

Guest of Honor's Address

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I consider it as a great privilege to stand before you today, on this memorable occasion of the induction ceremony of the Senior Prof. Namal Priyantha as the President of the Institute of Chemistry Ceylon.

It is a tremendous honor for me to address this esteemed gathering of distinguished university academics, accomplished technical-experts, prominent Researchers, valuable industry representatives and the learned membership of the Institute of Chemistry, many of whom directly or indirectly use Chemistry within their respective fields of work. I would like to extend my sincere thanks to the organizers of this event, for extending me the honor of being the 'Guest of Honor' on this significant occasion.

Today, we witness the induction of our respected colleague to the prestigious position of the President of the Institute of Chemistry Ceylon. This institution serves as the paramount authority entrusted with the responsibility of upholding and advancing the esteemed profession of Chemistry within our nation.

I extend my heartfelt congratulations, both personally and on behalf of all my year-78' university batchmates on his achievement as the President of Institute of Chemistry Ceylon. Prof Namal is not only a dear friend to me, but also a cherished companion from our shared journey at Thurstan College, and a fellow batch mate from our time-together at the University of Peradeniya.

He is a family man with his loving wife Ayanthi, who is also a Professor in Chemistry at the University

of Peradeniya. Ayanthi has always been a great tower of strength to Namal. His two adorable daughters Kushani and Sanduni excelled in university level and Post Graduate level education and they are steadily following the footsteps of their parents.

My fellow batchmates gathered here today, can attest to the fact that during our university days we have hardly seen Namal with a glass of Alcohol in his hand, I mean even in social gatherings. But, of course he preferred to work with many varieties of Alcohols in the R & D laboratories. However, time has made lots of changes, in our batch get togethers now he excels in his singing talents as well, probably after the second glass.

Since my graduation from the university almost four decades ago, I entered on a career path within the chemical industry, both in Sri Lanka and abroad. At the turn of the new millennium, I ventured into the domain of entrepreneurship and over the years establishing a group of companies with eight distinct verticals including export industries. Throughout my journey, I have come to realize that my knowledge of chemistry, acquired during my undergraduate years, has been a significant asset in propelling my ventures forward, serving as a vital resource across various domains.

As an industrialist, I find great satisfaction and enthusiasm witnessing Professor Namal; who is a true promotor of University - Industry interactions, assuming today the position of President of the Institute of Chemistry Ceylon.

In keeping with the theme of the today's program "**Chemical Sciences for Technological Advancement; Empowering the Future**" and also in fostering a strong Academic-Industry relationship to establish the advancement of the nation's industrial sector and subsequently contributing to the overall economy, I would like to emphasize three key focal points that warrant significant attention from researchers, policymakers and implementers.

No.1: Value addition to our natural resources, agricultural products and herbal products within the local context

Well, This a topic that has been a subject of deliberation in our country for countless years. However, even today it is imperative to emphasize that addressing this matter necessitates a high level strategy and commitment from relevant stakeholders, if we are to achieve a satisfactory outcome. Sri Lanka is gifted with an invaluable assortment of natural resources, agricultural products, and a rich herbal heritage. Within the *natural resources sector*, our nation boasts of exceptional quality gems, graphite, and mineral sands: including ilmenite, rutile, zircon, vein quartz, feldspar, clay, kaolin, apatite (phosphate rock), silica sand, garnet sand, mica, calcite, dolomite, as well as various rare earth elements.

Within the agricultural sector, Sri Lanka is gifted with remarkable produce, including premium-quality tea, rubber, coconut, and a variety of spices such as cinnamon, nutmeg, cloves, cardamom and pepper. These agricultural products originating from Sri Lanka are world renowned for their superior quality and are highly regarded in global markets. To highlight one example in this area, the development of coconut-based cosmetics, using coconut oil, milk, and water-based variants formulated with herbal ingredients, is experiencing remarkable growth in the global market, with a Compound Annual Growth Rate (CAGR) surpassing 60%. These advancements create significant opportunities for Sri Lanka in the export market.

The rich heritage of Sri Lankan herbal varieties presents a significant opportunity for the development of high-value-added products. In the wake of the recent global pandemic, there has been a substantial increase in demand for herbal-based healing products. Notably, the global market for herbal medicine has witnessed significant growth, with a market size of USD 152 billion in 2021. Projections indicate that the market will continue to expand, reaching USD 166 billion in 2023 and eventually reaching USD 348 billion by 2029, exhibiting a Compound Annual Growth Rate (CAGR) of 11% during the forecast period. This data make it evident the immense potential for Sri Lanka to capitalize on this growing global market and enhance the value of its herbal products. While the Researchers work extensively on new product innovations using above-mentioned

resources, it is imperative for governmental policies and facilitative measures to effectively guide and incentivize the establishment of sustainable joint ventures including diverse forms of collaboration in order to optimize the returns generated by these three industry sectors.

Let me give you a specific example of Mineral Sands to elaborate on this point.

The Pulmoddai mineral sand deposit stretches approximately 6 kilometers in length and spans nearly 200 feet in width. If left uncollected, the beach deposit would be eroded into the sea during the monsoon season; however, it undergoes continuous replenishment at a rate of no less than 150,000 Metric Tons per year. This deposit is estimated to contain approximately four million tons of raw sand, with a composition consisting of approximately 70% ilmenite, 8% zircon, 8% rutile, 0.3% monazite, and 1% sillimanite. The Pulmoddai deposit is globally renowned as one of the unique sources of high-quality titanium. These mineral-based value-added products serve a diverse range of industries, including but not limited to aerospace, computing, coatings and inks, plastics, paper, medical, steel, textiles, rubber, and ceramics. Although this deposit is a great treasure to our nation, the level of value addition to our Mineral Sand resources remains minimal, primarily limited to basic magnetic separation processes followed by bulk exports. These resources hold immense potential for economic development and prosperity of our country. However, their effective utilization with productive value additions and sustainable management requires concerted efforts and unwavering dedication from all stakeholders involved.

No 2: Facilitating an environment conducive to the production of increased import substitution products

As much as we expand our value-add industries to export and improve dollar inflows to the country, we should ride the wave of the demand for import substitutions as raw material and finished goods and reduce dollar outflow from the country. In the recent past when the country ran dry on Dollar supply, most of the manufacturing organizations who were depending on imported raw materials were badly hampered on both availability and cost factors. This challenging scenario has prompted many industrialists to explore local

alternatives wherever feasible, emphasizing the need for promoting domestic sourcing and manufacturing capabilities. Furthermore, it is noteworthy that Sri Lanka also imports various finished products, often in the form of branded goods, across numerous sectors.

Drawing from my personal experience, I have witnessed the success of our company R&D team in developing construction chemicals, including water-proofing agents, flooring solutions, and protective coatings; all of them conforming to international quality standards. These innovative products have been formulated utilizing a combination of imported basic chemical additives and locally sourced raw materials. Such initiatives, not only foster technological advancements but also showcase the potential for value addition within the domestic market. In the import substitution product development process 'De-formulation', also known as the process of reverse engineering, is used to identify and quantify one or more unknown chemical components of a formula, which involves in-depth knowledge of Chemistry.

No 3: Expanding the boundaries of Research domains to bring economic benefits to the end-user industries and communities.

Sri Lanka has more than seventy-five research Institutes, primarily dedicated to agricultural research and several others servicing to specific industries. Further to that, Universities are extensively involved with variety of research projects. These research Institutes stand as examples of excellence, furnished with state-of-the-art laboratories, staffed by qualified and committed experts, and equipped with the necessary infrastructure to conduct impactful research & development activities. Over the course of time, these institutions have evolved into invaluable national assets, playing a pivotal role in advancing knowledge, innovation, and progress within the country.

The emphasis I wish to highlight here is that research endeavors should exceed the boundaries of knowledge

generation and academic pursuits alone. These invaluable resources possess the potential to significantly contribute to the nation's economy through industry-specific research & development activities encompassing the domains of new product developments, process enhancements, technology introductions, managing chemical waste for environment preservation & economic perspectives, Recycling of Waste and the Dissemination of knowledge through comprehensive training initiatives to the industry. By harnessing the capabilities of these resources and redirecting their focus towards the commercial dimensions of research, we can work towards achieving substantial economic growth and prosperity for our country.

Across all three above-mentioned domains, the profound knowledge of Chemistry assumes a pivotal role. I firmly believe that under the guidance of Prof. Namal Priyantha, the Institute of Chemistry Ceylon, with its rich academic heritage focused on Chemistry, will usher in a new era of academic-industry collaboration, thereby fortifying the technological advancements of the industrial sector of our nation focused upon empowering the future. Undoubtedly, our country is currently treading through a gloomy period, characterized by a multifold challenges and threats confronting the industrial landscape. This dark period, however, penetrates across various segments of our society, casting a shadow of "uncertainty". Yet, let us not waver in our confidence and resilience, for it is in these trying times that our collective contributions can pave the way towards recovery and progress. In conclusion, I would like to quote a renowned statement by the esteemed Prime Minister Winston Churchill, which asserts,

"Never let a good crisis go to waste."

Let us harness the potential within challenging circumstances and foster resilience to confront the multifaceted obstacles confronting us in this crisis-laden period. It is an appropriate time to acquire valuable and innovative insights, embark on new journeys, and approach the future with unwavering optimism...

Mr Siriwardena is a highly-reputed business personality in Sri Lanka and is the Founder and Managing Director of Wardena Venture Holdings (Private) Limited (also known as the Wardena Holdings Group), a Sri-Lanka-based diversified conglomerate with interests in construction chemicals, engineering, Bitumen and allied road construction products, plantations and agriculture, food and beverage, spices and essential oils, cosmetics, international trading, and coconut husk and fibre products. He is a Graduate of the University of Peradeniya, with a BSc in Physical Science, and also holds a Diploma in Business Management from the University of Colombo, together with a Diploma in Industrial Engineering from the National Institute of Business Management.