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THE CONVERGENCE AND INDUSTRY-ACADEMY-INSTITUTE COOPERATION OF SPACE  
TECHNOLOGY IN KOREA

**Abstract**

The innovation of the fusion technology takes place as the universal phenomenon of the modern scientific technique and the most of technical innovation subjects including governmental-funded research institute, the company, university and etc. get the attention as the innovation subject of the fusion technology. The convergent research classifies into the multidisciplinary research, interdisciplinary research, trans-disciplinary research. The multidisciplinary research can be said to be the loose physical fusion for the research subject solution. The interdisciplinary research can be said to be the chemical fusion for solving the problem. Trans-disciplinary research defines as 'the research that it has the concern to transcend the academic field and presents the synthetic biology, artificial intelligence. The space industry develops the satellite launch vehicle and is comprised of one system which is integrated with many electricity and subsystems. In addition, it is seen that Korea Aerospace Research Institute researchers are comprised of the various majoring field including the aerospace engineering, electronics, material, physics, chemistry, astronomy. The aerospace field studies the multidisciplinary research. The associated industrial technology including IT, NT, BT which is one's strength technology of our country has to be utilized for the space technology. Then, the development of the leading edge intelligent exploration rover will be possible in the future. 'Lunar exploration development project' which is based on the open-type convergence system is promoted for the successful propulsion goal of Korean lunar exploration program which is planned to be launched by 2020. 15 governmental-funded research institute and industry-academic circles participate for the concentration of all industry-academic's ability. We promote research cooperation of various industry-academic researchers for the development of technologies, which possible as a lunar exploration rover, and hold 15 governmental-funded research institute council. Korea Aerospace Research Institute enlarged the convergence research scale of investment and promoted the convergence NAP(National Agenda Project) research project and proceed the continuous assignment called A study on satellite based position tracking technology for calamity prevention and public safety improvement'. Satellite information application project is under way for the agency-specific core technology development as the continuous assignment and promotes 'Development of the payload core tech for the next generation SAR (Synthetic Aperture Radar) satellite' as a new assignment. The investment is enlarged to the convergence Research and Development that it utilizes the research society itself asset and 'Development of telescope core parts for the next generation space application' assignment is promoted as the Creative Analysis Problem solving capability.