Tau Beta Pi Names
Dr. Amelio, Dr. Diarra, Dr. Harker, Lt. Gen. Johnson, & Mr. Rothrock, P.E., as 2015 Distinguished Alumni

Tau Beta Pi, the engineering honor society, has named the 2015 winners of its Distinguished Alumnus Award. Now in its 19th year, the award recognizes alumni who have demonstrated adherence to the ideals of Tau Beta Pi (integrity, breadth of interest, adaptability, and unselfish activity) and to fostering a spirit of liberal culture on local, national, and international scales.

Gilbert (Gil) F. Amelio, Ph.D., Georgia Alpha ’65; Cheick M. Diarra, Ph.D., District of Columbia Alpha ’85; Patrick T. Harker, Ph.D., Pennsylvania Delta ’81; Lt. Gen. Michelle D. Johnson, Colorado Zeta ’81; and Ray A. Rothrock, P.E., Texas Delta ’77, are the 2015 Tau Beta Pi Distinguished Alumni and will be honored on October 31, 2015, at the 110th annual Convention to be held in Providence, RI. Tau Beta Pi President J.P. Blackford will present a commemorative plaque, and a $2,000 scholarship will be given in the name of each alumnus to a deserving student member of Tau Beta Pi.

Dr. Amelio is a senior partner at Sienna Ventures and a past chairman and CEO of Apple. Dr. Diarra is a chairman of the board at the African Legal Network and past chairman of Microsoft Africa. Dr. Harker is president and CEO of the Federal Reserve Bank of Philadelphia and past president of the University of Delaware. Lt. Gen. Johnson is Superintendent of the U.S. Air Force Academy (CO) and past Deputy Chief of Staff, Operations and Intelligence. Mr. Rothrock is a partner emeritus of Venrock and past CEO of RedSeal Networks.

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The selection of these five eminent engineers as 2015 Distinguished Alumni recognizes their lifetime achievements and commitment to engineering education. Each has played a role in developing young minds, inspiring the next generation of engineers, and contributing to the advancement of the engineering profession. A short summary including biographical details, achievements, and work follows.

**Dr. Amelio** earned his degrees (bachelor’s, master’s, and Ph.D.) in physics from the Georgia Institute of Technology. His career has included leadership roles as CEO and chairman of Apple; president, CEO, and chairman of National Semiconductor; and president of Rockwell Communication Systems. Since 1998, Dr. Amelio has been a venture capitalist.

During his four decades of technology and business leadership, Dr. Amelio has achieved numerous business, scientific, and technological successes. Beginning as a co-founder of Information Sciences, Inc., a software firm that was eventually acquired by Brown Engineering, and later founding Acquicor Technology, which became Jazz Technologies.

He has been a Fellow of IEEE for 38 years, a member of the board of governors of the Electronic Industries Association, a member of the executive committee of the Business and Higher Education forum, and has been active in numerous other associations and higher education institutions.

In addition to his business success, he has also made many impressive technical contributions, such as the first practical charge coupled image sensor and charged couple device which is used as the eyeball of the Hubble Space Telescope. In summary, Dr. Amelio’s entrepreneurial accomplishments and successful company transformations exhibit profound contributions to the development of the profession. Outside of industry, he has been involved in U.S. trade treaties with Japan and as chair of the 50th anniversary celebration of the U.S. Savings Bond program.

In these efforts, Dr. Amelio has demonstrated an unwavering dedication to the ideals of Tau Beta Pi and serves as a model of a well-rounded alumni fitting of recognition.

**Dr. Diarra** was born in the Republic of Mali, West Africa. He earned a B.S. in mathematics from the University of Pierre and Marie Curie in Paris, France. His master’s and Ph.D. degrees in engineering were completed at Howard University. Throughout his career, Dr. Diarra has been an astrophysicist, educator, engineer, and an international leader.

During his time working at NASA’s Jet Propulsion Laboratory as an interplanetary navigator, he was recognized for overseeing educational outreach efforts for the Mars Exploration Program and was designated as the 19th Goodwill Ambassador of the United Nations Educational, Scientific and Cultural Organization to the continent of Africa.

Subsequently, his commitment to helping the masses in Africa caught the attention of Bill Gates who appointed him as Microsoft Head in Africa (2006). In this position, Dr. Diarra helped bring computers and network connectivity to millions in Africa and oversaw Microsoft operations in 60 countries. Today, he is chairman of the board of the Africa Legal Network that assembles law firms on the African Continent to provide legal assistance to the poor, indigent, and victims of political oppression.

The culmination of his efforts to enrich the lives of others in his native continent culminated with the ultimate accomplishment of being elected Prime Minister of Mali in April 2012. After less than eight months, he was deposed by a military coup and placed under house arrest.
Dr. Diarra’s immeasurable self-sacrifice and his determination for justice and social and economic advancements of his people continue today as he remains in Africa. There is no doubt that he gives true meaning to advancing liberal culture both as a professional and as an activist fighting for change through science and technology.

**Dr. Harker** graduated with degrees (bachelor’s, master’s, and Ph.D.) in civil engineering from the University of Pennsylvania. He has worked in academia since 1997 and most recently served as president of the University of Delaware (2007-15). This summer he became president and chief executive officer of the Federal Reserve Bank of Philadelphia.

His strategic plan at Delaware (UD) was focused on education excellence, environmental leadership, global engagement, and service to the community. Prior to serving UD, Dr. Harker was dean of the Wharton School at his alma mater – the University of Pennsylvania (UPenn). When he first joined UPenn as a professor in 1991, he was the youngest faculty member in Wharton’s history to be awarded an endowed professorship.

Dr. Harker has published or edited 9 books and more than 100 professional articles. He also served for three years as the editor-in-chief of the journal *Operations Research*. Outside of academia, he serves on the board of many corporations and, in 1991, was named a White House Fellow and later served as a special assistant to FBI Director William S. Sessions.

His involvement in education includes views that engineers should be well-rounded and involved in the liberal arts. In addition, he believes those pursuing non-technical degrees should be required to take technical based classes for a more well-rounded education and with consideration to the penetration of computers and technology in today’s society.

Dr. Harker’s distinguished and diverse career in engineering, his achievements, and contributions to associations, non-profits, and universities are deserving of acknowledgement as an exemplary professional and Tau Bate.

**Lt. Gen. Johnson** is a distinguished graduate in operations research from the Air Force Academy (USAFA), where she was the first woman to serve as the Cadet Wing Commander – leading 4,000 students in day-to-day military requirements. She then earned an appointment as a Rhodes Scholar and studied politics and economics at Brasenose College, University of Oxford.

Subsequently, she graduated from pilot training and served as a faculty member in the political science department at USAFA. In this role, she helped inspire students to contribute to social discourse, become world citizens, and see the larger picture. Her exemplary career path then led to being selected as a military aide to both President George H.W. Bush and President William J. Clinton during their presidential terms.

In 2013, she was named Superintendent of the USAFA. To date, she has dedicated 34 years to serving the U.S. Air Force. Aside from her technical and military career achievements, Lt. Gen. Johnson has devoted a significant amount of time to giving presentations and lectures, and serving on panels and forums to help teach and share her experiences with others. Her focus ranges from connecting with the next generation, commitment to service, respect for human dignity, innovation, and modernization.

Today, Lt. Gen. Johnson spends her career as an educator promoting the importance of liberal culture, with engineering, to young people, educators, and her peers. She has focused a great deal on bringing these two sides together, working specifically with faculty at the USAFA. For her continued leadership and outstanding efforts, she is worthy of this distinguished title.
Mr. Rothrock, P.E., attended Texas A&M University graduating with a B.S. in nuclear engineering. Next, he earned a master’s in engineering from MIT and an MBA with distinction from Harvard Business School. An engineer at heart, Rothrock spent time at Yankee Atomic Electric and Exxon Minerals before joining Venrock.

While at Venrock he launched the company’s Internet practice, the firm’s energy practice, and his investments have resulted in a lifetime investment internal rate of return of 94 percent. In addition, Rothrock serves on the board of five privately held companies, previously served as chairman of the National Venture Capital Association, and testified to the President Obama’s Blue Ribbon Commission on America’s Nuclear Future.

Rothrock is a frequent speaker on venture, energy, and technology. He often presents independent research showing how government, industry, technology, and public opinion must converge for America to solve big problems such as developing and implementing an energy policy that protects national, economic, and environmental security. His current research includes clean tech strategies and prospective cyber security threats.

Most recently, he was chairman and CEO of RedSeal Networks – a cyber security company. In 2013, he was co-executive producer of Robert Stone’s documentary titled, Pandora’s Promise, which debuted at the Sundance Film Festival and was screened at the Tau Beta Pi Convention in Ames, IA.

For his passion and dedication to educating the globe on issues of climate change and nuclear power, for his accomplishments as a venture capitalist, and his ability to mentor young entrepreneurs, Mr. Rothrock embodies the spirit of this award.

The Association hereby recognizes Dr. Amelio, Dr. Diarra, Dr. Harker, Lt. Gen. Johnson, and Mr. Rothrock, as the 2015 Tau Beta Pi Distinguished Alumni.

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Tau Beta Pi is the Engineering Honor Society, founded at Lehigh University in 1885. It has collegiate chapters at 244 engineering colleges in the United States and active alumni chapters in 41 cities. It has initiated more than 564,000 members in its 130-year history and is the world’s largest engineering society. (See www.tbp.org)