

RESUME (AUGUST 2012)

PERSONAL DATA

NAME: Christidis George
 BIRTH DATE: 16/07/1964
 MAR. STATUS: Married, 1 child.
 ADDRESS: Technical University of Crete (TUC), Department of Mineral Resources Engineering 73100 Chania, Greece.
 TEL: +30-2821-37622 FAX: +30-2821-37888
 E-mail: christid@mred.tuc.gr

EDUCATION

Ph.D. University of Leicester (U.K), 1992, M.Sc in Industrial Mineralogy, University of Hull (U.K), 1989, B.Sc in Geology, University of Athens (Greece).
 Foreign Languages: Greek (mother language), English (fluent), German (elementary).

CAREER

4/2009 Professor of Economic Geology-Industrial Mineralogy TUC, Department of Mineral Resources Engineering (MRED), Greece.
 8/2004-4/2009 Associate Professor of Economic Geology-Industrial Mineralogy TUC, MRED, Greece
 12/1998-8/2004 Assistant Professor of Economic Geology-Industrial Mineralogy TUC, MRED Greece.
 3/1995-11/1998 Visiting Associate Professor MRED, TUC, Greece.
 9/1994-12/1997 Research Associate, National Technical University of Athens, Greece.
 7/1994-8/1994 Research Associate, Technical University of Crete, Greece.
 11/1992-6/1994 National Service.
 8/1992-11/1992 Research Associate, TUC, Greece.
 10/1987-7/1988 Research Associate, Department of Geology, University of Athens, Greece.

TEACHING-SUPERVISION

Undergraduate courses: Ore deposits, Industrial minerals and rock deposits Field trip courses, Introduction to the activities of the Mineral Resources Engineer.

Postgraduate courses: Novel Clay Technologies in Environmental Protection, Economic geology of Industrial Rocks and Minerals, Methods of analysis of rocks and minerals, Geomaterials and Environment.

Supervision: Completed 3 Ph.D Theses, 9 MSc Theses, 20 undergraduate dissertations. Co-supervisor of 2 completed Ph.D Theses. Currently supervisor of 1 M.Sc Thesis, and 5 undergraduate dissertations. Member of examination boards for 8 Ph.D Theses (6 in Greece, 1 in Belgium 1 in Portugal) and 3 M.Sc Theses.

RESEARCH ACTIVITIES-SCIENTIFIC INTERESTS

Genesis of bentonite and zeolite deposits, formation and growth of smectites in bentonites of various geological environments. Layer charge of smectites, charge of smectite particles. Physical and chemical properties and industrial applications of industrial rocks and minerals. Assessment of bentonite, zeolite, limestone, talc, kaolin, perlite and diatomite deposits. Modification of physical and chemical properties of industrial clays with inorganic and organic reagents. Environmental applications of industrial minerals. Application of clays in provenance geoarcheological studies. Synthesis of high added value high purity zeolites A, X and Y from raw materials and waste materials.

Completed 8 research projects funded by the EU, Greek Ministry of Education, Technical University of Crete, Fulbright Foundation and the industry.

COLLABORATION WITH RESEARCH INSTITUTES AND INDUSTRY

Universities-Research Institutes: University of Poitiers (France), University of Aveiro (Portugal), University of Ottawa (Canada), University of Porto Allegre (Brazil), Camborne School of Mines (UK), Technical University of Istanbul (Turkey), Hungarian Academy of Sciences, University of Bologna, Italy,

Institute of Nuclear Chemistry CNR (Rome, Italy), Tbilisi State University (Georgia), Yerevan State University (Armenia), Yerevan Physics Institute (Armenia), US Geological Survey (Boulder-Colorado) Indiana State University USA, Johns Hopkins University USA, University of Athens, National Technical University of Athens, Greek Geological Survey (IGME)

Industry: Greece: S&B Industrial Minerals SA, Geohellas SA, Akrolithos SA Cyprus: Hellenic Mining Co.

DISTINCTIONS-AWARDS

Marion L. and Chrystie M. Jackson Mid-Career Clay Scientist Award (CMS-2013-to be awarded in 50th CMS meeting in Urbana-Champaign, October 2013)

George Brown Lecture, joint BZA/BCG conference (July 2012)

Ktenas Award (Greek Academy of Sciences) (2006)

Fulbright Award (2002)

Giovanni Novelli Award (Italian Committee of AIPEA) (2001)

“Prof. I. Papastamatiou” Award (Greek Geological Survey) (1989)

Scholarship from the Greek Academy of Sciences (1989), grants from Papadakis Foundation and Greek State Scholarship Foundation (SSF) for undergraduate studies and postgraduate studies,

EDITORIAL WORK

- Editor of the book: “Advances in the Characterization of Industrial Minerals”, EMU Short Notes in Mineralogy, vol 9 Mineralogical Society London, (2011).
- Associate editor of Clay Minerals-Journal of Fine Particle Science (since March 2007)
- Associate editor of Applied Clay Science (since mid December 2010) (formerly member of the editorial board, since March 2006)
- Member of the editorial advisory board of the Open Mineralogy Journal
- Guest Editor with F. Rocha (Clay Minerals Vol. 43, No. 4, December 2008, papers from Euroclay 2007)
- Guest Editor: Ore Geology Reviews (Vol 29, No 2, August 2006): Special Issue: Industrial Minerals-A series of thematic papers (Elsevier).
- Co-editor: Mineral Exploration and sustainable development, Millpress, Rotterdam, Netherlands (2003)

REVIEWING ACTIVITIES

Reviewer of more than 250 manuscripts in 35 scientific journals and 3 books. EU Evaluator for FP6 and FP7 in Earth Sciences and Environment. Reviewer of ITSC project proposals, funded by EU. Evaluator for International Foundation for Science (IFS, Sweden), and for research agencies in Cyprus, Belgium, Romania, Ukraine, Slovakia and Greece.

INVITED LECTURES-PRESENTATIONS

Camborne School of Mines, U.K., 1999., Technical University of Istanbul, Turkey, 2000, Indiana University USA, 2002, University of Crete, 2005, 23rd ECM Belgium, 2006, Euroclay 2007 and 2011, 9th SGA Conference Dublin., 45th Joint Conference ACS-CMS New Orleans, USA, 14th ICC, Italy 2009, Annual Meeting of the Spanish Mineralogical Society, 2009, Dreyer Conference, Chicago, 2010, George Brown Lecture, joint BZA/BCG Conference, Chester, UK, 2012.

INTERNATIONAL TEACHING ACTIVITIES

- Participation as partner in the International Master in Advanced Clay Science (IMACS) (University of Poitiers, France-coordinator), TUC, Greece, University of Aveiro (Portugal), University of Ottawa (Canada) University of Porto Alegre (Brazil). Our role is teaching applied clay mineralogy-industrial clays, clays in geotechnical applications and beneficiation and processing of clays. IMACS is the first International Master devoted to clays, supported and monitored by AIPEA and funded by the EU.
- Invited lecturer in Erasmus IP-EMU Schools on clays (ADVANCE CLAY 1 and 3, Budapest and Szeged, Hungary, coordinators T. Weiszburg and E. Tombasz respectively and Rome, coordinator M.F Brigatti).

OTHER SCIENTIFIC ACTIVITIES

- Director of the postgraduate course “Geotechnology and Environment”, MRED, TUC (since 2010).
- Organizer of the EMU-IP school: Advances in the characterization of Industrial Minerals” (2009 TUC).
- Elected member of CMS Council (’12). Member of the CMS council nomination committee (’13)
- Member of the Scientific Committee: Euroclay 2007, Aveiro, Portugal and 2011, Antalya Turkey, MECC ’08 ’10, and ’12, 11th Congress of the Greek Geological Society and 2nd and 4th Greek Congress on Porous materials (2005 and 2011).
- Member of the Organizing committee of Euroclay 2011, the 3rd and 4th Mediterranean Clay Conference, the Carpatho-Balkan Conference, 2010.
- Governor and chairman in various sessions in International Conferences
- Abstractor of “Clay Minerals” for the “Mineralogical Abstracts” (1998-2008)
- Book reviewer for Clay Minerals-Journal of Fine Particle Science
- Foreign Collaborator for ISTC project A-485: Liquid waste treatment with zeolites
- Membership: Greek Geological Society (since 1984), MSA (since 1986), the MinSoc (London) (since 1988), MAC (since 1988), CMS, (since 1990), European Crystallographic Society (since 2006).

PUBLICATIONS

1 Ph.D Thesis, 1 M.Sc Thesis 1 undergraduate dissertation, 74 peer review publications in scientific journals (4 additional currently under review), books and International and National Conference Proceedings with referees 45 abstracts in National and International Conferences, 1 computer program (with DD Eberl) 1 patent. More than 530 non self citations, h-index 15.

SELECTED REPRESENTATIVE PUBLICATIONS (bold numbers indicate non-self citations)

1. Christidis, G. and Dunham, A.C. (1993) Compositional variations in smectites: Part I: Alteration of intermediate volcanic rocks. A case study from Milos Island, Greece. *Clay Miner.*, 28, 255-273 **(34)**
2. Christidis, G., Scott, P.W. & Marcopoulos, T. (1995) Origin of the bentonite deposits of Eastern Milos, Aegean, Greece: Geological, Mineralogical and Geochemical evidence. *Clays Clay Miner.*, 43, 63-77. **(32)**
3. Christidis, G. (1995) Mechanism of illitization of bentonites in the geothermal field of Milos Island, Greece. Evidence based on mineralogy, chemistry, particle thickness and morphology. *Clays Clay Miner.*, 43, 567-594. **(10)**
4. Christidis, G. and Marcopoulos, Th. (1995) Mechanism of formation of kaolinite and halloysite in the bentonite deposits of Milos Island, Greece. *Chem. Erde* 55, 315-329. **(4)**
5. Christidis, G. & Dunham, A.C. (1997) Compositional variations in smectites: Part II: Alteration of acidic precursors. A case study from Milos Island, Greece. *Clay Minerals*, 32, 253-270. **(21)**
6. Christidis, G., and Scott, P.W. (1997) Origin and colour properties of white bentonites: A case study from the Aegean Islands of Milos and Kimolos, Greece. *Mineralium Deposita* 32, 271-279. **(12)**
7. Christidis, G., Scott, P.W. Dunham A.C. (1997) Acid activation and bleaching capacity of bentonites from the islands of Milos and Chios, Aegean, Greece. *Applied Clay Science* 12, 329-347 **(112)**
8. Christidis, G. (1998) Physical and chemical properties of some bentonite deposits of Kimolos Island, Greece. *Applied Clay Science*, 13, 79-98. **(37)**
9. Christidis, G. (1998) Comparative study of the mobility of major and trace elements during alteration of an andesite and a rhyolite to bentonite, in the islands of Milos and Kimolos, Aegean, Greece. *Clays and Clay Minerals*, 46, 379-399. **(31)**
10. Christidis, G., Paspaliaris, I. Kontopoulos, A. (1999) Zeolitization of perlite fines: Mineralogical characteristics of the end products and mobilization of chemical elements. *Appl. Clay Sci.*, 15, 305-319. **(14)**
11. Moirou, A., Vaxevanidou K., Christidis G. & Paspaliaris I. (2000) Ion exchange of zeolite Na-Pc with Pb^{2+} , Zn^{2+} and Ni^{2+} solutions. *Clays and Clay Minerals*, 48, 563-571. **(8)**

12. Christidis, G. (2001) Formation and growth of smectites in bentonites: A case study from Kimolos Island, Aegean, Greece. *Clays and Clay Minerals*, 49, 204-215 **(10)**
13. Christidis, G. (2001) Geochemical fingerprinting of bentonites from Milos Island, Greece. *Clay Minerals*, 36, 295-306. **(5)**
14. Christidis, G. E. & Kosiari, S. (2003) Decolorization of vegetable oils: a study of the mechanism of adsorption of β -carotene by an acid-activated bentonite from Cyprus. *Clays Clay Miner.* 51, 327-333. **(27)**
15. G. E. Christidis, D. Moraetis, E. Keheyan, L. Akhalbedashvili, N. Kekelidze, R. Gevorkyan, H. Yeritsyan, & H. Sargsyan. (2003) Chemical and thermal modification of natural HEU-type zeolitic materials from Armenia, Georgia and Greece. *Appl. Clay Sci.*, 24, 79-91. **(20)**
16. Christidis G.E. & Eberl D.D. (2003) Determination of layer charge of smectites. *Clays Clay Miner.*, 51, 644-655. **(12)**
17. Christidis, G.E., Makri, P. and Perdikatsis V. (2004) Influence of grinding on the structure and colour properties of talc, bentonite and calcite white fillers. *Clay Miner.*, 39, 163-175. **(15)**
18. Christidis G.E. Blum A.E. & Eberl D.D. (2006) Influence of layer charge and charge distribution of smectites on the flow behaviour and swelling of bentonites. *Applied Clay Science*, 34, 125-138. **(10)**
19. Christidis, G.E. (2006) Genesis and compositional heterogeneity of smectites. Part III. Alteration of basic pyroclastic rocks. A case study from the Troodos Ophiolite Complex, Cyprus. *Amer. Mineral.*, 91, 685-701. **(7)**
20. Christidis G.E. & Mitsis I. (2006) A new Ni-rich stevensite from the ophiolite complex of Othrys, central Greece. *Clays and Clay Minerals*, 54, 653-666. **(3)**
21. Kelessidis V.C., Tsamantaki, Ch., Mihalakis, A., Christidis, G.E., Makri, P., Papanicolaou, C. & Foscolos, A. (2007). Greek lignites as additives for controlling filtration properties of water-bentonite suspensions at high temperatures. *Fuel*, 86, 1112-1121. **(6)**
22. Moraetis D., Christidis G.E. & Perdikatsis V. (2007) Ion exchange equilibrium and structural changes in clinoptilolite irradiated with β - and γ -radiation. Part I: monovalent cations. *Amer Mineral.*, 92, 1714-1730. **(3)**
23. Marantos I., Markopoulos Th & Christidis G.E. (2007) Zeolitic alteration in the Feres Tertiary volcano-sedimentary basin, Thrace, NE Greece. *Mineralogical Magazine*, 71, 327-345. **(2)**
24. Christidis G.E. & Papantoni H (2008) Synthesis of FAU Type Zeolite Y from natural raw materials: hydrothermal SiO₂-sinter and perlite glass. *The Open Mineralogy Journal*, 2, 1-5. **(1)**
25. Livi K.J.T., Christidis, G.E., Arkai P. & Veblen, D.R. (2008) White mica domain formation: A model for paragonite margarite and muscovite formation during prograde metamorphism. *Amer. Mineral.* 93, 520-527. **(8)**
26. Christidis G.E. (2008) Validity of the structural formula method for layer charge determination of smectites: A re-evaluation of published data. *Applied Clay Science*, 42, 1-7. **(2)**
27. Christidis, G.E. (2008) Do bentonites have contradictory characteristics? An attempt to answer unanswered questions. *Clay Minerals*, 43, 515-529. **(3)**
28. Marantos, I., Marcopoulos Th., Christidis, G.E. & Perdikatsis, V. (2008) Geochemical characteristics of the alteration of volcanic and volcanoclastic rocks in the Feres Basin, Thrace, NE Greece. *Clay Minerals*, 43, 575-595. **(3)**
29. Christidis, G.E. & Huff, W.D. (2009) Geological aspects and genesis of bentonites. *Elements*, 5, 93-98 **(14)**
30. Christidis, G.E. (2011): Industrial Clays. In Christidis G.E. (ed): "Advances in the characterization of industrial minerals" EMU Notes in mineralogy, Mineralogical Society London, vol. 9 pp. 341-414. **(3)**
31. Christidis G.E. (2011): The concept of layer charge of smectites and its implications for important smectite-water properties. In Brigatti M.F. and Mottana A. (eds): "Layered mineral structures and their Application in Advanced Technologies" EMU Notes in mineralogy, Mineralogical Society London, vol. 11. **(1)**
32. Christidis G.E. (2012). Assessment of Industrial Clays. In Bergaya F. et al. (eds): "Handbook of Clay Science", 2nd edition, Elsevier, Amsterdam (in press).