

### Francisco Benavides, P.E.



Mr. Benavides has + 40 years of experience in management, engineering and construction. He has conducted bankable feasibility studies; economic comparative analysis of mineral transport alternatives; financial evaluations for the privatization of state owned companies; plant valuations for acquisitions and for financing purposes; and due diligence studies.

He holds an MBA from Kellogg School of Management, Northwestern University, Evanston, IL; a BS in Civil Engineering from Missouri University of Science & Technology, Rolla, MO, and has completed Graduate Studies in Engineering Management and Environmental Engineering at Missouri University of Science & Technology.

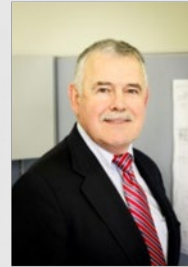
### Narayana (“Jay”) Jayaraman



Mr. Jayaraman is PEC’s expert *on cement process systems*; he has over 48 years of experience in the cement industry, including 27 years with a global OEM. His expertise includes plant conceptualization for process and layout, equipment sizing, procurement and production optimization. He has had in-depth exposure to the technical, economic,

and commercial aspects of large cement projects, and extensive *experience* in the upgrade and optimization of existing plants. He earned a BS in Mechanical Engineering from Osmania University, Hyderabad, India, and an MS in Mechanical Engineering from the Indian Institute of Technology, Kharagpur, India.

### Ken Schweigert



Mr. Schweigert is PEC’s expert for the non-metallic minerals industries; he has over 35 years of experience in mining and processing of lime, cement, calcium carbonates, aggregates, silica sand, frac sand, diatomaceous earth, perlite and clays. His expertise includes underground and surface mine operations, plant design, selection of process equipment, project scope development, operations impro-

vement, maintenance, plant personnel and equipment evaluations, due diligence analysis and construction services. He has led and participated in numerous renovation and expansion projects for industrial minerals facilities. He has a BS in Engineering Management from Missouri University of Science & Technology, Rolla, MO.

### Steven Phagan



Mr. Phagan is an accomplished professional who for 40 years has worked in operations for the lime industry. During his career, he has gained knowledge and expertise in the process, design, operations management, and strategic planning for the manufacture of quicklime and its derivatives. His technical expertise includes plant design, selection of process equipment, operations

Improvement, plant personnel and equipment evaluation, due diligence analysis, and construction and commissioning services for the lime industry. Mr. Phagan earned a B.S. in Business Administration from Saint Leo University, Tampa, Florida.;

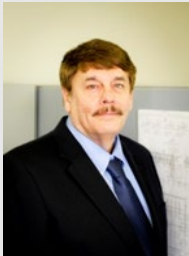
### Petko Vlaytchev



Mr. Vlaytchev is proficient in detailed engineering design for new construction, upgrades, conversions, and evaluations of structures for projects worldwide. He has over 20 years of experience in the design of steel and concrete structures for industrial projects. He has designed a wide range of structures such as pre-heater towers, silos, mill foundations and buildings, ductwork and material handling systems.

Mr. Vlaytchev earned a Master's and Bachelor's degrees in Structural Engineering from the Higher Institute of Architecture and Civil Engineering in Sofia, Bulgaria.

### Tom Boutaugh, P.E.



Mr. Boutaugh has over 35 years of experience in planning, scheduling, and execution of projects in the cement, minerals and coal industries. He has broad experience in managing all aspects of plant design and construction. His extensive experience in limestone quarries and coal mines includes mine plans, ventilation, material handling,

quality control, blasting, and management of mining operations. He is a certified MSHA instructor and has foreman certifications in 3 states and shot-firer certification in Illinois. He has a B.S. in Mining Engineering - West Virginia University.

### Ney Linares, P.E.



Mr. Linares has 20 years of experience in the design and construction of heavy industrial projects. Throughout his career, he has been responsible for the analysis and design of various types of structures, including being the Structural Engineer of Record for CTG's new \$350 million kiln line in Martinsburg, WV; Lead Structural Engineer for a \$400 million new cement line for Kuwait Cement; Construction Manager for the construction of a \$7.5

million clinker storage facility for Ash Grove Cement, Foreman, AR; Structural Engineer for the design of a preheater tower, and Site Engineer for slip forming pre-heater structure for Loma Negra in Olavarria, Argentina. He has a B.Sc. Civil Engineering and M.S. in Structural Engineering from Washington University, St. Louis, MO, and a B.S. in Physics, Bethany College, Bethany, WV.

### Prasanna Seshadri, PhD

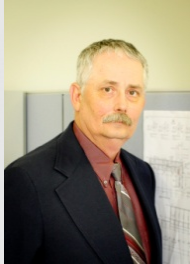


Dr. Seshadri is an experienced engineer with strong background in process design, project engineering and management, technology and new product development for a wide range of energy conversion and environmental control processes used in power and other heavy manufacturing industries. He is a Subject Matter Expert (SME) for solid fuel combustion, acid gas

and heavy metals emission control for thermal conversion systems and wastewater treatment. He has a BS in Chemical Engineering from the University of Madras, India; MS in Environmental Engineering and a PhD in Energy Engineering from the University of North Dakota.



### Dave Smith



Mr. Smith has over 30 years experience in engineering, preparation of capital cost estimates, purchasing and expediting, construction management, operational planning, scheduling, and cost control for mining projects. He has prepared numerous capital cost and design/build estimates, project scheduling and tracking for cement, lime,

and the mining industries. Prior to joining PENTA, he was Chief Engineer and Acting Mine Manager for Getchell Gold and Independence Mining, NV. He attained a BS in Mining Engineering and a BS in Geological Engineering from the University of Missouri, Rolla.

### Dario Hadziselimovic



Mr. Hadziselimovic has over 18 years of experience in mechanical engineering design, project coordination and management. His project background includes cement plants, frac sand plants, material storage ports and facilities and underground mineral and ore mines. He was the mechanical engineer for the slurry pump

Replacement and reclaim tunnel extension for a frac sand project in TX for which he also developed Gas and detailed SOW along with list of potential vendors. He has a degree in Mechanical Engineering from the School of Mechanical Engineering in Sarajevo, Bosnia, and a BSME from Washington U, St. Louis, MO

### Jose A. Clavijo



Mr. Clavijo is an accomplished executive with expertise in process optimization for increasing production yields. Prior to joining PEC Consulting as a Senior Consultant, he served as Technical Manager, Plant Manager, Project Engineer, and Plant and Quarry Engineer for Cementos ARGOS in Colombia. As Plant Manager, he was responsible for investment projects to increase production,

addressing the individual challenges of each facility and reducing production costs in various areas of the plants. He has *vast experience with management for expanding existing facilities and in the investment decision-making for new installations*. Mr. Clavijo attained a degree in Chemical Engineering from the Universidad del Atlántico-Barranquilla, Colombia.

### Kenneth Rone



Mr. Rone has 30 years' experience in all phases of cement plant operations and maintenance. He has managed maintenance activities at Ash Grove Cement, Riverside Cement, and Lonestar Industries. Among his greatest accomplishments are the oversight & coordination of maintenance reliability initiatives at nine cement plants and

one lime plant. Mr. Rone holds a BS degree in Engineering from the University of Washington, Seattle, WA. In addition, he is a Certified Maintenance and Reliability Professional and an MSHA Instructor.

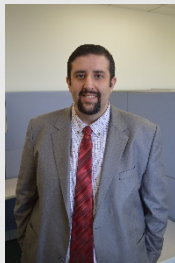
### Jay Shah



Mr. Shah has over 40 years of experience in electrical, instrumentation, programmable controllers and computer control for heavy industry. His experience includes medium and low voltage distribution systems, programmable controls and process instrumentation. He has been responsible for the electrical design and electrical

instrumentation of several cement plant projects. Jay has an M.S. in Electrical Engineering from St. Louis University, and a B.S. in Electrical Engineering, from the University of Gujarat, India.

### Mohammed Dimah



Mr. Dimah's experience includes the design and management of projects for various industries, such as cement, lime and frac sand. He has been responsible for the preparation of process flow diagrams and process calculations for the implementation of a waste heat recovery system in a cement plant, process & mass flow diagrams for a new lime plant, project management of a frac sand

Greenfield plant, design & procurement of equipment, and many due diligence and valuation studies for cement plants worldwide. He earned a BS Chemical Engineering from the University of Technology, Iraq; Master's in Chemical Engineering from the Polytechnic University of Valencia, Spain; and an MBA – Industrial Business from the University of Valencia, Spain.

### Jose I. Escavy



Dr. José Ignacio Escavy has over 20 years of experience in mining of industrial minerals. He has hands-on experience in exploration, investigation, deposits modeling, reserves calculation, mine planning, reclamation, and closure of quarries. He has served as Manager of the Quality and Environmental Department and Quarries Manager of large cement production

facilities. He is fluent in Spanish, English, and French. His credentials include a Degree in Geology from the University of Madrid, Spain ; M. Sc. in Minerals Resources from the University of Cardiff, U.K.; Ph.D. in Industrial Minerals from the University of Madrid, Spain.