



George E. CHRISTIDIS
(Prof. PhD in Geosciences)



Research Unit:
Economic Geology of Industrial Minerals
Department of Mineral Resources
Engineering
TUC – GR

Responsibilities inside the institution

Professor
Member of Staff of Department of Mineral Resources Engineering, TUC
In charge of the Research Unit:: Economic Geology of Industrial Minerals

Responsibilities inside the consortium

Contact person and academic supervisor for TUC
Teaching: modules TUC 301 and TUC 304

Address, contacts

Institution address: Technical University of Crete, Department of Mineral Resources Engineering, University Campus
73100 - GR

Office
Phone : (30) 28210 37622
Fax : (30) 28210 37888
E-mail : christid@mred.tuc.gr
Personal webpage : http://www.mred.tuc.gr/cv/hristidis_uk.pdf

Research focus

Genesis of industrial clay and zeolite deposits, formation and growth of smectites in bentonites. Layer charge of smectites. 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. Synthesis of high added value high purity zeolites A, X and Y from raw materials and waste materials.

Teaching experience

Post-graduate level Novel Clay Technologies in Environmental Protection, Economic Geology of Industrial Rocks and Minerals, Geomaterials and the Environment,
Undergraduate level : Ore deposits, Industrial minerals and rock deposits, Field trip courses.

International experience

Research collaborations : US Geological Survey, Boulder-CO (Fulbright visiting scheme), Hungarian Academy of Sciences, (Greek-Hungary bilateral exchange research programs) , Indiana State University USA (NEH project), Institute of Nuclear Chemistry CNR (Rome, Italy)-Tbilisi State University (Georgia)-Yerevan State University (Armenia)-Yerevan Physics

	Institute (Armenia) (INCO Copernicus Project), Organizer of Erasmus IP ADVANINMIN, 10-21 July 2009, Chania, Greece.
Regular employment	Professor, Technical University of Crete, GR
Studies	PhD (1992) – University: Leicester, UK MSc in Industrial Mineralogy (1989) – University: Hull (UK) Diploma in Geology (1987) – University: Athens (GR)
Five selected references and Book section	<p>Christidis G. E. & Eberl. D.D. (2003) Determination of layer charge characteristics of smectites. <i>Clays and Clay Minerals</i>, 51, 644-655</p> <p>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. <i>American Mineralogist</i>, 91, 685-701</p> <p>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. <i>American Mineralogist</i> 93, 520-527.</p> <p>Christidis G.E. (2008) Do bentonites have contradictory characteristics? An attempt to answer unanswered questions. <i>Clay Minerals</i>, 43, 515-529.</p> <p>Christidis G.E. & Huff, W.D. (2009) Geological Aspects and Genesis of Bentonites. <i>Elements</i>, 5, 93-98.</p>