
Prof. VITO SUMMA

CURRICULUM SCIENTIFICO

WORK EXPERIENCE

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| 2010 – Present | Head of the CNR-IMAA Environmental and Medical Geology Laboratory (LGMA).
Member of Council of the Institute of Methodologies for Environmental Analysis of the National Research Council, IMAA-CNR. |
| 2001 – Present | Research Scientist, Institute of Methodologies for Environmental Analysis of the National Research Council, IMAA-CNR. |
| 1994 – 2001 | Research Scientist, Institute of Research on Clays of the National Research Council, IRA-CNR. |

EDUCATION

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| 1988 | Laurea degree in Geology, University of Naples “Federico II”, Italy |
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ORGANISATIONAL / MANAGERIAL SKILLS

Experience in:

- project management, acquired as coordinator and partner of national and international research projects;
- organisation of scientific events, acquired as Conference Organizing Committee and Scientific Committee of international Conferences and workshops;
- international programs, acquired as member or chair of international working groups.

JOB RELATED SKILLS

- Active in the research field of environmental geology from 1994.
- Organization and scientific management of the V Training Course entitled “Argille e Minerali delle Argille: Metodi di Analisi di Materiali Argillosi/Clays and Clay Minerals: Methods for the Analysis of clayey materials” organized by the Italian Group of the Association Internationale pour l’Etude des Argiles (AIPEA), held at the Clay Research Institute – CNR; from 28 to 30 September 1999.
- Organization and scientific management of the VII Training Course of AIPEA – Clay and Clay Minerals Italian group – Analysis of clay materials by X-Ray diffraction and Scanner Electronic Microscopy. Theory and applications. IMAA-CNR in Tito Scalo (PZ), 7-10 September 2004.
- Member of Conference Organizing Committee of XIV International Clay Conference. Castellaneta Marina – Italy, June 14-20 – 2009.
- Member of Scientific Committee of 4th International Conference on Medical Geology. Bari – Italy, September 20-25 – 2011.
- Methodology integration of EO techniques as operative tool for land degradation management and planning in Mediterranean areas - Programme Interreg IIIB – ARCHIMED; from 2006 to 2007.

PROJECTS

- Scientific coordinator of the project entitled ‘Studio dell’inquinamento da metalli pesanti in un’area prossima all’abitato di Potenza. /A study of pollution due to heavy metals in an area close to the Potenza built-up area. Funds: Potenza Provincial Government: from January 1998 to December 1999.
- Scientific coordinator of the project entitled ‘Studio Pilota per la valutazione della vocazione d’uso delle argille della Basilicata nel campo ceramico ed interventi di trasferimento tecnologico per la P.M.I. della ceramica artistica’/A pilot study for an evaluation of the use of the Basilicata clays in the field of ceramics and interventions of technological transfer for P.M.I. of artistic ceramics. Funds: POP Basilicata 1994/99 – Measure 9.4 (Research, Development and Innovation). Period: from December 1999 to December 2002.
- Scientific coordinator of the project entitled ‘Monitoraggio di frane finalizzato all’individuazione delle tecniche ottimali di controllo e/o di stabilizzazione’/Landslide monitoring aimed at identifying suitable techniques for the control and/or stabilization. Funds: Basilicata Regional authority. Period: from March 1999 to April 2004.
- Scientific coordinator of the project entitled ‘Monitoraggio della frana di Costa della Gaveta del Comune di Potenza/Monitoring of the Costa della Gaveta landslide in the Potenza municipality. Funds: Basilicata regional authority. Period: in progress since May 2001.
- - Person in charge, for the CNR Institute of Methodologies for Environmental Analysis, of the project entitled ‘Fenomeni franosi e altri movimenti di massa/Landslide events and other mass movements’ within the National Research Council Natural and anthropic risks. 2009 -2011.
- Scientific coordinator of the project entitled ‘MoSATeF. Monitoraggio e Studio dei processi di Alterazione di Terreni in Frana presenti nei centri abitati di Grassano, Latronico, Tricarico/ MoSATeF.Monitoring and Study of Alteration Processes involed in landslide events affecting the Grassano, Latronico and Tricarico built-up areas’. Period: in progress since May 2006.
- Scientific coordinator of the project entitled ‘FAECAB - Fattori Ambientali ed Epidemiologia della Calcolosi in alcune Aree campione della Basilicata/ FAECAB- Calculosis Environmental and Epidemiological factors in some sample areas in the Basilica region’ . Period: in progress since May 2006.
- Scientific coordinator of the project entitled ‘Monitoraggio ambientale del sistema acqua e sottosuolo nell’area campione del Pollino – Basilicata/Environmental monitoring of the water and subsoil system in the Pollino sample area - Basilicata’. Period: in progress since May 2006.
- Scientific coordinator of the project entitled ‘Monitoraggio di aree campione soggette a rischio

desertificazione/Monitoring of sample areas subject to desertification'. Period: in progress since January 2003.

- Scientific coordinator of project “Studio dei processi di land degradation a supporto delle attività di prevenzione e gestione degli impatti indotti sull’ambiente/ Assessment methodologies for controlling land degradation processes and impacts on the environment - Asse VII (Energy and Sustainable Development) part of the Operational Programme ERDF Basilicata 2007-2013. In progress since Feb. 2012.

MEMBERSHIPS

- Member of scientific board of Society of research and experimentation in Agro-biotechnology “Metapontum Agrobios”; from 1998 to 2001.
- Member of scientific board of interdisciplinary commission for the use of clay utilized in mud therapy, cosmetic and pharmaceutical industry - Association Internationale pour l’Etude des Argiles (AIPEA) – Italian Group; from 1999-2002.
- Member of scientific board of interdisciplinary commission of “Hazard map of the environmental risk areas”. Basilicata Region (Italy); from 2003 to 2006.
- Member of board of Earth Science Italian Federation (FIST); from 2010 - present.
- Member of scientific board of Geoitalia - Earth Science Italian Federation; from 2010 - present.
- Member of scientific board of Interlab-Environmental - Regional Agency for Protection Environmental in Basilicata Region - Italy; from Sept. 2015 - present.

Principali Pubblicazioni / Selected Papers and Publications:

- Margiotta S., Lettino A., Speranza A., Summa V. (2015) - PM1 geochemical and mineralogical characterization using SEM-EDX to identify particle origin - Agri Valley pilot area (Basilicata, Southern Italy). *Nat. Hazards Earth Syst. Sci.*, 15, 1551-1561, doi: 10.5194/nhess-15-1551-2015.
- Summa V., Margiotta S., Colaiacovo R., Giannossi M. L. (2015) - The influence of the grain-size, mineralogical and geochemical composition on the Verdesca landslide. *Nat. Hazards Earth Syst. Sci.*, 15, 135-146, doi: 10.5194/nhess-15-135-2015.
- Margiotta S., Mongelli G., Summa V., Paternoster M., Fiore S. (2012) - Trace element distribution and Cr(VI) speciation in Ca-HCO₃ and Mg-HCO₃ spring waters from the northern sector of the Pollino massif, southern Italy. *Journal of Geochemical Exploration* 115, 1-12; doi: 10.1016/j.gexplo.2012.01.006; ISSN: 0375-6742.
- Giannossi M.L., Summa V. (2012). New mixed urinary stone: review of classification scheme. *The urologist*, 1.2.
- Giannossi M.L., Summa V. & Mongelli G. (2012). Trace element investigations in kidney stones: a preliminary pilot case in Basilicata (southern Italy). *Journal of trace elements in Medicine and Biology*, 27(2), 91-97.
- Giannossi M.L., Mongelli G. & Tateo F. Summa V., (2012). Mineralogical and morphological compositions of kidney stones of a pilot case of a mediterranean region (Basilicata, Italy). *Journal of X-ray science and technology* 20: 1-12. DOI 10.3233/XST-2012-0327.
- Giannossi M.L., Summa V. (2010). Post-ESWL fragments as core of new kidney stones. *Nephrology Dialysis Trasplantation Plus*, 3: 405 - 406.
- Tateo F., Ravaglioli A., Andreoli C., Bonina F., Coiro V., Degetto S., Giaretta A., Monconi Orsini A.,

- Puglia C., Summa V. (2009). The in-vitro percutaneous migration of chemical elements from a thermal mud for healing use. *Applied Clay Science* 44, pp. 83-69.
- Summa V., Tateo F., Giannossi M.L., Bonelli C.G. (2009): Influence of clay mineralogy on the stability of a landslide in Plio-Pleistocene clay sediments near Grassano (Southern Italy). *Catena*, 80, 2, 75-85.
 - Giannossi M.L., Medici L., Summa V., Tateo F. (2009). The influence of physico-chemical material properties on different badland development (Aliano, Southern Italy). *Catena* 81: 172–181.
 - Bonina F.P., Giannossi M.L., Medici L., Puglia C., Summa V., Tateo F. (2008): Diclofenac-hydroxycalcite: In vitro and in vivo release experiments. *Applied Clay Science* 41: 165–171.
 - Bonina F.P., Giannossi M.L., Medici L., Puglia C., Summa V., Tateo F. (2007): Adsorption of salicylic acid on bentonite and kaolinite raw materials and in vitro release experiments. *Applied Clay Science* 36: 77-85.
 - Dinelli E., Tateo F., Summa V. (2007): Geochemical and mineralogical proxies for grain size in mudstones and siltstones from the Pleistocene and Holocene of the Po River alluvial plain, Italy. *Geological Society of America Special Paper* 420, 25-36.
 - Summa V., Tateo F., Medici L., Giannossi M.L. (2007): The role of mineralogy, geochemistry and grain size in badland development in Pisticci (Basilicata, southern Italy). *Earth Surface processes and landforms* 32: 980-997.
 - Tateo F., Summa V. (2007): Element mobility in clays for healing use. *Applied Clay Science*, v. 36, n. 1-3, pp. 64-76.
 - Tateo F., Summa V., Giannossi M.L., Ferraro G. (2006): Healing clays: mineralogical and geochemical constraints on the preparation of clay-water suspension ("argillic water"). *Applied Clay Science*, 33: 181-194.
 - Mascolo N., Summa V., Fabio T. (2004) - In vivo experimental data on the mobility of hazardous chemical elements from clays. *Appl. Clay Sc.*, Vol. 25, pp. 23-28.
 - Gasparotto G., Spadafora E., Summa V., Tateo F. (2000): Contribution of grain size and compositional data from the Bengala Fan sediment to the understanding of Toba volcanic. *Marine Geology*, Vol. 162, pp. 561-572.
 - Summa V. (2000): Analisi granulometrica dei sedimenti. In *Incontri scientifici*, Vol. II, Fiore S. – Editore, Istituto di Ricerca sulle Argille, pp.19-29. V Corso di Formazione “Argille e Minerali delle Argille: Metodi di Analisi di Materiali Argillosi”. Gruppo Italiano dell’Association Internationale pour l’Etude des Argiles (AIPEA). Istituto di Ricerca sulle Argille – CNR, 28-30 settembre.
 - Mascolo N. Summa V., Tateo F. (1999): Characterization of toxic elements in clays for human use. *Appl. Clay Science*, Vol 15, pp. 491-500.
 - Summa V., Tateo F. (1998): The use of pelitic raw materials in thermal centres: mineralogy, geochemistry, grain size and leaching tests. Examples from the lucanian area (southern Italy) *Appl. Clay Science*, Vol 12, pp. 403-417.
 - Acquafredda P., Fornelli A., Piccarreta G., Summa V. (1997): Heavy minerals in Pliocene-Pleistocene siliciclastic sediments from southern Apennines (Italy). *Sedimentary Geol.*, Vol. 113, pp. 149-159.
 - Mazzoleni P., Summa V. (1996): Compositional of Plio-Pleistocene clays from Tricarico (Potenza - southern Italy) and their utilization by the Italian tile industry. *Appl. Clay Science*, Vol. 11, pp. 251-268.

CAPITOLI DI LIBRO

Summa V. & Giannossi ML (2013). The role of soil mineralogy, geochemistry and grain size in the development of Mediterranean badlands: a review. In: *Soil Processes and Current Trends in Quality Assessment*. Eds. Dr. Maria C. Hernandez Soriano. In Tech. ISBN: 978-953-51-1029-3

Giannossi ML & Summa V (2013). An observation on the composition of urinary calculi: environment influence. In: Medical Geochemistry - Geological Materials and Health. Eds. Censi Paolo; Darrah Thomas; Erel Yigal. Springer. ISBN: 978-94-007-4371-7

Giannossi ML & Summa V (2012). Calcium Phosphate Urinary Stones: Prevalence, Composition And Management. In: Calcium Phosphate: Structure, Synthesis, Properties, and Applications. Eds. Robert B. Heimann. Nova Science Publishers. ISBN: 978-1-62257-299-1

Giannossi ML & Summa V (2012). A review of pathological biomineral analysis techniques and classification schemes. In: An Introduction to the Study of Mineralogy. Eds. Prof. Dr. Cumhuri Aydınalp. In Tech. ISBN: 978-953-307-896-0

Summa V. & Giannossi ML (2011). Clay Deposits, From a Problem to an Economic Resource for the Territory: Case Study in Southern Italy. In: Clay: Types, Properties and Uses. Eds. Justin P. Humphrey and Daniel E. Boyd. Nova Science Publishers. ISBN: 978-1-61324-449-4
Titolo libro: An Introduction to the Study of Mineralogy
Editori: Prof. Dr. Cumhuri Aydınalp

ORARIO E SEDE DI RICEVIMENTO

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