

**Dr. Hayat Sindi**

***Visiting Scholar, Harvard University***

Your highnesses, your Excellencies, ladies and gentlemen

I'm very honored, and delighted to be here with you today when the forum organizers contacted me to be part of decision, landscaping the future who should take the lead, I was very excited, I also felt it's going to be a challenging of someone like me, but after I said yes, they said (oh!) by the way George Soros and Richard Branson are in the same platform, I said this is far more challenging, how am I going to give more, they are great they did so much, I also thought every one has something special to give through their journey, my journey has involved breaking boundaries between east and the west to serve society to help everyone child, man or woman, of different religion, culture or color not fearing and looking to find the good the value of people who work together humanity together, I was born in Makkah, and with the support of my family, I left on my own to presume my dream to become a scientist I did my first degree at ( ) college In London in pharmacology and later my PHD at Cambridge in bio technology. Later, I started my own new company with Saudi seat funding base on a Nano technology idea, I moved to industry and I worked within the field of biotechnology in oil and water applications with project base in Cambridge, Paris and Moscow. This afternoon, I would like to describe to you recent chapters in my journey which took me to Harvard university to work at both a scientific research lab and Harvard business school, as you know all America has many out standing research labs, and it's safe to say Harvard labs are all excellent, but there is one is very special lab by everybody's standards it is a fantastic lab it brings real products to society indeed this is ..... lab were more than nine hundred and 50 scientific articles more than one hundred patents and over 30 startup companies have emerged. I was thrilled to be invited to work there. How does this lab translate a scientific idea to products? how do we do that, three main factors, first: we have a high quality scientist, we have a high level of talent, we like to think that imagination, intellect, motivation, and we are patient about what we do, Second: we have our standing ability to work with others collaboration is the culture of our lab, Third: the diversity we are mixed, and mixed of cross culture and cross disciplines, we have range of background of skills we are 27 nationalities that work together and proud to say I'm the first Saudi link in this lab and I'm sure I wont be last, here we have solved a human

problem, people usually fear mixing fear to lose identities people fear uncomfortable even hostile to those who are different even in a scientific community people fear quietly are afraid to share ideas and collaborate in our lab we have broken this ---- we have overcome the fear to mix even within 77 languages among us, I believe mixing is the only recipe of success to get value to society , what comes out of this mixture of experience talent youth different background and the basic pleasure to work in teams a research group who can do amazing things can affect human lives , let me take you through our innovation process in the lab , its usually start with an idea , a Question about fundamental science , we try to understand the idea we bring storm and then try to find how to apply It , we built a prototype and follow up with the research engineering after 3 to 5 years there is likely to be a value creation a start up company or a product I have to say the keep hard to create this value is the right collaboration steps , every step we collaborate with different foundations industries research groups businessmen and even politicians across the globe its our partners that breath life into the final products , the result is consistent break troughs invitations of 30 start up company from the lab worth 20 billion dollars , also we noticed being smart and having resources is not enough , is not enough for true break through and innovation that can reach everyone . a lot of that energy can easily wasted innovation cannot lead on its own we need to lead innovation, people think that innovation or great discovers in the west is atomically going to give to everyone to every country the fact is this has never happen and it would never happen, in the poor areas of the developing world many people are deprived from the benefit of scenes in technology which can give them better health and quality of life , why is it not happening for them ?because people in the developing world look only for their own in product its inconceivable to apply these products to the developing world , for example it's not possible to carry a huge M I R scanner of the hospital in the west to Africa; the majority of people live in a remote area without electricity. I think it is naïve to think there is one science that can carry to everyone to correct this. As a scientist before we begin we need to have a least a clear vision about everyone's product requirement then we can customize the product to their need according to their infrastructure in a way of life . To a accomplish this we need a big enterprise of not only scientists, but also with politicians, businessmen with the right mindset, who care and they want to make a difference. This approach is the future for science where is the start, science links to society. An example

of this approach , I have started a company with my professor ..... called the agnostic frolle, non profit company , we developed a unique type of sensor made very very cheaply from a paper , it cost about 1 cent by sensor to make it cost nothing. But I cant help the poor people every where in the world , it can be difficult to help the third world countries and make profit for investor , it is extremely difficult , that's why we had to think carefully and it takes great effort to fit our technology to a country from the start , and to satisfied the investor needs, I believe that the middle east has the power to put society and science hand in hand , the middle east has the resources to do this , so it can work with, in this enterprise model and take the lead , through money it gives the philanthropic companies , these companies can help customize science to the needs of the middle east and Africa , for all to benefit , because the result of this company are simple and expensive products everyone can use. I would like to summarize, in this global complex world many parts change the way of life scientist, businessmen , politicians, citizens , IT, biotechnology , oil , nano technology clearly one science one person or one market cannot lead alone, instead I think the lead will be taken by people who bring diversity , who would stand out as a force people who love a mixture, a range of jobs people who create in people several skills , people who care , who don't have to wait for any one else, and people who can break boundaries and make value in the 21<sup>st</sup> century. I believe all of us can take that lead, the true power is us doing it together.

Thank you for listening