

Comments on Materials Informatics from a Researcher in Industry

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Over 30 years passed since invention of an Nd-Fe-B magnet, there are strong demands of “new materials” exhibiting characteristics more excellent than this magnet. To realize this matter, for example, there are many efforts to find out a new compound with better magnetic properties than $\text{Nd}_2\text{Fe}_{14}\text{B}$.

“Materials Informatics” is an approach which combines material sciences and data sciences, and has great possibility to change a way of development of new materials in industry in the future. Several national projects are promoted in Japan, and magnetic materials, especially permanent magnets, are one of the important targets of them.

In this talk, I will give personal comments on application of “Materials Informatics” for research and development of permanent magnets based on my own experiences in industry.