1. Name

Gary Kent Rogers

2. Education – degree, discipline, institution, year

Doctor of Philosophy, Mining Engineering, 5/89

Virginia Polytechnic and State University, Specialization: Geological/Geotechnical Engineering Doctoral Dissertation: <u>The Stability of Portals in Rock</u>
Master of Engineering, Civil Engineering, 6/83
University of California - Berkeley, Specialization: Geological/Geotechnical Eng., Construction Mngt. Master's Thesis: <u>Ground Control at the Feather Fork Gold Mine</u>
Bachelor of Science, Mining Engineering, 5/81
West Virginia Institute of Technology, Specialization: Ground Control

3. Academic experience – institution, rank, title, when, full time or part time

8/93 - To Date **Professor**. Lexington, VA. <u>Professor, Civil and Enviro Engineering Department, Virginia Military</u> <u>Institute</u>. <u>Materials, Mining/Geotechnical/Geological Engineering</u>.

 1/93 - 8/93
 Instructor, Consultant. Lexington, VA. Instructor, Civil and Enviro Engineering Dept, Virginia Military Institute. Consultant, Geotechnical/Geological Engineering.

4. Non-academic experience – company or entity, title, brief description of position, when, full time or part time

7/92 - 1/93 Consultant. Blacksburg, VA. Consultant, Mining and Geotechnical/Geological Eng.

7/91 - 7/92 Mine Ventilation Services, Inc. Blacksburg, VA. Manager, East Coast Office.

5/89 - 5/91 Vecellio & Grogan, Inc. Beckley, WV. Project Coordinator.

12/86 - 5/89 Virginia Polytechnic and State University (VPI&SU). Blacksburg, VA. <u>Research Assistant.</u>

11/85 - 12/86 Mine Ventilation Services, Inc. Lafayette, CA. Mining Engineer.

1/85 - 11/85 U.S. Army Eng District, Corps of Engineers, San Francisco. CA. <u>Civil/Geotech Eng</u>.

6/82 - 1/85 U.S. Army Eng Division, Corps of Engineers, S. Pac. Engineer Div. CA. Civil/Geotech Eng.

9/81 - 6/82 University of California, Berkeley. CA. Research Assistant.

12/79 - 1/81 Sterling Smokeless Coal Company. Whitby, WV. Underground Transitman.

5/75 - 8/81 Robert J. Rogers, Licensed Land Surveyor. Beckley, WV. <u>Transit/Draftsman</u>.

5. Certifications or professional registrations

Commonwealth of Virginia Professional Engineer – Mining Engineering (VA 023988) UTD-Leidos Sponsored Security Classification

6. Current membership in professional organizations

American Society of Civil Engineers (ASCE)

7. Honors and awards

Appointed VP for Historic Crozet Tunnel Foundation Board of Directors (Jan 2012) Faculty Teaching "Excellent" Classification (2011 - 2017)

8. Service activities

Serve a variety of VMI Committees and Departmental Duties Advise Cadets on ASCE projects Supervise/Employee Cadets on research projects

9. Publications and presentations from the past five years – title, co-authors if any, where published and/or presented, date of publication or presentation

Listed below within "professional development activities"

10. Most recent professional development activities

- Leidos Security Classification. Consulting/Research. 2017 to Date. Geological/Geotechnical Engineering.
- Raytheon Security Classification. Consulting/Research. 2012 2017. Geological/Geotechnical Engineering.
- Historic Crozet Tunnel (c. 1850 1944), VA, Foundation Board of Directors Vice President 2012 to Date.
- UTD-Raytheon. Periodic Security Classification Review/Update. [Classified] 2012.
- UTD-Raytheon. Rock Core Testing Material Properties. Sunbright. Students. 2012.
- Secure Mountain. On Site Review and 2nd Phase Design Planning. 2012. [Proprietary]
- Secure Mountain. Field Trip/Coordination with Cave Survey Group. 2011. [Proprietary]
- Low Moor Site Underground Data Storage Site Recommendations, Alleghany County. 2011.
- DTRA/IGAT Peer Review Meetings. Bi-Monthly. Ongoing. 2011. [Classified].

- Antebellum Portal Excavations and Ground Condition Assessment. Buchanan. 2011.
- UTD-Raytheon. Subsurface Widget Testing. Sunbright Site. [Classified]
- UTD-Raytheon. Field Trip Lead. Sunbright Site, Scott County, VA. 2011.
- VMI Earthquake Damage Assessment Overview. 2011.
- Secure Mountain. Underground Data Storage Center Research. 2011. [Proprietary]
- Depth-to-Bedrock and Weathered Rock Research. 2011. [Classified].
- Sunbright Underground Mine Continuous NX Rock Core Properties and Unconfined Compressive Strength Testing. Scott County, VA. Sunbright Group. 2011.
- Historic Crozet Tunnel (c. 1850 1944) Nelson & Augusta Counties, VA) Foundation Board of Directors appointment. 12/03/10 Inaugural Meeting. 2011 ongoing.
- Student Internship Sponsor with UTD-Raytheon. Geological/Geotechnical. 2010 2011.
- DTRA/IGAT Peer Review Meetings. Monthly to Bi-Monthly. Ongoing. 2010. [Classified].
- Water Table Research. UTD-Raytheon. Ongoing. 2010. Classified.
- Weathered Rock Research. UTD-Raytheon. Ongoing. 2010. [Classified].
- Low Moor Underground Limestone Mine Vibration Analysis (Proposed Underground Data Storage Center). Alleghany County. VA. 2010.
- Sunbright Underground Mine Preliminary Geological/Geotechnical Feasibility Assessment for Conversion to Underground Data Storage Center, Scott County, VA. Allegheny Construction, Roanoke, VA. Lab testing of rock included with field research. 2009 2010.
- Crozet's Old Blue Ridge Tunnel Renovation Research and Engineering Consulting, Nelson County, VDOT, Whitesell Group, Mattern & Craig, 2009. Ongoing.
- Weathering Research, Raytheon-UTD, [Classified], Ongoing. 2009.
- DTRA/IGAT Peer Review Meetings. Monthly to Bi-Monthly. Ongoing. 2009.
- Multiple IGAT Meetings, Hard Target Research and Analysis Center (HTRAC), [Classified], July 2008 to January 2009.
- Luck Stone Research Meeting, Richmond VA, July 30, 2008. [Classified] Weathering.
- Interagency Geotechnical Assessment Team (IGAT) Working Session Meeting, Hard Target Research and Analysis Center (HTRAC), [Classified], July 24 July 25, 2008.
- Weathering Research, Luck Stone, IGAT, and Raytheon, [Classified], May/June/July, Ongoing. 2008
- TS-SCI Classification Finalized (Formally Initiated January 2006). Raytheon-UTD Sponsor for IGAT/HTRAC projects. [Classified] May 2008.
- Interagency Geotechnical Assessment Team (IGAT) Meeting, Hard Target Research and Analysis Center (HTRAC), [Classified], March 30 April 5, 2008
- Quarry Field Trips w/IGAT members, assisted by DMME, Granite Study, Raytheon/DTRA, December 2008
- Crozet Blue Ridge Tunnel Phase II Design, VDOT, Nelson County, Mattern & Craig, Whitesell Group, Roanoke, VA September 2007, on going research
- Granitic Study, UTD/Raytheon aided by VA DMME, September 2007, ongoing research @ VA various VA quarry locations
- Interagency Geotechnical Assessment Team (IGAT) Meeting, Hard Target Research and Analysis Center (HTRAC), [Classified], September 23 27, 2007
- Interagency Geotechnical Assessment Team (IGAT) Meeting, Hard Target Research and Analysis Center (HTRAC), [Classified], April 23 27, 2007
- "Portals", Short Course Lecture, Hard Target Research and Analysis Center, (HTRAC), Felice Associates, Herndon, VA, (2006), [Classified] March 25 28, 2007
- "Portal Vulnerability Index (PVI)", UTD/Raytheon, Hard Target Research and Analysis Center (HTRAC), [Classified] – Research Initiated August 8, 2006
- "Engineering Concepts Crozet's Blue Ridge Tunnel", Whitesell Group, Nelson County Board of Supervisors, Lovingston, VA, October 10, 2006.
- "Draft Stability Analysis, Crozet's Blue Ridge Tunnel", VDOT, Nelson County, Mattern & Craig, Whitesell Group, Roanoke, VA, (Summer 2006)
- "Stability Methods Presentation Crozet's Blue Ridge Tunnel", Mattern & Craig, Roanoke VA, (2006)
- "Remote Analysis of Rock Structure" Presentation Interagency Geotechnical Assessment Team (IGAT) Meeting, Alexandria, VA, [Classified], UTD/Raytheon, (2006)
- "Portals" Presentation, Hard Target Research and Analysis Center, Raytheon/UTD, Herndon, VA, (2006), [Classified]
- "Portals" Presentation, Interagency Geotechnical Assessment Team (IGAT) Meeting, Alexandria, VA, [Classified], UTD/Raytheon, (2006)
- Lead Organizer, Field Trip to VA Portals w/Washington DC Professionals (2006), Virginia, [Classified TS-SCI]
- Crozet's Blue Ridge Tunnel Research (2002-2005), Whitesell Group, Rock Fish Gap, VA
- Portal Stability and Geologic Characterization, Classified, 2004 2005.
- Southern Illinois Tunnel Invert Stability Assessment, HDR, 2004.