volcanic arcs as archives of plate tectonic change. *Gondwana Research*, in press.
DOI: 10.1016/j.gr.2011.10.006
- Zellmer G.F.**, Sheth H.C., Iizuka Y., Lai Y.-J. (2012) Remobilization of granitoid rocks through mafic recharge: evidence from basalt-trachyte mingling and hybridization in the Manori-Gorai area, Mumbai, Deccan Traps. *Bulletin of Volcanology* 74, 47-66. DOI: 10.1007/s00445-011-0498-4
- de Ronde C.E.J., Massoth G.J., Butterfield D.A., Christenson B.W., Ishibashi J., Ditchburn R.G., Hannington M.D., Brathwaite R.L., Lupton J.E., Kamenetsky V.S., Graham I.J., **Zellmer G.F.**, Dziak R.P., Embley R.W., Dekov V.M., Munnik F., Lahr J., Evans L.J., Takai K. (2011) Submarine hydrothermal activity and gold-rich mineralization at Brothers volcano, Kermadec arc, New Zealand. *Mineralium Deposita* 46, 541-584. DOI:10.1007/s00126-011-0345-8
- Straub S.M., Gomez-Tuena A., Stuart F.M., **Zellmer G.F.**, Cai, Y., Espinasa-Perena, R. (2011) Formation of hybrid arc andesites beneath thick continental crust. *Earth and Planetary Science Letters* 303, 337-347.
DOI:10.1016/j.epsl.2011.01.013
- Schmitt A.K., Perfit M.R., Rubin K.H., Stockli D.F., Smith M.C., Cotsonika L.A., **Zellmer G.F.**, Ridley I., Lovera O.M. (2011) Rapid cooling rates at an active mid-ocean ridge from zircon thermochronology. *Earth and Planetary Science Letters* 302, 349-358. DOI:10.1016/j.epsl.2010.12.022
- Zellmer G.F.**, Rubin K.H., Dulski P., Iizuka Y., Goldstein S.L., Perfit M.R. (2011) Crystal growth during dike injection of MOR basaltic melts: evidence from preservation of local Sr disequilibria in plagioclase. *Contributions to Mineralogy and Petrology* 161, 153-173. DOI:10.1007/s00410-010-0518-y
- Shellnutt J.G., **Zellmer G.F.** (2010) High-Mg andesite genesis by upper crustal differentiation. *Journal of the Geological Society* 167, 1081-1088. DOI:10.1144/0016-76492010-070
- Belousov A., Belousova M., Chen C.-H., **Zellmer, G.F.** (2010) Deposits, character and timing of recent eruptions and large-scale collapses in Tatun Volcanic Group, Northern Taiwan: hazard-related issues. *Journal of Volcanology and Geothermal Research* 191, 205-221. DOI:10.1016/j.jvolgeores.2010.02.001
- Zellmer G.F.** (2009) Petrogenesis of Sr-rich adakitic rocks at volcanic arcs: insights from global variations of eruptive style with plate convergence rates and surface heat flux. *Journal of the Geological Society of London* 166, 725-734. DOI:10.1144/0016-7649.2008-072
- Rubin K.H., **Zellmer G.F.** (2009) Reply to Comment on "On the recent bimodal magmatic processes and their rates in the Torfajökull-Veidivötn area, Iceland" by K.M. Cooper. *Earth and Planetary Science Letters* 281, 115-123.
DOI:10.1016/j.epsl.2009.02.008
- Shellnutt J.G., Zhou M.-F., **Zellmer G.F.** (2009) The role of Fe-Ti oxide crystallization in the formation of A-type granitoids with implications for the Daly gap: an example from the Permian Baima Igneous Complex. *Chemical Geology* 259, 204-217. DOI:10.1016/j.chemgeo.2008.10.044

- Witt M., Fischer T.P., Pyle D.M., Yang T.F., **Zellmer G.F.** (2008) Fumarole compositions and mercury emissions from the Tatum Volcanic Field, Taiwan: Results from multi-component gas analyser, portable mercury spectrometer and direct sampling techniques. *Journal of Volcanology and Geothermal Research* 178, 636-643.
DOI:10.1016/j.jvolgeores.2008.06.035
- Zellmer G.F.** (2008) Some first order observations on magma transfer from mantle wedge to upper crust at volcanic arcs. In: Annen, C. & Zellmer, G. F. (eds) Dynamics of crustal magma transfer, storage and differentiation. *Geological Society, Special Publications* 304, 15-31. DOI:10.1144/SP304.2
- Zellmer G.F.**, Annen C. (2008) An introduction to magma dynamics. In: Annen, C. & Zellmer, G. F. (eds) Dynamics of crustal magma transfer, storage and differentiation. *Geological Society, Special Publications*, 304, 1-13. DOI:10.1144/SP304.1
- Zellmer G.F.**, Rubin K.H., Grönvold, K., Jurado-Chichay Z. (2008) On the recent bimodal magmatic processes and their rates in the Torfajökull-Veidivötn area, Iceland. *Earth and Planetary Science Letters* 269, 387-397. DOI:10.1016/j.epsl.2008.02.026
- Zellmer G.F.**, Turner S.P. (2007) Arc dacite genesis pathways: evidence from mafic enclaves and their hosts in Aegean lavas. *Lithos* 95, 346-362. DOI:10.1016/j.lithos.2006.08.002
- Zellmer G.F.**, Clavero J.E. (2006) Using trace element correlation patterns to decipher sanidine crystal growth chronologies: an example from Taapaca volcano, Central Andes. *Journal of Volcanology and Geothermal Research* 156, 291-301. DOI:10.1016/j.jvolgeores.2006.03.004
- Zellmer G.F.**, Annen, C., Charlier, B.L.A., George, R.M.M., Turner, S.P., Hawkesworth, C.J. (2005) Magma evolution and ascent at volcanic arcs: constraining petrogenetic processes through rates and chronologies. *Journal of Volcanology and Geothermal Research* 140, 171-191. DOI:10.1016/j.jvolgeores.2004.07.020
- Hawkesworth C.J., George R.M.M., Turner S.P., **Zellmer G.F.** (2004) Timescales of magmatic processes. *Earth and Planetary Science Letters* 218, 1-16. DOI:10.1016/S0012-821X(03)00634-4
- Zellmer G.F.**, Sparks R.S.J., Hawkesworth C.J., Wiedenbeck M. (2003) Magma emplacement and remobilisation timescales beneath Montserrat: insights from Sr and Ba zonation in plagioclase phenocrysts. *Journal of Petrology* 44, 1413-1431. DOI:10.1093/petrology/44.8.1413
- Zellmer G.F.**, Hawkesworth C.J., Sparks R.S.J., Thomas L.E., Harford, C.L., Brewer T.S., Loughlin, S.C. (2003) Geochemical evolution of the Soufrière Hills volcano, Montserrat, Lesser Antilles volcanic arc. *Journal of Petrology* 44, 1349-1374. DOI:10.1093/petrology/44.8.1349
- Hawkesworth C.J., George R.M.M., Turner S.P., **Zellmer G.F.** (2003) Estimating the time scales of magmatic processes. In: Bodnar R.J., De Vivo B. (Eds) Melt inclusions in volcanic systems: methods, applications and problems. *Developments in Volcanology* 5, 23-43. DOI:10.1016/S1871-644X(03)80022-0
- Charlier B.L.A., ***Zellmer G.F.** (2000) Some remarks on U-Th mineral ages from igneous rocks with prolonged crystallization histories. *Earth and Planetary Science Letters* 183, 457-469. DOI:10.1016/S0012-821X(00)00298-3
- Turner S.P., George R.M.M., Evans P.J., Hawkesworth C.J., **Zellmer G.F.** (2000) Time-scales of magma formation, ascent and storage beneath subduction-zone volcanoes. In: Causes and consequences of eruptions of andesite volcanoes. *Philosophical Transactions of the Royal Society A* 358, 1443-1464. DOI:10.1098/rsta.2000.0598
- Hawkesworth C.J., Blake S., Evans P., Hughes R., Macdonald R., Thomas L.E., Turner S.P., **Zellmer G.F.** (2000) Time Scales of Crystal Fractionation in Magma Chambers—Integrating Physical, Isotopic and Geochemical Perspectives. *Journal of Petrology* 41, 991-1006. DOI:10.1093/petrology/41.7.991
- Zellmer G.F.**, Turner S.P., Hawkesworth C.J. (2000) Timescales of destructive plate margin magmatism: new insights from Santorini, Aegean volcanic arc. *Earth and Planetary Science Letters* 174, 265-281. DOI:10.1016/S0012-821X(99)00266-6
- Zellmer G.F.**, Blake S., Vance D., Hawkesworth C., Turner S. (1999) Plagioclase residence times at two island arc volcanoes (Kameni islands, Santorini, and Soufriere, St. Vincent) determined by Sr diffusion systematics. *Contributions to Mineralogy and Petrology* 136, 345-357. DOI:10.1007/s004100050543

NON-PEER REVIEWED ARTICLES

- Zellmer G.F.** (2010) Book review of "Studies in Volcanology: The Legacy of George Walker" (Special Publications of IAVCEI No. 2, edited by T. Thordarson, S. Self, G. Larsen, S. K. Rowland and Á. Höskuldsson). *Journal of Asian Earth Sciences* 38, 170-172. DOI:10.1016/j.jseaes.2009.12.007
- Zellmer G.F.**, Fischer T.P., Chen C.H. (2008) Evolution, transfer and release of magmas and volcanic gases: an introduction. *Journal of Volcanology and Geothermal Research* 178, v-vii. DOI:10.1016/j.jvolgeores.2008.07.001

Zellmer G.F. (2007) MAG2007 – An overview of the international conference on evolution, transfer and release of magmas and volcanic gases. *IAVCEI News* 2007 No.1, 3-5.

RECENT CONFERENCE ABSTRACTS

Zellmer G.F., Iizuka Y., Miyoshi M., Tamura Y., Tatsumi Y. (2011) Lower crustal H₂O control on the formation of adakitic melts. *Eos Trans. AGU*, 92, Fall Meet. Suppl., Abstract V43C-2583.

Straub S.M., **Zellmer G.F.**, Gómez-Tuena A., Stuart F., Espinasa-Perena R., Cai Y. (2011) Mantle origin of silicic calc-alkaline basalts to andesites in the Central Mexican Volcanic Belt. *Eos Trans. AGU*, 92, Fall Meet. Suppl., Abstract V32C-04.

Zellmer G.F., Dulski P., Iizuka Y., Perfit M.R. (2011) Rates and processes of crystallization in on-axis and off-axis MOR basaltic melts. XXV IUGG General Assembly, 28 June - 7 July, Melbourne, Australia.

Zellmer G.F., Miyoshi M., Tamura Y., Iizuka Y. (2011) Surface heat flow variations at continental arcs: exploring the effects of magma flux rates, ponding depths, and volatile contents. XXV IUGG General Assembly, 28 June - 7 July, Melbourne, Australia.

Straub S.M., Gómez-Tuena A., Stuart F.M., **Zellmer G.F.**, Cai Y., Espinasa-Perena R. (2011) Monogenetic volcanoes in the Central Mexican Volcanic Belt record silicic slab flux to subarc mantle sources. XXV IUGG General Assembly, 28 June - 7 July, Melbourne, Australia.

Straub S.M., Gómez-Tuena A., Stuart F.M., **Zellmer G.F.**, Espinasa-Perena R., Cai Y., Iizuka Y. (2011) High-Ni olivines and the mantle origin of arc andesites. XXV IUGG General Assembly, 28 June - 7 July, Melbourne, Australia.

Straub S.M., Gómez-Tuena A., Stuart F., **Zellmer G.F.**, Cai Y., Espinasa-Perena R. (2010) High-Ni olivines and the mantle origin of arc andesites in the Central Mexican Volcanic Belt. *Eos Trans. AGU*, 91, Fall Meet. Suppl., Abstract V54A-07.

Zellmer G.F., Shellnutt J.G. (2010) High-Mg andesite genesis by upper crustal differentiation. State of the Arc 5, 19-25. September, Syros and Santorini, Greece.

de Ronde C.E.J., Massoth G.J., Butterfield D.A., Christenson B.W., Ishibashi J., Ditchburn R.G., Hannington M.D., Brathwaite R.L., Lupton J.E., Dziak R.P., Kamenetsky V.S., Graham I.J., **Zellmer G.F.** (2010) Submarine hydrothermal activity and gold-rich mineralization at Brothers volcano, Kermadec arc, New Zealand. 20th General Meeting of the International Mineralogical Association, 21-27 August, Budapest, Hungary.

Zellmer G.F., Sheth H.C., Iizuka Y., Lai Y.-J. (2010) Melting and remobilization of felsic protoliths through mafic recharge: evidence from basalt-trachyte mingling in Mumbai, Deccan Traps. Western Pacific Geophysics Meeting, 22-25 June, Taipei, Taiwan.

Belousov A., Belousova M., Chen C.-H., **Zellmer G.F.** (2010) Deposits, character and timing of recent eruptions and large-scale collapses in Tatun Volcanic Group, Northern Taiwan: hazard-related issues. Western Pacific Geophysics Meeting, 22-25 June, Taipei, Taiwan.

Straub S.M., Gómez-Tuena A., Cai Y., Stuart F., **Zellmer G.F.**, Espinasa-Perena R. (2010) Are primary arc magmas in the Central Mexican Volcanic Belt basaltic or andesitic? Western Pacific Geophysics Meeting, 22-25 June, Taipei, Taiwan.

Jego S., Nakamura M., Kimura J., Iizuka Y., **Zellmer G.F.** (2010) Gold (Au) solubility in arc magmas: effect of pressure in S-free and S-bearing hydrous silicate melts. Western Pacific Geophysics Meeting, 22-25 June, Taipei, Taiwan.

Kamenetsky V.S., Kamenetsky M.B., Chung S.L., Maas R., Yaxley G.M., **Zellmer G.F.**, Kuzmin D.V. (2010) Primary melts of the Emeishan and Karoo flood basalts: Linking Ni potential of the magmas and their mantle sources. 11th International Platinum Symposium, 21-24 June, Sudbury, Ontario, Canada.

Zellmer G.F., Sheth H.C., Iizuka Y., Lai Y.-J. (2010) Melting and remobilization of felsic protoliths through mafic recharge: evidence from basalt-trachyte mingling in Mumbai, Deccan Traps. EGU General Assembly, 2-7 May, Vienna, Austria.

Zellmer G.F., Shellnutt J.G. (2009) Genesis of high-Mg andesites through shallow fractionation of primitive arc basalts at elevated oxygen fugacities. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V31B-1962.

Straub S.M., Gómez-Tuena A., **Zellmer G.F.**, Cai Y., Stuart F.M., Espinasa-Perena R., Langmuir C.H., Goldstein S.L. (2009) The origin of 'OIB-type' magmas in the Central Mexican Volcanic Belt. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V31B-1966.

Zellmer G.F., Rubin K.H., Grönvold, K., Jurado-Chichay Z. (2009) Rates of magmatic processes from U-series in historical eruptions at Askja and Krafla volcanoes, Iceland. *Geochimica et Cosmochimica Acta*, 73(13), Suppl. 1, A1499.

For a complete list of over 50 published abstracts since 1997, please refer to: <http://www.earth.sinica.edu.tw/~gzellmer/>