

Raffaella Granata: International Achiever

It is unusual to begin a DFI member profile with a quote from a colleague. However, Trevi's Riccardo Crippa sets the stage perfectly for Granata when he says, "Raffaella is certainly one of the most experienced and competent international authorities in the field of soil improvement, cutoff walls and deep foundations, and has tremendous knowledge of soil and rock grouting. She is not only a scientist, but also applies her know-how and experience directly at the construction site, working with site people to implement her vast technical capability providing solutions and improvements. She gives her best at the site and enjoys being directly part of the construction's development.

Raffaella is very respected and appreciated by all the site colleagues. They are used to seeing her in the field, side-by-side with the engineers and operators putting in long hours. She is determined to achieve the best outcome. Raffaella is certainly a 'citizen of the world.' I can imagine very few countries where she has not been."

A World of Experience

Granata is a senior engineer with Trevi, with whom she has worked for 16 years. She works out of Trevi's Milan office. While "works out of" is geographically correct, that doesn't begin to capture the fact that she has been the "engineer on the spot" for both Trevi and Rodio in Argentina, Tunisia, India, Iraq, Saudi Arabia, Switzerland, Oman, Egypt, the United States, and — as you might expect — projects throughout Italy.

Milan, Italy, is home to the University of Milan, where she studied geology, geotechniques and hydrology, and from which she received her master's degree. Granata spent 20 years with Rodio before joining Trevi in 2004. She has applied her expertise on a vast array of projects over the years, including dams, roads, high-speed

railways, remediation of polluted areas, and deep foundations for high-rise structures. She has designed and overseen the construction of hundreds of projects calling for diaphragm walls, piles, jet grouting and related technologies. In her role as technical advisor, she is involved with projects from inception to execution. She particularly enjoys working on jobsites alongside project engineers and construction personnel. Granata tells us, "I always like the challenges that work performed in the ground poses. It is investigative work that requires patience, perseverance and attention to the clues that the soil provides."

All of the tasks, from design to construction, provide different challenges that she finds to be what makes her profession and her unique role most gratifying. Her integrated involvement is highlighted by comments from another colleague, Vice President Mario Mauro of Treviicos. "I have known Ms. Granata since 1989 when I joined the technical office of Rodio. At the time, she was in charge of the geotechnical laboratory and a key developer of new grout, slurry and concrete mixes for underground work. Battista DePaoli, the head of the technical office at Rodio, commented about the results of a site visit: 'Ms. Granata was the only one who understood and fixed the problem. She hit the nail on the head and has more grit than most of the people in the company.'"

Mauro adds, "Raffaella developed and implemented the technology for the construction of the self-hardening slurry wall at the Hoover Dike in Florida, and the plastic concrete cutoff wall at Bolivar Dam in Ohio. Her technical knowledge is outstanding, but the qualities that strike me the most is her absolute passion for our work and perseverance in the face of difficulties." He mentions wryly, given that he is an engineer: "Ms. Granata is a



geologist, not an engineer, which is a plus in my opinion. Geologists are more versatile and inventive than engineers."

Her tenacity and creativity are echoed by fellow DFI member David Paul, P.E., of Paul GeoTek Engineering, who was formerly with the U.S. Army Corps of Engineers. "I have known Raffaella for 20 years. Among other high-visibility dam projects, we spent three years working together on Mosul Dam in Iraq. She worked tirelessly in Italy and onsite at Mosul Dam to ensure that the work was executed at the highest level. She led the development of the specialized grouting equipment required for the grouting gallery at the base of the dam, the computer modeling system 'T Grout,' and the various grout mixes and grouting procedures." Paul added how much he appreciates the work she has done for DFI in her support of the Seepage Control and International Grouting committees.

Being a Professional Woman

The oft-quoted grit and determination expressed in discussions about Granata came into play early on in her career when she ran headlong into resistance to a woman being in civil construction. In 1984 when she interviewed for a position at Rodio, she was surprised to learn from their chief of human resources that pursuing a career in civil engineering as a woman in Italy was in itself unique.

To this day Granata feels strongly that women should be judged by the same standards as men. To this end, she is most

supportive of the efforts of DFI's Women in Deep Foundations Committee. While she notes that she has seen many changes in her 36-year career in the industry, she adds that there is still much to be done in encouraging women to enter the profession. Moreover, she feels women should be given every opportunity to advance and be viewed with the same respect and receive the same compensation as men. This disparity is a familiar theme in the industry and one that needs to be addressed and changed. To not do so, she says, deprives the profession of talented professionals who make a significant contribution to the success of the organizations for which they work, and negatively impacts advances in the profession at every level.

To other women in the profession, Granata advises, "Never stop studying and accumulating experiences. The more you know, the more powerful you are. Bring an open mind to work each day, push yourself out of the comfort zone and be brave. And last but not least, never think of yourself as a woman first, but as a capable individual."



Raffaella Granata in Saudi Arabia

View of the Future

When expressing her concern about the commoditization of geotechnical engineering services, she says, "The challenge of the future will be to achieve an even balance between price and the quality of our work. The technological advances in the development of new equipment will push the boundaries of what can be done, but the experience of the personnel will remain the most important factor."

Granata lives the values she espouses. She has confronted challenges that few would undertake. Whether working as a professional woman in the Middle East, tackling the most thorny civil engineering projects throughout the world or taking time out to putter in her garden, she is uniquely keen for every task. Oh, and let's not forget, *brave...*

GEO NET

WIRELESS DATA HOSTING SYSTEM



Features:

- Effortless system configuration
- Seamless data retrieval and conversion
- Versatile data visualization options
- Extensive 60 km radio range (line of sight), 15 km per hop (up to 4 hops)
- Automatic data relay around obstacles
- Stand-alone datalogger functionality
- Android app offers onsite configuration and data retrieval

GEOKON

TRUSTED MEASUREMENTS®

Producing **Quality Geotechnical Instrumentation** Since 1979.

Visit: www.geokon.biz/geonet

GEOKON | Lebanon, NH, USA

+1.603.448.1562 | info@geokon.com

