CARLO A. ARCILLA

Curriculum Vitae

ADDRESS National Institute of Geological Sciences, College of Science

University of the Philippines, Diliman, Quezon City

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DATE OF BIRTH April 20, 1961, Catanduanes Province, Philippines

HIGHER EDUCATION

1998	Doctor of Philosophy in Geotechnical Engineering &
	Geosciences (Petrology and Geochemistry), University of
	Illinois at Chicago; Dissertation: "Mantle Dynamic Implications
	of Philippine Arc Volcanism"
1991	M.S. Geology (Petrology & Tectonics) University of Illinois at
	Chicago; Thesis: "Lithology, Age and Structure of the Angat
	Ophiolite, Luzon, Philippine Islands".
1981	B. S. Geology (cum laude), University of the Philippines,
	<u>Diliman</u>

EMPLOYMENT/EXPERIENCE

2007 – present	Director, National Institute of Geological Sciences; helped guide institute to national prominence in disaster mitigation (Project NOAH is based at NIGS) and leader in producing top geologists for the country
June 2014	Recipient of third PRC Eric Nubla Oustanding Professional of the Philippines
June 2014	Recognized by PRC as Most Outstanding Geologist for 2014
February 2014	Expert Witness for the Philippines in International Court of Arbitration, Washington, DC
December 2013	Keynote Speaker, Annual Geology Conference, Geological Society of the Philippines
2010 to present	Amicus Curiae for Philippine Supreme Court on Writ of Kalikasan cases (FPIC pipeline disaster, etc.)
Oct 2010-present	Head Consultant, Makati FPIC Pipeline Disaster, City of Makati
Oct 2012	Organizer and Commentator, Executive Order 79 on the Mining Industry of the Philippines Forum
Dec 2011	Head, Search Committee for the Archaeological Studies Program (ASP) Directorship

Sept 10 - present Feb 10	Professor 1 Mambar Investigating Committee on San Regue Dam
Jan 10	Member, Investigating Committee on San Roque Dam Member, Special Committee to Investigate Econ Students
•	•
Jan 10	Member, President's Committee (Team) to help Partido State
Sant OO	University Affiliate Conducto February Coolegy & Coophysics University of
Sept 09	Affiliate Graduate Faculty, Geology & Geophysics, University of Hawaii
Ium 00	
Jun 09	Associate Professor 7
Apr 09 - 12	Member, University Council Committee on Faculty Development, Conduct & Welfare
Jan 09	Member, Ad Hoc Committee for Disaster Management for UP
Jun 08	Secretary, Asia Oceania Geosciences Society
Apr 08	Associate Professor 6
Jul 07 – present	Director, National Institute of Geological Sciences
Jul 2007	Co-convenor, Special Session in Asia-Oceania Geological Society
jui 2007	Annual Conference, Bangkok
	Selected Secretary of Geochemistry and Volcanology Section
2006-present	Member, University Council Committee on Faculty Governance
2000-present	Member, University Council Committee on Faculty
I 2005	Development, Conduct & Welfare
Jun 2005	Convenor, Special Session in Asia Oceania Geological Society
1 - 2004 1 - 2007	Annual Conference, Singapore
Jun 2004- Jun 2007	Professorial Chair Holder – UP System, on General Education
	(STS)
Jun 2004	Co-convenor, Special Session in Asia Oceania Geological Society
	Annual Conference, Singapore
Jan 2004-2006	Member, Committee to Review Freshman Admission at
	University of the Philippines, Diliman
Jun 2006- July, 2007	Associate Dean for Resources and Facilities
	College of Science, University of the Philippines
Jun 2003-2006	Coordinator, Science and Society Program
	College of Science, University of the Philippines
Jan 2002-2004	Editor-in-Chief, <u>Diliman Review</u>
	University of the Philippines
Jun 2001- Jun 2003	Associate Dean for Research and Extension
	College of Science, University of the Philippines
Jun 2000-May 2001	Associate Dean for Student and Public Affairs
•	College of Science, University of the Philippines
May 2001	Associate Professor 1, then 4
•	National Institute of Geological Sciences
	University of the Philippines
Jul 1998-May 2001	Assistant Professor 5
,	National Institute of Geological Sciences
	University of the Philippines
Jan-Jun 1998	Teaching Assistant
,	University of Illinois at Chicago
Aug-Dec 1997	Lecturer (part-time)
ing Dec 1777	Truman College, Chicago, Illinois
Dec 1996- Dec 1997	Visiting Lecturer (full-time)
DCC 1770- DCC 177/	visiting become (tun time)

	Northeastern Illinois University, Chicago, Illinois
1987-present	Member, American Geophysical Union
Aug 1987-1996	Fulbright Fellow, Teaching and Research Assistant
	University of Illinois at Chicago
1987 (6 mos.)	Exploration Manager
	Triangle International Corporation, Cebu City, Philippines
	*Coordinated exploration & start-up of high-purity, dolomite
	mine (open pit)
1984-1987	Senior Geologist
	Atlas Consolidated Mining & Development Corp., Philippines
	*Ore Microscopy for gold and copper deposits; geologic
	support for tunnel and open pit operations; gold occurrence
	research; delineation of orebody extensions
1981-present	Member, Geological Society of the Philippines
	Member, University of the Philippines Alumni Association
1981-1983	Instructor and Field Research Geologist
	University of the Philippines
	*Geologic mapping of complex Montalban quadrangle & Angat
	ophiolite

CONSULTING WORK

2014	Office of Solicitor General, Republic of the Philippines, for
	international arbitration work
2013	DMCI Mining Corporation
2011	Marc Ventures Mining and Development Corporation
2008	Asian Alliance Investment Bank, Marc Ventures Mining Corp
2007	Century Peak Mining Company
2006	McKinley Consulting, Switzerland; Hyperalkaline fluids and bentonite research
2005	Belle Corp. (Fault and Materials Science Studies in Tagaytay Highlands)
	Province of Pangasinan – Mineralogy and Environmental Problems
2005-2004	Boracay Island – Solid Waste Management and Environmental Problems
2004	Apercu Environmental – Mineralogy work Mckinley Consulting – Natural Analogues for Nuclear waste disposal
2003	INCHEM Environmental – Environmental Mineralogy work
2002	Philippine Geothermal, Inc. – Assessment of potential geothermal sump pollution
2001	Quezon City Government – Mediation of methane emissions at the Payatas dumpsite
1995-1994	Science Club Network (part-time), Museum of Science and Industry, Chicago

* Helping inner-city kids from Chicago improve in science &

academics

1987-1986 *Consultant for Gold Ore Microscopy*, Philippine Bureau of Mines

& GeoSciences

1983 *Consultant for Mining Valuation*, Cuervo Appraisers, Philippines

PROFESSIONAL ASSOCIATIONS

Sigma Xi, American Geophysical Union, Mineralogical Society of America, Society of Mining Engineers (Chicago), Geological Society of the Philippines, Microscopy Society of the Philippines, Asia-Oceania Geological Society, Philippine Mineral Exploration Association, Inc., PMRC-Accredited Competent Person In Geology, Geoscience Foundation, Inc., University of the Philippines Geological Alumni Association, International Association on the Genesis of Ore Deposits, Geological Society of Canada

PAST and CURRENT RESEARCH

- Project Leader, Establishment of Baseline Sedimentation Rates During Extreme Rainfall Events: Pasig River Basin – DOST-PCIERD
- o Team Leader for NIGS, Philippine Consultant, Determining the Potential for Carbon Capture and Storage in Southeast Asia Asian Development Bank (ADB)
- o Project Leader, Bangkal Decontamination Team City of Makati
- o Project Leader, Pipeline Integrity Test Department of Energy (DOE)
- o Member, Hyperalkaline Studies RWMC, Japan
- o Laboratory Head, Earth Materials Science Laboratory at NIGS
- Project Leader, Geochemical, Mineralogical, and Geophysical Characterization of Philippine Copper, Nickel and Gold Ores and Related Deposits: Search for New Exploration, Ores Beneficiation and Environmental Benchmarks. – DOST-PCIERD
- o Project Leader, Setting Up of Seismic, Geological Analytical Laboratory at NIGS
- Project Leader, Setting up of GEMCOM and PROMAX Laboratories at NIGS
- o Geological Disposal of Toxic and Nuclear Waste
- o Igneous Petrology of High Silica Magmas in Macolod Corridor
- o Environmental Problems in Boracav Island
- o Geochemistry of Northern Palawan Basaltic Lavas
- Geology, Geochemistry and Mineralogy of Existing and Proposed Landfill Sites in Metro Manila
- Geochemistry and Petrology of Philippine Arc Volcanoes, focusing on mantle source character
- Material Science Characterization of Environmentally-related products Asbestos in Philippine Tiles

- Mantle Structure Beneath the Philippines: Petrologic and Seismological Constraints
- o Origin of High-Field Strength Element Depletion in Arc Volcanoes
- o Lithosphere-Asthenosphere Interactions in Sources of Arc Volcanoes
- Mineralogical and Geochemical Characterization of Pinatubo 1991 Eruption Tephra
- o Petrology and Geochemistry of the Angat Ophiolite, Luzon, Philippines
- o Gold Occurrence in a Porphyry Copper Deposit, Cebu City, Philippines
- Delineation of one of the world's youngest (Pleistocene) dolomite deposit, Cebu City, Philippines

AWARDS/GRANT SUPPORT:

Jan – Dec 2011	UP Diliman Centennial Faculty Grant Awardee "Chemical weathering, river geochemistry and atmospheric
	carbon fluxes from volcanic and ultramafic regions on Luzon
	Island, the Philippines"
June 2010	UP Policy Paper Award to lead the multidisciplinary group
	crafting policy on Improving Disaster Preparedness in the
	Philippines
June 2010	SEARCA Professorial Chair holder AY 2009-2010
April 2008	International Atomic Energy Association, Grant to attend
	Technical Meeting on Planning nuclear waste disposal in
	geologic settings in Nottwil, Switzerland
May 2007	International Atomic Energy Association, Grant to attend
	Technical Meeting on planning nuclear waste disposal activities
	in Vienna, Austria
May 2006	International Atomic Energy Association, Grant to attend
	Meeting to plan nuclear waste conference activities and visit
N - 2005	Underground Research Laboratory, Sweden
Nov 2005	International Atomic Energy Association, Grant to attend
	international conference on Radioactive Waste Repository Design Construction and Operation, held in Switzerland
2005	University of the Philippines System Professorial Chair in
2003	General Education – for Innovations and Improvement in
	teaching Science, Technology and Society (STS)
2004	International Energy Atomic Association – Grant to attend
2001	International Conference on Geological Disposal of Radioactive
	Waste; held in Czech Republic and Switzerland
2002	NIGS Faculty Grant – Investigation of methane generation and
	extraction from Payatas open dump
2001	NIGS Faculty Grant – Palawan OIB volcanism
2000	NIGS Faculty Grant – Asbestos research
1999	Office of the Vice-Chancellor for Research and Development
	grant: "Determining source character of Luzon volcanoes"
1997	National Student-Athlete Day Awardee, Northeastern Illinois
	University

1996	Selected as Teaching Assistant Consultant, University of Illinois at Chicago
	Listed in "Who's Who Among Students in American Universities & Colleges"
1995	Excellence in Teaching Award, UIC Department of Geological Sciences
	Club Leader of winning Science Club in Museum of Science &
	Industry Contest
1994	Honoree for Teaching Excellence, Office of Student Development
	Services, Univeristy of Illinois, Chicago
	(honored alongside university professors)
1991, 1992 & 1995	Foreign Student Service Award, \$1000 per year; University of
	Illinois at Chicago
1987-1991	Fulbright-Hays Fellowship. Support to conduct Masters studies
	in the United States.
1981-1983	PCARRD (Philippine Science Research funding institution)
	Geologic mapping and structural study of the Montalban quadrangle. Results published in Tectonophysics.

Financial Awards Facilitated for the National Institute of Geological Sciences as Director

2008	12 million grant from NAMRIA for UNCLOS continuation 10 million grant from NAMRIA for a Seismic Processing Unit in NIGS
	Imminent Professorial Chairs and Private grants (Mining & oil
	cos.)
2008-2007	20 million grant from DOST – with funds to purchase ICPMS,
	XRD and XRF for NIGS (project leader)
2007	25 million grant from PHILEX Mining Corporation
	5 million CHED grant resuscitated
	10 million grant from NAMRIA for UNCLOS (with other
	professors)

PUBLICATIONS

Monograph:

Arcilla C.A. 1983. The Geology and Mineral Resources of the Montalban Quadrangle, Luzon, Philippines. National Institute of Geological Sciences, University of the Philippines. 168 pp.

Publications in ISI Journals:

- Promentilla, M. A. B., Tapia, J. F. D., **Arcilla, C. A.,** Dugos, N. P., Gaspillo, P. D., Roces, S. A. and Tan, R. R., 2013. Interdependent ranking of sources and sinks in CCS systems using analytic network process, *Environmental Modelling & Software*, 50:21-24
- Huang, Q., Jiang, H., Briggs, B. R., Wang, S., Hous, W., Li, G., Wu, G., Solis, R., **Arcilla, C. A.,** Abrajano, T. and Dong, H., 2013. Archaeal and bacterial diversity in acidic to circumneutral hot springs in the Philippines, *Federation of European Microbiological Societies (FEMS)*, 1-13.
- **Arcilla, C. A.,** Pascua, C. S., and Alexander, W. R., 2011. Hyperalkaline groundwaters and tectonism in the Philippines: significance to natural Carbon Capture and Sequestration, *Energy Procedia*, 4:5093-5101.
- Schopka, H. H., Derry, L. A. And **Arcilla, C. A.**, 2010. River geochemistry of volcanic ultramafic regions on Luzon Island, the Philippines, *Geochimica et Cosmochimica Acta*, 75:978-1002
- Vogel, T.A., Flood, T.P., Patino, L.C., Wilmot, M.S., Maximo, RPR, Arpa, C.B, **Arcilla, C. A.**, and Stimac, J. 2006. Geochemistry of silicic magmas in the Macolod Corridor, SW Luzon, Philippines: evidence of distinct, mantle-derived, crustal sources for silicic magmas. *Contributions to Mineralogy and Petrology*, 151:267-281
- **Arcilla, C.A.**, Ruelo, H., and Umbal, H. 1989. The Angat ophiolite, Luzon, Philippines: Lithology, structure, and problems in age interpretation. *Tectonophysics*. 168: 127-136.

International Articles in peer-reviewed, non ISI Journals:

- W.R.Alexander, C.A. Arcilla, I.G.McKinley, H.Kawamura, Y.Takahashi, K.Aoki and S.Miyoshi 2008. A new natural analogue study of the interaction of low-alkali cement leachates and the bentonite buffer. *Scientific Basis for Nuclear Waste Management* XXXI, 493-500.
- Alexander, W.R., **Arcilla, C.A.**, McKinley, I., Kawamura, H., Takahashi, Y., Aoki, K., and Miyoshi S. 2008. A new natural analog study of the interaction of low-alkali cement leachates and the bentonite buffer of a radioactive waste repository. Materials Research Society. Scientific Basis for Nuclear Waste management XXXI. 11007: 493-500
- Alexander, W.R., **Arcilla, C.A.**, McKinley, I., Kawamura, H., Takahashi, Y., Aoki, K. and Miyoshi, S. 2007. A New Natural Analogue Study of the Interaction of Low-Alkali Cement Leachates and the Bentonite Buffer of a Radioactive Waste Repository. *Scientific Basis of Nuclear Waste Management*, The Radwaste Conference Proceedings of the Materials Research Society.
- Mc Kinley, I.G., Alexander, W.R., **Arcilla, C.A.**, Kawamura, H., and Takahashi, Y. 2007, IPHAP: A New Natural Analogue of Bentonite Alteration by Cement Leachates. *Proceedings of the Eureopean Material Science Research*.

Non-reviewed Articles:

- W.R.Alexander, M.L.L.Honran, C.A.Arcilla, C.Pascua, E.Vargas, I.G.McKinley, K.Namiki and H.Kawamura 2009. A natural analogue of bentonite alteration by hyperalkaline water: results from the FY'08 field programme in the Philippines. Bedrock Geosciences Technical Report 09-01, *Bedrock Geosciences*, Auenstein, Switzerland.
- W.R.Alexander, **C.A.Arcilla**, M.Y.Calibo and I.G.McKinley 2008. Natural analogue of bentonite alteration by hyperalkaline water: field programme in the Philippines. MC-TR-08-02, *McKinley Consulting Report*, Baden-Dättwil, Switzerland.
- M. Yamakawa, W.R. Alexander, I.G. McKinley, C.A. Arcilla, Y. Takahashi and K. Namiki 2008. The potential in the Philippines for studying natural analogues of the interaction of low-alkali cement leachates and bentonite barriers in a radioactive waste repository. *Proc. Japan-Korea Joint Meeting*, 30th April 1st May, 2008, Tokyo, Japan.

Articles submitted to ISI journals, in review:

- Promentilla, M., Tapia, J. F. D., **Arcilla, C. A.,** Dugos, P. D., Gaspillo, S. A., Roces, S. A., and Tan, R., 2012, Interdependent Ranking of Sources and Sinks in CCS Systems using Analytic Network Process.
- **Arcilla, C.A.**, 2007, et al., Methane Gas Production in the Notorious Payatas Open Dump: an Uncontrolled Dumpsite in Metro Manila, Philippines, in review in Journal of Geochemical Exploration.
 - **Arcilla, C. A.** 2007. Gold-bornite association in the Carmen porphyry copper deposit, Cebu, Philippines. (in review)
- **Arcilla, C. A.** 2007. Life As We Know It: Is this it? A Geochemical Perspective. Submitted, in review

Articles in preparation:

- **Arcilla, C. A.**, and Flower, M.F.J. 2007. Implications of variable source fertility for high field strength element depletion in arc magmas: major and trace element systematics. (in review in *Contributions to Mineralogy and Petrology*)
- **Arcilla, C.A.** and Besana, G.M., 2006 (in prep). Mantle and slab structure beneath Luzon: constraints from petrology and seismology
- **Arcilla, C.A.** 2006. Mt. Makiling, Philippines: adakitic (slab-melt?) lavas without a subducting slab underneath. (in prep. for Science)
- **Arcilla, C.A.** 2006. Geochemistry of Northern Palawan Basaltic Lavas: Clues to Origin of High Field Strength Element Depletion/Enrichment in Arcs (in preparation)

Articles published in national journals:

- **Arcilla, C.A.** 2002. Balat Sibuyas, Lack of Culture of Critique, and Lethargic Academic Output. Diliman Review. November, 2002
- **Arcilla, C. A.** 2002. The solid waste management of Metro Manila: a geoscientific perspective. Diliman Review.
- Chua, G.A., Kangleon, Y.Y., Hermosilla, A.Y., and **Arcilla, C.A.** 2001. On the number of volcanic craters in Laguna de Bay. Proceedings of the National Conference of Mathematical Society of the Philippines.

Published Abstracts:

- I.G.McKinley, W.R.Alexander, C.A. Arcilla, H.Kawamura and Y.Takahashi 2008. IPHAP: a new natural analogue of bentonite alteration by cement leachates, *Proc. Int. Symp. Radiation Safety Management*, Daejeon, Korea, 7-9 Nov. 2007, pp 492-498.
- W.R. Alexander, I.G. McKinley, C.A.Arcilla, Y.Takahashi, H. Kawamura, M.Yamakawa, and K. Aoki 2008. Hyperalkaline Natural Analogue Potential in the Philippines. *Proc. 2nd East Asia Forum on Radwaste Management (EAFORM) Conference*, 20-23 October 2008, Tokyo, Japan.
- **C.A.Arcilla**, C.S.Pascua and W.R.Alexander 2010. Hyperalkaline springs in the Philippines: significance to natural Carbon Capture and Sequestration. *Proc. 10th International Conference on Greenhouse Gas Control Technologies*, 19th-23rd September 2010, Amsterdam, The Netherlands, IEA Greenhouse Gas R&D Programme, IEA, London, UK.
- N.Fujii, **C.A.Arcilla**, M.Yamakawa, C.Pascua, K.Namiki, T.Sato, N.Shikazono and W.R.Alexander 2010. Natural analogue studies of bentonite reaction under hyperalkaline conditions: overview of ongoing work at the Zambales Ophiolite, Philippines. *Proc. ICEM 2010 Conference, ASME, Washington*, USA (submitted).
- K.Fujita, T.Sato, R.Nakabayashi, M.Yamakawa, N.Fujii, K.Namiki, C.Pascua, C.Arcilla, W.R.Alexander and T.Yoneda 2010. Natural analogue study of the interaction between hyperalkaline groundwater and bentonite at the ophiolite of Philippine. *Proc. Japan Geoscience Union Meeting*, 23-28 May, 2010, Makuhari, Japan. JGU, Tokyo, Japan (submitted).
- E. Vargas, M.L.L. Honran, C. Pascua, C.A. Arcilla, W.R. Alexander, M. Yamakawa, N. Fujii, K. Namiki and I.G. McKinley 2009. Developments in hyperalkaline natural analogue studies around the Zambales Ophiolite, Philippines. *Proc. ICEM'09 Conference*, Liverpool, UK, October, 2009, ASME, Washington, USA.
- Alexander, W.R., **Arcilla, C.A.**, McKinley, I., Kawamura, H., Takahashi, Y., Aoki, K., and Miyoshi S. 2008. A new natural analogue study of the interaction of low-alkali cement leachates and the bentonite buffer of a radioactive waste repository. Materials Research Society. *Scientific Basis for Nuclear Waste Management XXXI.* 11007: 493-500
- **Arcilla, C.A.** 2007. Adakitic Rocks Without a Slab: Macolod Corridor and Mindoro Volcanics, Philippines. *Asia Oceania Geological Society Annual Meeting* (Bangkok).
- **Arcilla, C. A.** 2007. Chrysotile-type Asbestos in Philippine Roofing Thermal Tile Samples: Characterization Using Combined Microscopy, FTIR and X-Ray Methods. *Asia Oceania Geological Society Annual Meeting* (Bangkok).

- **Arcilla, C.A.**, Ferrer, C., Africa M.J., Paguican, E., Moral, J. 2007. Geostatistical and Mineralogical Insights on Some Nickel Prospects in the Philippines. Asia Oceania Geological Society Annual Meeting (Bangkok).
- **Arcilla, C.A.** 2007. Gold-Bornite Occurrence in an Island Arc Porphyry Copper Deposit: The Carmen Orebody, Cebu, Philippines. Asia Oceania Geological Society Annual Meeting (Bangkok).
- **Arcilla,C.A.**, and Ferrer, C. 2007. Non-Volcanic Hot Springs in Palawan, Philippines: Mineralogical Origins and Potential Applications. Asia Oceania Geological Society Annual Meeting (Bangkok).
- **Arcilla, C.** 2006. High K Arc Volcanism Postdating the Eurasia-Northern Palawan- Philippine Mobile Belt Collision. Asia Oceania Geological Society Annual Meeting (Singapore).
- **Arcilla C.A.** 2006. Some Problems with Plate Tectonic Models and Arc Magmatism: Insights from Philippine Volcanic Data Asia Oceania Geological Society Annual Meeting (Singapore).
- **Arcilla, C.**, Collado M. and Cabria H. Detection of Subsurface Limestone Cavities (Balamban, Cebu, Philippines) by Electrical Resistivity and Implications for Groundwater Quality and Building Structures. Asia Oceania Geological Society Annual Meeting (Singapore), 2004.
- **Arcilla C.** and Funiciello F. 2004. Geochemistry of Macolod Corridor and Mindoro Arc Volcanics and Slab Rollback Dynamics: Implications for Adakite Genesis. Asia Oceania Geological Society Annual Meeting (Singapore)
- Tomarong, C. and **Arcilla C.** 2004. Geophysical Investigation of Potential Subsurface Pollution of Manila's Water Reservoir From the Juxtaposed Payatas Open Dumpsite. Asia Oceania Geological Society Annual Meeting (Singapore)
- Budianta, W., **Arcilla, C.** and Peralta, G. 2004. Groundwater Contamination and Effectiveness of Anthropogenic Intervention: Statistical Evidence From Yogyakarta City, Indonesia. Asia Oceania Geological Society Annual Meeting (Singapore).
- **Arcilla, C.** and Panol A. 2004. Retardation of Mercury Spillage Pollution by Extensive Clay Layers: A Philippine Example. Asia Oceania Geological Society Annual Meeting (Singapore).
- Tomarong, C., **Arcilla, C.**, De Sales, L., Chua, S., Garcia, E., and Pamintuan, G. 2003. Geology beneath and beside the notorious Payatas open dump, Metro Manila, Philippines. "EGS AGU EUG Joint Assembly, Nice, France, April 2003".
- **Arcilla, C.**, Maximo, R., Vogel, T., Patino, L., Flower, M., and Mukasa, S. 2003. High-Nb Lavas from Northern Palawan: implications for high field strength enrichment in southern Philippine Arc" EGS AGU EUG Joint Assembly, Nice, France," April 2003.
- Flood, T.P., Vogel, T., Patino, L., **Arcilla, C.A.**, Maximo, R., and Arpa, C. 2002. The origin of the silicic domes in the Macolod Corridor, Philippines. American Geophysical Union Fall Conference, San Francisco, December 2002
- **Arcilla, C.A.** and Tomarong, C.P., 2002. Steeper Artificial Versus Natural Slopes in Payatas Dump: Due to Plastics Content of Solid Waste? NIGSCON. November, 2002.
- **Arcilla, C.A.**, Tomarong, C.P., Garcia, E., Chua, S., Pamintuan, de Sales, L., G., Jaymalin R., and Sabater, L. 2002. Methane Generation Potential of the

- Payatas Open Dump: Comparison with Power Generating Landfills in the United States. NIGSCON. November, 2002.
- **Arcilla, C.A.** Pleistocene Volcanism in Palawan: implications and problems. Geology 170 presentation, NIGSCON, 2002
- **Arcilla, C.A.**Geology of Taytay, Palawan: issues and problems. Geology 170 presentation NIGSCON, 2002
- **Arcilla, C.A.** 2001. Origin of Philippine Lakes. Seminar on Philippine wetlands. NIGS. February, 2001
- **Arcilla, C.A.**, Flower, MFJ. Investigation of OIB-like lavas from Palawan. NIGS Annual Conference. November 2001
- **Arcilla, C.A.** Geoscientific aspects of the current solid waste crisis in Metro Manila: the neglected parameters. NIGS Annual Conference. November, 2001
- **Arcilla, C.A.**, Flower, MFJ., 2001. Volcanoes track mantle flow beneath Luzon Arc. American Geophysical Union Fall Conference, San Francisco, December 2001.
- **Arcilla, C.A.** 2000. The Philippines as a natural tectonic laboratory: testing the slab melting hypothesis. Symposium on the Geotectonics of Sundaland. National Institute of Geological Sciences and College de France.
- **Arcilla, C.A.** 2000. Origin of volcanic and non-volcanic mountains near Metro Manila. Philippine Mountains Summit. Calamba, Laguna.
- **Arcilla, C.A.**, and Flower, M.F. J. 2000. High field-strength element (HFSE) depletion in arc magmas: insights from major element systematics. NIGS 2000 Research Symposium. November, 2000
- **Arcilla, C.A.**, Flower, M.F.J., and Viray, E. 2000. How deep are the roots of Philippine volcanoes? NIGS 2000 Research Symposium. November, 2000
- **Arcilla, C.A.**, and Flower, M.F. J. 1999. Variable sources of Laguna Caldera volcanics? National Institute of Geological Sciences 2nd Research Symposium, November, 1999.
- **Arcilla, C.A.**, Go, J., and Clemente, E. 1999. Chrysotile-type asbestos in Philippine roofing tile samples: characterization using combined microscopy and x-ray methods. National Institute of Geological Sciences 2nd Research Symposium, November, 1999.
- **Arcilla, C.A.** 1998. The Philippine Arc: Geologic and Petrologic Summary. Invited abstract in: Subduction Factory. International Conference in La Jolla, California, June 1998.
- **Arcilla, C.A.**, Besana, G.M., Flower, MFJ, Ando, M., Negishi, H. & Punongbayan, R.S. 1998. Mantle structure beneath the Philippine arc: constraints from petrology and seismic attenuation. American Geophysical Union Fall 1998 Conference. San Francisco.
- Besana, G.M., **Arcilla, C.A.**, Flower, MFJ, Ando, M., Negishi, H., and Punongbayan, R.S. 1998. Mantle wedge and slab structure in the Philippine archipelago inferred from seismic intensity data inversion and petrological analysis. American Geophysical Union Fall 1998 Conference. San Francisco.
- **Arcilla, C.A.**, and Flower, M.F.J. 1997. The Philippines: a natural laboratory for studying magmatism, mantle recycling, and arc rollback at an unstable convergent plate margin. Invited abstract in: Materials Recycling Near Convergent Plate Boundaries. International conference in Puerto Azul, Philippines, November, 1997.
- Flower, M..F.J., **Arcilla, C.A.**, and Lallemand, S. 1997. Asthenosphere delamination of hydrated lithospheric mantle as a refractory source for arc melts. Invited

- abstract in: Materials Recycling Near Convergent Plate Boundaries International conference in Puerto Azul, Philippines, November, 1997.
- Huysken, K.T., Vogel, T.A., **Arcilla, C.A.**, Rodolfo, K.S., Alonso, R.A., Ruelo, H., Umbal, J.V., and Solidum, R. 1993. Time-constrained tephra fall from the 1991 Pinatubo eruption: evidence for magmatic fractionation. EOS: American Geophysical Union. 74:671.
- **Arcilla, C.A.**, Flower, M.F.J., Wright E., Cruz, J.C., Calonzo, M., Castillo, P., Mukasa, S. and Defant, M. 1992. Mantle fertility and melt fraction beneath the Luzon-Taiwan and Bicol arcs: implications for the HFSE-depletion problem. EOS: American Geophysical Union. 73:342.
- **Arcilla, C.A.** 1991. Gold occurrence in a porphyry copper deposit: Carmen orebody, Cebu Philippines. Geological Society of America –Society of Economic Geology Joint Conference. Montreal, Canada.
- **Arcilla, C.A.**, Flower, M.F.J., and Rodolfo, K.S. 1990. The Angat ophiolite, Luzon, Philippines: strike-slip emplacement of a back-arc ophiolite in the Early Miocene. EOS: American Geophys. Union. 71:1648.

Book International

- Alexander, W. R., **Arcilla, C.A.** Pascua, C. S., and Namiki, K., 2010. Natural analogues of bentonite alteration by hyperalkaline water: short overview of the Bigbiga field area, Luzon, Philippines, *Bedrock Geosciences Technical Note BGTN10-01*, Bedrock Geosciences, Auenstein, Switzerland
- Alexander, W. R. Honrado, M. L. L., **Arcilla, C.A.**, Pascua, C. S., Vargas, E., McKinley, I. G., Namiki, K., and Kawamura, H., 2009. A natural analogue of bentonite alteration by hyperalkaline water: results from the FY'08 field programme in the Philippines, *Bedrock Geosciences Technical Report 09-01*, Bedrock Geosciences, Auenstein, Switzerland

Abstracts Submitted for review for a conference

- The Makati Pipeline Leak, Philippines. Asia-Oceana Geoscience Society (AOGS) 2013 Annual Meeting. June 24-28, 2013, Brisbane, Australia
- Epithermal Gold exploration in Batangas, Philippines: XRD and FTIR validation of field-obtained alteration mineralogy. Asia-Oceana Geoscience Society (AOGS) 2013 Annual Meeting. June 24-28, 2013. Brisbane, Australia
- Characterization of alteration mineralogy of Potential Porphyry Copper Deposit by X-ray Diffraction and X-ray Fluorescence techniques: Surigao del Sur, Philippines. Asia-Oceana Geoscience Society (AOGS) 2013 Annual Meeting. June 24-28, 2013, Brisbane, Australia
- Element Mobility and Tropical Weathering in Ophiolites: A preliminary study from the Philippines. Asia-Oceana Geoscience Society (AOGS) 2013 Annual Meeting. June 24-28, 2013, Brisbane, Australia
- Metals bounded in different phases of Nickel laterites. Asia-Oceana Geoscience Society (AOGS) 2013 Annual Meeting. June 24-28, 2013, Brisbane, Australia

Participation in Conferences/Symposia/Workshops

Organizer

- Organizing Committee, Head, Philippines Revisited: Pros and Cons (Seminar series), January 30 – February 27, 2009, National Institute of Geological Sciences, UP Diliman.
- Organizing Committee, Co-Chair, Geocon 2008, GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City

Convenor

Convenor & Secretary, 5th Annual Meeting Asia Oceania Geosciences Society (AOGS), June 16-20, 2008, Busan Korea

Invited Talk

Natural Analogue Studies in Ophiolite Systems and Tertiary Volcanic Deposits of the Philippines. IWCERT09, Sapporo, Japan

Proceedings International

- Arcilla, C.A., Pascua, C. S., and Alexander, W. R., 2010. Hyperalkaline springs in the Philippines: significance to natural Carbon Capture and Sequestration, *Proc. 10th International Conference on Greenhouse Gas Control Technologies*, September 19-23, 2010, Amsterdam, The Netherlands, IEA Greenhouse Gas R&D Programme, IEA, London, UK (*submitted*)
- Fujita, K., Sato, T., Nakabayashi, R., Yamakawa, M., Fuji, N., Namiki, K., Pascua, C. S., **Arcilla, C.A.**, Alexander, W. R., and Yoneda, T., 2010. Natural analogue study of the interaction between hyperalkaline groundwater and bentonite at the ophiolite of Philippine, *Proc. Japan Geoscience Union Meeting*, May, 23-28, 2010, Makuhari, Japan. JGU, Tokyo, Japan (*submitted*)
- Vargas, E., Honrado, M. L. L., Pascua, C. S., **Arcilla, C. A.**, Alexander, W. R., Yamakawa, M., Fuji, N., Namiki, K., and McKinley, I. G. Developments in hyperalkaline natural analogue studies around the Zambales Ophiolite, Philippines 2009. ICEM 2010 Conference, ASME, Washington, USA
- Fuji, N., **Arcilla, C. A.**, Yamakawa, M., Pascua, C. S., Namiki, K., Sato, T., Shikazono, N., and Alexander, W. R. 2010. Natural analogue studies of bentonite reaction under hyperalkaline conditions: overview of ongoing work at the Zambales Ophiolite, Philippines Proc. ICEM 2010 Conference, ASME, Washington, USA (submitted)

- Deville, E., Prinzhofer, A., Vacquand, C., Chavagnac, V., Monnin, C., Ceuleneer, G. and **Arcilla, C.A.,** 2009. Natural flows of H2-rich fluids in the ophiolites of Oman and the Philippines: Tectonic control of migration pathways and associated diagenetic processes, *American Geophysical Union Conference* 2009, December 14-18, 2009, San Francisco, California, USA
- **Arcilla, C.A.** and Collado, M., 2009. Applications of 2D-resistivity surveys in characterizations of active faults in Luzon: Implications for fault occurrence beneath the Bataan Nuclear Power Plant, *Earth Sciences International Conference*, August 27-28, 2009, Heritage Hotel, Manila
- **Arcilla, C.A.**, Pascua, C. S., Vargas, E., Honrado, M. L. L., Alexander, W. R., Namiki, K., Fuji, N., Yamakawa, M., Sato, T., and McKinley, I. G., 2009. Reaction pathways for rising hyperalkaline groundwater in a bentonite mine in the Philippines. Proc. *Goldschmidt 2009 Conference*, Davos, June 22-26, 2009, Geochim Cosmochim Acta, Goldschmidt Conference Abstracts, A50
- Vargas, E., Pascua, C. S., Arcilla, C.A., Honrado, M. L. L., Alexander, W. R. Namiki, K., Fuji, N., Yamakawa, M., Sato, T., and McKinley, I. G., 2009. Origin of the Manleluag Hyperalkaline Hot Spring, Philippines. Proc. *Goldschmidt 2009 Conference*, Davos, June 22-26, 2009, Geochim Cosmochim Acta, Goldschmidt Conference Abstracts, A1375
- Honrado, M. L. L., Pascua, C. S., Vargas, E., **Arcilla, C.A.**, Alexander, W. R. Namiki, K., Fuji, N., Yamakawa, M., Sato, T., and McKinley, I. G., 2009. Smectite and zeolite formation from the pyroclastic deposits of the Aksitero Formation, Philippines. Proc. *Goldschmidt 2009 Conference*, Davos, June 22-26, 2009, Geochim Cosmochim Acta, Goldschmidt Conference Abstracts, A547
- **Arcilla, C.A.** Honrado, M. L. L., Vargas, E., Pascua, C. S., McKinley, I. G., Namiki, K., Fuji, N., Yamakawa, M., and Alexander, W. R., 2009. Bentonite Reaction in Natural Hyperalkaline Groundwaters: Examples from the Philippines, *XIV International Clay Conference*, June 14-20, 2009, Castellaneta Marina, Italy
- **Arcilla, C.A.** Pascua, C. S., Alexander, W. R. and McKinley, I. G., 2009. Natural analogue studies in ophiolite systems and tertiary volcanic deposits of the Philippines, *3rd International Workshop and Conference on Earth Resources Technology*, May 13-14, 2009, Sapporo Japan

Oral Presentation

- The Bangkal Fuel Leak, One Year After: Lessons and Challenges. National Institute of Geological Sciences Research Symposium 2011: YumayaNIGS. November 10-11, 2011. Quezon City, Philippines
- Hyperalkaline Springs and Natural Carbon Sequestration. National Institute of Geological Sciences Research Symposium 2011: YumayaNIGS. November 10-11, 2011. Quezon City, Philippines
- Century Peak Metals Holdings Corporation. Asian Pacific Organization for Lateritic-Nickel-Ore's (APOL's) 2011 Nanjing Conference, October 2011, Nanjing, China
- Mineralogy and Geochemistry of Some Philippine Nickel Laterite Deposits and Implications for Beneficiation and Exploration. Asian Pacific Organization for

- Lateritic-Nickel-Ore's (APOL's) 2011 APOL Annual Conference, April 22-23, 2011, Shanghai, China
- Geochemical and mineralogical characteristics of some Philippine nickel (laterite and saprolite) deposits. Asian Pacific Organization for Lateritic-Nickel-Ore's (APOL's) 2010 Mining Enterprise Meeting in Xiamen, October 27-28, 2010, Xiamen, China
- Hyperalkaline springs in the Philippines: Significance to natural Carbon Capture and Sequestration. Conference on Greenhouse Gas Control Technologies, September 19-23, 2010, London, UK
- Natural analogue study of the interaction between hyperalkaline groundwater and bentonite at the ophiolite of Philippine. Japan Geoscience Union Meeting – International, May 23-28, 2010, Makuhari, Japan
- Geochemical and mineralogical characteristics of some Philippine nickel (laterite and saprolite) deposits: Implications for exploration and beneficiation. 13th Quadrennial IAGOD Symposium, April 6-9, 2010, Adelaide Convention Centre, Adelaide, Australia
- Mineralogy and geochemistry of a nickel-bearing weathering section of the Palawan Ophiolite in Bgy. Berong, Palawan. 10th NIGS Research Symposium, March 4-5, 2010, NIGS AVR, UP Diliman, Quezon City
- Mineralogical and geochemical characterization of the Saile Bentonite: Beneficiation for its use in nanocomposite materials. 10th NIGS Research Symposium, March 4-5, 2010, NIGS AVR, UP Diliman, Quezon City
- Origin of the Manleluag Hotspring, Mangatarem, Pangasinan, Philippines. 10th
 NIGS Research Symposium, March 4-5, 2010, NIGS AVR, UP Diliman, Quezon City
- Natural flows of H2-rich fluids in the ophiolites of Oman and the Philippines: Tectonic control of migration pathways and associated diagenetic processes. American Geophysical Union Conference, December 14-18, 2009, San Francisco, California, USA
- Applications of 2D-resistivity surveys in characterizations of active faults in Luzon: Implications for fault occurrence beneath the Bataan Nuclear Power Plant. GEOCON 2009 "Geology and Resource Management in Time of Crisis", December 2-3, 2009, Edsa Shangri-La Manila, Mandaluyong City
- Applications of 2D-resistivity surveys in characterizations of active faults in Luzon: Implications for fault occurrence beneath the Bataan Nuclear Power Plant. Earth Sciences International Conference, August 27-28, 2009, Heritage Hotel, Manila
- Reaction Pathways for Rising Hyperalkaline Groundwater in a Bentonite Mine in the Philippines. Goldschmidt 2009 Conference, June 22-26, 2009
- Origin of the Manleluag Hyperalkaline Hot Spring, Philippines. Goldschmidt 2009
 Conference, June 22-26, 2009, Davos, Switzerland
- Smectite and Zeolite Formation from the Pyroclastic Deposits of the Aksitero Formation, Philippines. Goldschmidt 2009 Conference, June 22-26, 2009, Davos, Switzerland
- Bentonite Reaction in Natural Hyperalkaline Groundwaters: Examples from the Philippines. XIV International Clay Conference, June 14-20, 2009, Castallaneta Marina, Italy
- Natural analogue studies in ophiolite systems and tertiary volcanic deposits of the Philippines, 3rd International Workshop and Conference on Earth Resources Technology International, May 13-14, 2009, Sapporo, Japan

- Natural Analogues and Nuclear Waste Disposal. Philippines Revisited: Pros and Cons (Seminar series), February 13, 2009, National Institute of Geological Sciences, UP Diliman.
- Philippine Nuclear Power Plant: Post Mortem & Possible Resurrection Perspectives. Nuclear Power in the Philippines Revisited: Pros and Cons (Seminar series), January 30, 2009, National Institute of Geological Sciences, UP Diliman.
- Hyperalkaline Natural Analogue Potential in the Philippines: Implications for Nuclear Waste Disposal Studies. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- Low-Cost Natural Zeolite Activated Carbon Filters for Drinking Water for Poor Barrios in the Philippines. 5th Annual Meeting Asia Oceania Geosciences Society (AOGS), June 16-20, 2008, Busan Korea
- Mineralogy of Philippine Laterite Deposits and Comparison of Methods for Optimal Chemical Analysis. 5th Annual Meeting Asia Oceania Geosciences Society (AOGS), June 16-20, 2008, Busan Korea
- A New Natural Analogue Study of the Interaction of Low-alkali Cement Leachates and the Bentonite Buffer of a Radioactive Waste Repository: Mangatarem, Philippines High pH Hot Springs. 5th Annual Meeting Asia Oceania Geosciences Society (AOGS), June 16-20, 2008, Busan Korea

Poster Presentation

- Natural Zeolite Pangasinan, Philippines: Thermal Evolution from 30 °C to 1000
 °C. The 2nd Asian Clay Conference. September 6-8, 2012, Ewha Woman University, Seoul, Republic of Korea
- Statistical Correlation of Bulk Density, Moisture Content, And Porosity in the Amount of Clays in Nickel Laterites. The 2nd Asian Clay Conference. September 6-8, 2012, Ewha Woman University, Seoul, Republic of Korea
- Mid-ocean ridge processes and their consequences: melting and melt extraction from heterogeneous mantle, European Geosciences Union General Assembly 2012, April 22-27, 2012, Vienna, Austria
- SEM-EDX Determination of Ni- Behavior in Lizardite-6T1 and Goethite Extracted from a Nickel Laterite Ore Sequence. The 2nd Asian Clay Conference. September 6-8, 2012, Ewha Woman University, Seoul, Republic of Korea
- Thermal Evolution of Nickel-Bearing Serpentine from the Philippines. The 2nd Asian Clay Conference. September 6-8, 2012, Ewha Woman University, Seoul, Republic of Korea
- Occurrences of nickel in different host phases of a laterite deposit: An example from Berong, Philippines. 24th Annual Geological Convention of the Geological Society of the Philippines (GEOCON 2011), December 8-9, 2011, Crowne Plaza Hotel, Quezon City, Philippines
- Geochemical and Mineralogical Characteristics of Some Philippine Nickel Laterite Deposits. National Institute of Geological Sciences Research Symposium 2011: YumayaNIGS. November 10-11, 2011. Quezon City, Philippines

- Mineralogical and Geochemical Evolution of a Bentonite Deposit in Mangatarem, Pangasinan. National Institute of Geological Sciences Research Symposium 2011: YumayaNIGS. November 10-11, 2011. Quezon City, Philippines
- Heliborne-Digital SLR-based Aerial Photography for Geohazard Mapping. 10th
 NIGS Research Symposium, March 4-5 2010, NIGS AVR, UP Diliman, Quezon City
- Landslide in Sison, Pangasinan: X-Ray Diffraction Mineralogy of Slump Materials. 10th NIGS Research Symposium, March 4-5, 2010, NIGS AVR, UP Diliman, Quezon City
- Low-Cost Natural Zeolite Activated Carbon Filters for Drinking Water for Poor Barrios in the Philippines. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- Geochemical Characteristics of Philippine Laterite and Saprolite Nickel Ores.
 GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- Characterization of Asbestiform Phases in Narra Residence Hall Fire Samples.
 GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- Comparisons of Various Analytical Methods for Nickel Ores. GEOCON 2008,
 December 3-4, 2008, Hotel Intercontinental, Makati City
- XRD Analysis of the Clay Alterations of the Aksitero Formation. GEOCON 2008,
 December 3-4, 2008, Hotel Intercontinental, Makati City
- GEONICS: Utilization of Philippine Clay Mineral for Nanotechnology. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- An Aqueous Geochemical Reaction Path Model for the Origin of the Manleleuag Hotspring, Mangatarem, Pangasinan. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- Variations in Mineralogy in a Nickel Laterite Deposit and Its Implications on Nickel Recovery. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- A Possible Origin for the Sira-an Hotsprings, Anini-y, Antique Province. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- Extent of Indian MORB Mantle Domain During the Cretaceous: Geochemistry of Basement Rocks In Luzon, Philippines. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City
- Groundwater Pollution from Payatas Controlled Dumpsite: Bioassay and Resistivity Results. GEOCON 2008, December 3-4, 2008, Hotel Intercontinental, Makati City

Attendance Only

- 2012 Annual Meeting of the URF Network, December 3-7, 2012, Albuquerque, New Mexico, USA
- NAST Round Table Discussion on Mining, March 27, 2012, Traders Hotel, Pasay City, Manila
- International Atomic Energy Agency's (IAEA's) Network Training and Demonstration of Waste Disposal Technologies in Underground Research Facilities (URF Network), November 16-18, 2011, Vienna, Austria
- o International Atomic Energy Agency's (IAEA's) Regional Training Course in Advanced Conceptual and Numerical Methods for Modelling Subsurface

- Processes Regarding Nuclear Waste Repository Systems, June 21-25, 2010, Albuquerque, New Mexico
- o Banff/2011 Pipeline Workshop, April 4-7, 2011, Banff, Alberta, Canada
- International Atomic Energy Agency's (IAEA's) Plenary Meeting of the Network of Centres of Excellence for Underground Research Facilities (URF Network), March 3-4, 2010, Vienna, Austria
- Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP) – Norway Program for Enhancing Public Petroleum Management for the CCOP Member Countries (EPPM): Seminar on CCS Awareness & Networking of Petroleum Geoscience Institutes in the CCOP Region, November 16-17, 2009, Bangkok, Thailand
- Mining Philippines 2009 Conference & Exhibition" Strengthening Competitiveness, September 15-17, 2009, Sofitel Philippine Plaza, Manila, Philippines
- Technical Meeting on Training in and Demonstration of Waste Disposal Technologies on Underground Research Facilities – An IAEA Netwrok of Centres of Excellence, April 22-24, 2009, La Grande Motte, France
- Asean Regional Roundtable Achieving a Safe and Sustainable Nuclear Future, March 2, 2009, The Gallery, Level 2, Traders Hotel, Singapore
- Quantitative Seismic Interpretation, October 20-22, 2008, Hotel Istana, Kuala Lumpur

TEACHING: Courses Taught

Physical Geology

Surface and Internal Processes (laboratories and lectures)

Laboratory Course in Mineralogy and Crystallography

Laboratory Course in Igneous Petrology

Laboratory Course in Optical Mineralogy and Petrography

Laboratory Course in Geostatistics and Computer Applications

Laboratory Course in Economic Geology

Field Geology Summer Course (mapping in ophiolitic terrane, economic ore deposits, and active volcanoes)

Historical Geology

Seminar graduate courses in Geochemical and Petrological Computer Modelling, Geoscientific Communications, and Subduction Zone Magmatism

Introduction to Geophysics

Introduction to Geology

Undergraduate Seminar in Geology

Natural Science II

Science, Technology, and Society (STS)

Lecture in Mineralogy and Crystallography

Elementary Mineralogy

Metalliferous Ore Deposits

Graduate course in Igneous Petrology

SERVICES TO THE COMMUNITY

- Served as speaker for PSHS-CLC Career Conference & Career Fair 2012, February 21, 2012
- Wrote a newspaper article for Talk of the Town: How the pipeline leak in Makati was found, Philippine Daily Inquirer, November 27, 2010
- Served as A Speaker in District Conference (DISCON) "Ondoy and Pepeng Disasters: A Geological Perspective", Rotary International District 3820, March 13, 2010, Pili, Camarines Sur
- T.V. Guesting in Mel & Joey "Earthquakes 101". January 31, 2010
- Radio program guesting in Para sa 'yo Bayan in DZMM, hosted by V.P. Noli de Castro, January 30, 2010
- Served as a Resource Speaker in The Forum on "Nuclear Power as an Energy Source Option for the Philippines" 2009 Technical Sessions, December 8, 2009, PNRI, Diliman, Ouezon City
- Served as Resource Speaker in 2009 League of Municipalities of the Philippines General Assembly Session 1: What Every Mayor Should Know About Climate Change, October 27, 2009, Manila Hotel, One Rizal Park, City of Manila
- Wrote a newspaper article for Talk of the Town: Early Warning for Floods, Lanslides. Philippine Daily Inquirer, October 18, 2009, A14
- Served As a Resource Speaker in a Discussion on Super Typhoon Ondoy and Pepeng at the Senate, October 14, 2009
- T.V. Guesting in Qtv Channel 11, August 10, 2009, 1:00pm-2:00pm
- T.V. Guesting in The Big Picture, July 9, 2009, About nuclear energy
- Served as Speaker in PSHS Career Talks Coolehiyo: Make It Happen, June 5, 2009, PSHS 4th Floor Auditorium
- Served As a Resource Speaker in a Round Table Discussion on Bataan Nuclear Power Plant: Implications of Its Possible Revival, April 14, 2009, House of Representatives, Ouezon City
- Served as a Resource Speaker in 2009 National Youth Science, Technology, & Environment Summer Camp, April 5, 2009, Balanga City, Bataan
- Resource Person, March 24, 2009, Code Red, Television Program, Channel 4
- Resource Person, March 9, 2009, BNPP validation right step: Savants by Lyn Resurreccion, Business Mirror
- Resource Person, March 8, 2009, Geologist: no fault below nuke plant by Lyn Resurreccion, Business Mirror
- Resource Person, March 8, 2009, Editorial: Listen to science, for once, Business Mirror
- Resource Person, February 18, 2009, Interviewed by Rey Langit, Channel 4
- Resource Person, Februay 2009, Interviewed by Tina Monsod Palma, Talk Back, Television Program, ANC Channel
- Resource Person, February 2009, GNN, My Destiny Cable Channel

LANGUAGES

Proficient in English, Spanish, Tagalog, Bicol, Cebuano

REFERENCES

- Dr. Alfredo E. Pascual, President, Uninversity of the Philippines, Quezon Hall (North Wing), Diliman, 1101 Quezon City, Philippines, Direct Line: 928-3014 & 928-0110
- Dr. Caesar A. Saloma, Chancellor, University of the Philippines, Diliman, Office of the Chancellor, 2nd Floor, South Wing Quezon Hall, U.P. Diliman, Quezon City, 1101 Philippines, Direct Lines (632) 929-5401, 927-1835, 926-6942, 928-0115
- Mayor Jejomar Binay, Jr., Mayor, City of Makati, City Government of Makati J.P. Rizal St., Brgy. Poblacion Makati City 1200, Philippines, Trunkline: (632) 870-1000
- Dr. August F. Koster Van Groos, Professor and Head, Department of Geological Sciences, University of Illinois at Chicago, Telephone:312-996-8678
- Dr. Stephen Guggenheim, Professor, Department of Geological Sciences, University of Illinois at Chicago, Telephone: 312-996-3263
- Dr. Kelvin S. Rodolfo, Professor Emeritus, Department of Geological Sciences, University of Illinois at Chicago, Telephone: 312-733-0617