A brief history of synthetic diamond researches in Japan



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Research on diamond synthesis started in early 1960s in Japan, following GE's success in 1955. The research was most active between 1980 and 2000 in Japan, triggered by success in CVD diamond synthesis in NIRIM in 1982. A research society named "Japan New Diamond Forum" was established in 1985, and national projects were also implemented. The Japanese research activity spread to Western countries, inducing publication of an international journal, "Diamond Related Materials" in 1991 and regularly held international conferences all over the world. In the active years, interesting results were achieved. For example, several methods were invented to synthesize diamond films from carbon containing gas. High quality HPHT diamond crystals were commercialized. Non-metallic catalysts similar to materials in the earth's interior were found to convert graphite to diamond. It could be said that the technology has led to a huge production of synthetic diamond in China and India since 2000.

