

## Perspectives on Platform Industrial Biotechnology

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### Abstract

The review of the present status of Korean bioindustries and the establishment of strategic R&D agenda are necessary to improve the innovative technological capabilities of Korea to the top level of the world. Recently, the Korean Society for Biotechnology and Bioengineering has summarized specific areas to develop national biotechnological innovation system as Industrial biotechnology (IBT). IBT, also called white biotechnology (WhiteBT), has large potential to substantially impact industrial production and there by contribute to a more sustainable future. The potential of IBT is very promising and it is expected that IBT will be a key technology contributing to the achievement of the strategy to make Korean the most competitive an dynamic knowledge-based economy in the world. So, this research aims to investigate strategic platform technologies/functions as one part of IBT and key technologies in order to make IBT roadmap. The scope of this research is as follows: First, we review the environment of our national bioindustry and biotechnology. Second, we foresee the future of our IBT platform technology in the field of metabolic engineering, protein engineering and innovative process. Third, we establish the vision of our science and technology in 2015. Forth, we choose 'Strategic platform technologies' which need to realize this vision. Finally, we select key technologies which need to realize 'Strategic platform technologies'. The results propose the core role of industry, university, research institute, and government for the development of IBT.

### References

1. EuropaBio, White biotechnology: gateway to a more sustainable future (2003).