



SPEECH INFORMATION (For Conference Program Book)

Topic	From Lab to Realizing Market Value: Organic Waste Management Using Microbial Enzymes
Abstract	<p>Each year, billions of tons of organic waste remain unrecycled, often ending up in incinerators, landfills, or open dumps. Finding an efficient, scalable solution to transform this waste into valuable resources is one of the most pressing challenges of our generation.</p> <p>For centuries, organic waste has primarily been recycled through composting — a process that typically takes several months, sometimes over six, depending on environmental conditions. Composting generally involves three key stages: the initial propagation of microbes, the subsequent degradation of organic matter, and finally, its stabilization. The success of composting largely depends on microbial growth and the secretion of enzymes, both of which require significant time.</p> <p>Dr. Chiu-Chung Young’s invention, TTT Technology, revolutionizes this process by bypassing the first two time-consuming stages. Using microbial enzymes, TTT Technology can directly stabilize organic material within just three hours. This breakthrough dramatically reduces the space and time required for composting — all without increasing costs. The challenge now lies in scaling its immense global potential.</p>

