Basic Research at Universities in Relation to Innovation Processes in Industry

by Kurt R. Richter, IEEE Life Fellow

Invited Talk

Abstract:

Very often people and in particular politicians or leaders in industry blame universities to disregard innovation processes and entrepreneurship. Mostly these critics are based on the (historic) "linear model" of innovation which starts with an idea and, finally, leading directly to an (industrial) product on the market which will be a guaranty for jobs and competitiveness.

In this presentation the importance of so called unapplied research or in other words basic research at universities is discussed. The role of the universities in the in innovation processes in particular the contribution to the transformation from information to knowledge as well as the education of critical thinking graduates are emphasized. Furthermore suggestions of ideas to improve the relation between industry and university will be presented.

Finally, politics is challenged to improve the understanding for universities which should not be considered just as a production line for graduates, PhDs and scientific papers. Universities can and do more than that for our society and industry.

Kurt R. Richter is a professor and dean emeritus from the University of Technology in Graz, Austria. He is a Corr. Member of the Austrian Academy of Sciences and Hon. Member of the Croatian Academy of Engineering, He is serving as core member on the Engineering Education Platform of the European Council of Applied Sciences and Engineering (Euro-Case).