

National Hsinchu Senior High School's 100th Anniversary Greeting

■ Dr. Yuan Tseh Lee

Dearest National Hsinchu Senior High School fellow brothers,

I am Yuan Tseh Lee. This year is National Hsinchu Senior High School's 100th year anniversary. I am thankful for the opportunity to share my life story with you all.

I was born during the time when Taiwan was under Japanese occupation. When I started elementary school, it was towards the end of World War II. Once, a bomb landed 50 meters from our home door. For our safety, my father relocated our family to the mountains. There, I learned how to do agricultural work and

handicrafts, as well as help my mom with caring for my siblings, carrying the weight of an older brother's responsibility. Once World War II ended, I was able to go back to school, but I was dubbed as the classic "hyperactive" child. Because my family was not rich, we kids used wooden sticks and a small rubber ball to play baseball. We played ping pong at the nearby Confucian temple, and we were often scolded for being naughty children. The first time I played in the Hsinchu township baseball competition, anyone who hit a homerun was able to eat a chicken egg. I also joined the school's ping-pong team, and, in sixth grade, I

was a member of the team that won the little league championship in Taiwan. We practiced hard. I often felt as if the ping pong paddle was like an extension of my body; my blood would flow into, through, and out of the paddle.

In 1949, I tested into National Hsinchu Senior High School's junior high division (equivalent to today's middle school). Due to my strong academic performance, I was automatically able to enter the high school division, so I spent a total of six years at National Hsinchu Senior High School. During this period, I was greatly influenced by our Principal Chih-ping Hsin, who championed the balance of five education virtues: moral, intellectual, physical, social, and artistic development. He supported freedom of thought; his vision was that the students of National Hsinchu Senior High School would be well-rounded and receive a holistic education. The National Hsinchu Senior High School version of me was curious about everything. I wanted to learn everything, I dove into reading, and I poured myself into extracurricular activities, not feeling tied down by academics. I liked playing tennis, baseball, volleyball, and ping-pong. I also was able to throw the shot put a good distance

-- I guess you could have called me an athlete. I also participated in the chorus and symphonic band. In addition, in my class I was the head of the academic arts and organized a poster competition for my classmates. Because my drawings were fairly good, the biology teacher also had me draw an anatomy poster, which was used in class.

The high school version of me was not a goody two-shoes student. At the time, I was quite outspoken, and when I witnessed a situation that I thought was unjust, I was quick to point it out. I also liked to use perspectives different from my teachers to analyze problems. In 10th grade, I used my own method to solve a geometric proof and received a zero from my teacher. Later on, the teacher asked me to come to the front of the classroom and to solve the proof on the blackboard in front of my peers. In the end, there were no errors to my method so the teacher added a 10 in front of my zero, changing my grade from a zero to 100.

High school is a critical time to think about and launch your future. In 10th grade, due to a health issue, I spent a month at home for recovery. This month impacted my life and my view of the

world, and, with time to think deeply, the period changed my future self. At that time, I thought that apart from my own happiness, it was more important to contribute to society. All the time, I was keen on research and determined to become an academic. This dream humbled me and helped me to put down my individual heroic thoughts. Once I was admitted into National Taiwan University, aside from hoping to become an excellent academic, what I wanted most was to find like-minded partners with whom I could work hard to change society.

In 1986, Professor Herschbach, Professor Polanyi, and I were awarded the Nobel Prize in Chemistry. It was with Professor Herschbach that we further developed the “crossed molecular beam technique” so that it could be used to research the detailed observation of molecules during chemical reactions. (<https://www.britannica.com/biography/Yuan-T-Lee>)

I would like to share some mutual encouragement with my National Hsinchu Senior High School fellow brothers. An individual's hard work is very important; I worked in a windowless laboratory struggling from morning to night.

However, behind every accomplishment or award, there are many people who have helped us along the way. They may be our parents, teachers, spouses or the classmates next to you. I truly believe that those who are worthy of our respect are those who understand what it means to share and who are not satisfied with the status quo, but humbly seek to learn and gain more courage.

From the 20th to 21st century, the world has changed dramatically, and Taiwan – as a part of the world – has not paused a beat either. Each generation has its own set of problems; different generations have different coming-of-age stories. When I first left Taiwan, I went to UC Berkeley to complete my Ph.D. and to Harvard University for my postdoctoral degree. Later, I taught at the University of Chicago. The University of Chicago's motto is: “Let knowledge increase so that life may be enriched.” Early on, Taiwan experienced a “brain drain”, with many leaving the country, and now we need more people to return to create a “brain circulation”. For a long time, the world functioned with a “nation first” mentality in competing against one another. But I hope that in the future it can be the “world

team” mentality so that countries can cooperate together. I hope that Taiwan can develop a depth and breadth of knowledge and power to help deal with the many global challenges we face.

In the past 50 years, especially with the global population boom and increased consumption per capita, humanity has quickly changed our living environment. Our lifestyles are changing the atmospheric elements. With the rise in carbon dioxide and other greenhouse gases, more energy is entering into the earth than leaving, and thus the earth’s temperature is incrementally increasing. Scientifically, when the temperature rises, it means that more energy is stored at the surface. But we need to realize that the increase in temperature means that the atmosphere is impacting our livelihoods, bringing extreme weather, such as large typhoons, floods, forest fires and more. We are already starting to see the serious detrimental impacts to human society. We do not have much more time to fight this battle. If over the next decade we are not able to reduce greenhouse gas emissions by a half (or at least by 40%), then human life on this earth will be severely threatened.

My fellow school brothers, what

dreams for the future do you hold? (In the science field, those that compromise or give up easily will definitely not be excellent researchers.) For lifelong learning, school is just a small starting point. In this beautiful garden of life, I hope that you will dare to explore and try new things, so that you will one day break out of the cocoon and become a butterfly, and flutter into the sky of your dreams. A promising future awaits those who attempt to carve a new path. But remember that a promising future requires like-minded people with whom we cooperate to build it. Let us continue to work hard on earth for human society, so that we can lengthen humanity’s existence. To do this, we need to take a path different than the one we took in the past.

Yuan T. Lee