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S03.14 - From old cauldrons to young quaternary calderas: context, processes, and economic potentials for geothermal energy and ore resources

Time	ID	Title	Author Name	Affiliations	Presenter Name
8.30 - 8.45	89	Evidence For A Miocene Caldera-Forming Eruption at Pucará (Azuay, southern Ecuador)	Mulas Maurizio (1) Aviles Moran Harry Steven (1) Flor Jimenez Milton Alejandro (1) Sanclemente Ordoñez Eddy Ruben (1) Jean-Luc Le Pennec (2) Eduardo Diaz (1)	(1) Escuela Superior Politécnica del Litoral, ESPOL, Facultad de Ingeniería en Ciencias de la Tierra, Campus Gustavo Galindo Km 30.5 Vía Perimetral, P.O. Box 09-01-5863, Guayaquil, Ecuador (2) Laboratoire Magmas et Volcans, Université Clermont Auvergne, CNRS, IRD, OPGC, F-63000 Clermont-Ferrand, France	Maurizio Mulas
8.45 - 9.00	246	Defining the initial development strategy for the Borinquen geothermal field (Cañas Dulces caldera, Costa Rica)	Joan Martí (1) Fernando Molina (2)	(1) Group fo Volcanology, Institute of Earth Sciences Jaume Almera, CSIC, Barcelona, Spain (2) Área de Geociencias, Centro de Servicios Recursos Geotérmicos, Instituto Costarricense de Electricidad, 50601 Guanacaste, Costa Rica	Joan Martí
9.00 - 9.15	131	Reactivation of the Los Humeros volcanic complex (Mexico), implications for the geothermal field and hazards	Gerardo Carrasco-Núñez 1 Guido Giordano 2 Pablo Dávila 3 Gianluca Norini 4 Steven Barrios 1 Jaime Cavazos 1 Javier Hernández 1	1 Centro de Geociencias, Universidad Nacional Autónoma de México, Campus Juriquilla, Queretaro, Mexico 2 University of Roma Tre, Roma, Italy 3 División de Geociencias Aplicadas, IPICYT, San Luis Potosí, Mexico Consiglio Nazionale delle Ricerche, Milano, Italy	Gerardo Carrasco
9.15 - 9.30	820	Structure of the Los Humeros geothermal field, Mexico, using seismic noise tomography	Ivan Granados (1) Marco Calò (1) Angel Figueroa Soto (2) Luis Oregel (2) Tania Andrea Toledo Zambrano (3) Joana Martins (4) Philippe Jousset (3) Mathieu Pertou (1)	(1) UNAM. Universidad Nacional Autónoma de México (2) UMSNH. Universidad Michoacana de San Nicolás de Hidalgo (3) GFZ-Potsdam (4) TNO One	Ivan Granados
9.30 - 9.45	719	Petrogenesis of the magmatic heat source of the Los Humeros caldera geothermal field	Federico Lucci (1) Gerardo Carrasco-Nunez (2) Guido Giordano (1) Federico Rossetti (1)	(1) Università Roma Tre, Italy (2) UNAM	Guido Giordano
9.45 - 10.00	809	Induced and triggered events in geothermal fields following large earthquakes. The example of the Los Humeros Caldera, Mexico	Joel Angulo (1) Marco Calò (1) Angel Figueroa Soto (2) Philippe Jousset (3)	(1) UNAM Universidad Nacional Autónoma de México (2) UMSNH Universidad Michoacana de San Nicolás de Hidalgo (3) GFZ Potsdam, Germany	Joel Angulo Carrillo
10.00 - 10.15	654	Link between gulf-inherited regional structures and hydrothermal circulation inside La Reforma Pleistocene caldera complex, Baja California Sur, Mexico	Claudia Pelliccioli (1, 2) Gianluca Gropelli (2) José Luis Macias (3) Roberto Sulpizio (2, 4)	(1) Dipartimento di Scienze della Terra "Ardito Desio", Università degli Studi di Milano, Milano, Italy (2) Istituto per la Dinamica dei Processi Ambientali - Sezione di Milano, Consiglio Nazionale delle Ricerche, Milano, Italy (3) Instituto de Geofísica, Universidad Nacional Autónoma de México, Morelia, Michoacán, México (4) Dipartimento di Scienze della Terra e Geoambientali, Università degli Studi di Bari Aldo Moro, Bari, Italy	Claudia Pelliccioli
10.15 - 10.30	520	The Tulancingo multi-collapse graben caldera and the intra-caldera Acozulco lava dome complex, central-eastern México: A potential site for geothermal energy	Gerardo J. Aguirre-Díaz (1) Aida López-Hernández (2) Eduardo González-Partida (1) Erik Díaz-Carreño (1) Mariana Coutiño-Taboada (1) Katia Jasso-Torres (1) Gerardo Garay-Delgado (1) Miguel A. Ramírez-Montes (3)	(1) Centro de Geociencias UNAM (2) Universidad Michoacana de San Nicolás de Hidalgo (3) Gerencia de Proyectos Geotermoeléctricos. CFE	Gerardo J. Aguirre-Díaz

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S03.02 - Health hazards of volcanic eruptions: towards improved preparedness and resilience and reduced impact

Time	ID	Title	Author Name	Affiliations	Presenter Name
14.30 - 14.45	612	Volcanic fatalities: threat to life with distance and victim classification	Sarah K Brown (1) Susanna F Jenkins (2) Steve Sparks (1)	(1) School of Earth Sciences, University of Bristol, Bristol, UK (2) Earth Observatory of Singapore, Nanyang Technological University, Singapore	Sarah K Brown
14.45 - 15.00	704	Revisiting the health impact of the degassing at Masaya, Nicaragua.	Peter Baxter (1) Evgenia Ilyinskaya (2)	(1) University of Cambridge (2) University of Leeds	Peter Baxter
15.00 - 15.15	529	It ain't over till it's over: A latent health impact of an Icelandic large fissure eruption (Holuhraun 2014-2015) through exposure to mature, sulphate-rich, volcanic cloud	Hanne Carlsen (1) Evgenia Ilyinskaya (2) Peter Baxter (3) Unnur Valdimarsdóttir (4) Haraldur Briem (6) Francesca Dominici (5) Ragnhildur Gudrun Finnbjörnsdóttir (7) Thorsteinn Jóhannsson (7) Thor Aspelund (8) Thorarinn Gislason (9) Thorolfur Guðnason (5) Throstr Thorsteinsson (1) Anja Schmidt (10) Melissa Pfeffer (11) Sara Barsotti (11)	(1) Environment and Natural Resources, University of Iceland (2) School of Earth and Environment, University of Leeds (3) Cambridge Institute of Public Health, University of Cambridge School of Clinical Medicine (4) Centre of Public Health Sciences, University of Iceland (5) Chief Epidemiologist, Directorate of Health, Centre for Health Threats and Communicable Diseases, (6) Department of Biostatistics, Harvard T.H. Chan School of Public Health (7) The Environment Agency of Iceland (8) School of Health Sciences, University of Iceland (9) Faculty of medicine, University of Iceland (10) Department of Geography, University of Cambridge (11) Icelandic Meteorological Office	Evgenia Ilyinskaya
15.15 - 15.30	638	Microscopic Monitoring of Laboratory Based Physical Disintegration Ratio of Fibrous Zeolite Crystals from Cappadocian Altered Ignimbrites (Turkey)	Efe Akkaş (1) H. Evren Çubukçu (1) Volkan Erkut (1) Lutfiye Akin (1) Yasin Yurdakul (1) İnan Ulusoy (1) Erdal Şen (1))	(1) Hacettepe University, Department of Geological Engineering, 06800, Ankara, Turkey	Efe Akkaş
15.30 - 15.45	1200	Environmental health consequences of the 2017-ongoing Ambae eruption, Vanuatu	Carol Stewart (1) Graham Leonard (2) Sandrine Cevuard (3) Esline Garaebiti (3) Aaron Tregoweth (4) Mike Rosenberg (2) Geoff Kilgour (2) Tom Wilson (5) Emily Limage (6)	(1) Massey University (2) GNS Science (3) VMGD (4) NZ Defence Force (5) University of Canterbury (6) Auckland University	Carol Stewart
15.45 - 16.00	558	Distribution of volcanogenic elements in Vanuatu: Impacts to health and agriculture from volcanic degassing and deposition	Emily Limage (1), Shane Cronin (1)	(1) University of Auckland	Emily Limage
16.00 - 16.15	775	The impact of in-plume ash-gas interactions on the respiratory health hazard of volcanic ash: an in vitro study	Ines Tomašek (1,2) Claire J. Horwell (1) David E. Damby (3) Paul M. Ayris (4) Pierre Delmelle (5) Christopher J. Ottley (6) Pablo Cubillas (6) Ana S. Casas (4) Christoph Bisig (2) Alke Petri-Fink (2,7) Martin J. D. Clift (8) Barbara Drasler (2) Barbara Rothen-Rutishauser (2)	(1) Institute of Hazard, Risk and Resilience, Department of Earth Sciences, Durham University (2) BioNanomaterials, Adolphe Merkle Institute, University of Fribourg (3) United States Geological Survey (4) Department of Earth and Environmental Sciences, Section for Mineralogy, Petrology and Geochemistry, Ludwig-Maximilians-Universität München (5) Earth & Life Institute, Université catholique de Louvain (6) Department of Earth Sciences, Durham University (7) Chemistry Department, University of Fribourg (8) In Vitro Toxicology Group, Swansea University Medical School	Ines Tomašek
16.15 - 16.30	1202	The effectiveness of facemasks for protection against volcanic ash: overview and results of the HIVE project	Claire Horwell (1) Judith Covey (1) Claudia Merli (1) Lena Dominelli (1) Ernesto Schwartz Marin (1) Andrew Apsley (2) John Cherrie (2) Hilary Cowie (2) Karen Galea (2) William Mueller (2) Susanne Steinle et al. (2) Makoto Hagino (3) Sueo Kuwahara (3) Riochi Ogawa (3) Satoru Nishimura (3) Takeshi Baba (3) Fentiny Nugroho (4) Laksmi Rachmawati (4) Maria Aurora Armienta (5) Rita Fonseca (5) Ana Lillian Martin (5) And colleagues from the: Pan American Health Organization, PMI (Red Cross) Yogyakarta, Save the Children Indonesia, International Society for Respiratory Protection	(1) Durham University (2) Institute of Occupational Medicine (3) Kagoshima University (4) University of Indonesia (5) UNAM	Claire Horwell

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Massimo Osanna | Parco Archeologico di Pompei • ss-pes@beniculturali.it

S03.06 - Volcanoes and Human History

Time	ID	Title	Author Name	Affiliations	Presenter Name
17.00 - 17.15	859	Conflicting accounts of the 1902 VEI 6 eruption of Santa María volcano, Guatemala; an investigation into how natural, social and political factors impacted the validity of eruption reporting	Hannah Berry (1) Katharine Cashman (1) Caroline Williams (1)	(1) University of Bristol	Katharine Cashman
17.15 - 17.30	1162	Beyond Social Volcanology: The teachings of Merapi and Popocatepetl in regards to health, authority and protection	Author: Ernesto Schwartz Marin (1) Claudia Merli (1,2) Claire Horwell (1) HIVE project team	(1) Durham University (2) Uppsala University	Ernesto Schwartz Marin
17.30 - 17.45	493	"We used to grow more crops here; now we can only grow pineapples and dragon fruit": historical evidence for impacts of persistent volcanic degassing from Masaya volcano in Nicaragua	Hilary Francis (1) Xochilt Hernandez Leiva (2) Sebastien Nobert (3, 4) Harold Rodriguez Bellanger (5) Evgenia Ilyinskaya (3) UNRESP team (6)	(1) Northumbria University, UK (2) Universidad Americana, Nicaragua (3) University of Leeds, UK (4) University of Montreal, Canada (5) IDEAS, Nicaragua (6) http://unresp.com	Evgenia Ilyinskaya
17.45 - 18.00	637	THE ANGER OF GODS. Mt. Cameroon traditional beliefs among Bakweri and Bakossi ethnic groups	Robert Mbe Akoko (1), Maria Ilaria Pannaccione Apa (2), Emmanuel Kouokam (3)	(1) University of Bamenda - Cameroon, (2) INGV - Italy, (3) BEIG3 - Cameroon	Maria Ilaria Pannaccione Apa
18.00 - 18.15	964	New Excavations and Researches: the second life of Pompeii	Massimo Osanna	Parco archeologico di Pompei	Massimo Osanna
18.15 - 18.30	504	Recent excavations at Pompeii: new findings and their volcanological implications	Claudio Scarpati (1) Annamaria Perrotta (1) Andrea Montanaro (1) Domenico Sparice (1) Alberta Martellone (2) Arianna Spinosa (2) Massimo Osanna (2)	(1) Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse (DiSTAR), University of Naples Federico II, Napoli (Italy) (2) Parco Archeologico di Pompei, Via Plinio, 4 - 80045 Pompei (Na)	Claudio Scarpati
18.30 - 18.45	457	Geoarchaeological perspectives on the human impacts of the Laacher See Eruption at some distance	Felix Riede (1) Florian Sauer (1)	(1) LAPADIS – Laboratory for Past Disaster Science, Department of Archaeology and Heritage Studies, Aarhus University, Moesgård Allé 20, 8270 Højbjerg, Denmark	Felix Riede
18.45 - 19.00	993	Pleistocene Archaeology, Geochronology and Environment of the Southern Caucasus	Katie Preece (1) Keith Wilkinson (2) Jenni Sherriff (2) Rhys Timms (3) Darren Mark (1) Christina Manning (4) Simon Blockley (3)	(1) Scottish Universities Environmental Research Centre, UK (2) Dept. of Archaeology and Anthropology, University of Winchester, UK (3) Dept. of Geography, Royal Holloway, University of London, UK (4) Dept. of Earth Sciences, Royal Holloway, University of London, UK	Katie Preece