## SUMMARY Alumni Distinguished Professor

## **April 1, 2019**

The Alumni Distinguished Professorship (ADP) is a preeminent faculty appointment recognizing faculty members who demonstrate extraordinary accomplishments and academic citizenship through substantive scholarly contributions across all three of Virginia Tech's core mission areas of teaching, research or creative activity, and engagement. Each ADP is expected to make scholarly contributions in the three mission areas at the same high level evident at the time of appointment. An extensive nomination and vetting process involves department and college honorifics committees, a specially convened university committee, the executive vice president and provost, and the president. The Board of Visitors confers upon an individual appointment as Alumni Distinguished Professor for a period of 10 years, at which time the appointment may be renewed. Currently 10 ADPs may be appointed and there is no quota by college or department (Faculty Handbook, Section 3.2.2).

Having followed the established protocol, and consistent with the recommendations received from the university committee, Executive Vice President and Provost Cyril Clarke recommends the appointment of Dr. Wing Ng as Alumni Distinguished Professor. This recommendation also has the enthusiastic endorsement of President Timothy Sands and the Executive Committee of the Alumni Association Board. Dr. Ng is a truly exceptional scholar and educator whose achievements have been recognized nationally and internationally. The appointment carries with it an annual operating account for use by the professor.

## **ALUMNI DISTINGUISHED PROFESSOR**

Dr. Wing Ng is currently the Chris Kraft C. Endowed Professor of Mechanical Engineering in the College of Engineering.

Appointed to the faculty in 1983, Dr. Ng has spent his entire post-Ph.D. career at Virginia Tech. He has helped to advance the department of Mechanical Engineering through his teaching, research, service, and entrepreneurial endeavors and has achieved a high level of excellence in each area. He is continually ranked highly among instructors in his department.

Compassionately mentoring his students through undergraduate and graduate degree programs and preparing them for work in industry are two of the factors earning Dr. Ng the William E. Wine Award for teaching excellence and the Certificate of Teaching Excellence four times. Dr. Ng has mentored approximately 125 master's degree and doctoral degree students as a thesis advisor. He has led and assisted in significant curriculum revisions twice: first working with faculty in restructuring and revising courses to meet new degree requirements, as well as restructuring a junior level class to accommodate a large enrollment number and lack of teaching staff. He has also developed new courses to meet critical needs of students interested in careers working with gas turbines. His "spin-off" company, Techsburg, receives federal funding and consistently hires undergraduate and graduate students for cooperative education and as summer interns, giving them unique, first-hand opportunities to solve industry problems.

Dr. Ng's research is recognized and supported by the United States government as well as industry, having resulted in a number of patents that improved products for Original Engine Manufacturers (OEM). He has authored almost 300 journal and conference publications, has been recognized a number of times by the American Society of Mechanical Engineers and the American Institute of Aeronautics and Astronautics with three Best Paper Awards, an Outstanding Paper Award, a Best Poster Award, and has received the Society of Automotive Engineers' Ralph R. Teetor Educational Award for significant contributions to teaching, research, and student development. Research from Dr. Ng's lab has significantly impacted design of gas turbines, making Virginia Tech graduates highly sought after by gas turbine companies such as Rolls-Royce, General Electric, and Siemens.

Some of Dr. Ng's additional accomplishments include contributions to the economic development of the Commonwealth of Virginia. His strong relationship with Rolls-Royce from contract research helped to convince high-level Rolls-Royce executives that Prince George, Virginia was the right place for the Rolls-Royce Crosspointe aircraft engine manufacturing plant, due to the strength of Virginia's higher education institutions,. Ng frequently hosts visiting international faculty members in his laboratory and is an adjunct professor at Xi'an JiaoTong University, a prominent university in China. At the local level, Ng's service spans department, college, and university levels. He has chaired the Executive Committee of the Engineering Faculty Organization, served on the advisory

board of the Institute for Critical Technologies & Applied Science to promote interdisciplinary research, and served two terms on the University's promotion and tenure committee. Ng has served as a faculty advisor for the Hong Kong Students Club, mentoring activities for students from Hong Kong and helping new international students while they settled into campus and into American culture. He has also been an advisor to the United States Government, serving on advisory committees to NASA and the Department of Defense.

Dr. Ng is nationally and globally recognized for outstanding scholarly contributions in teaching, research, and service throughout the course of his career, all of which have served to advance the stature of the department and the university, the success of students, the development of industrial products, and the economic competitiveness of the Commonwealth of Virginia.

## **RECOMMENDATION:**

That Dr. Wing Ng be appointed Alumni Distinguished Professor effective April 10, 2019, for a period of ten years.