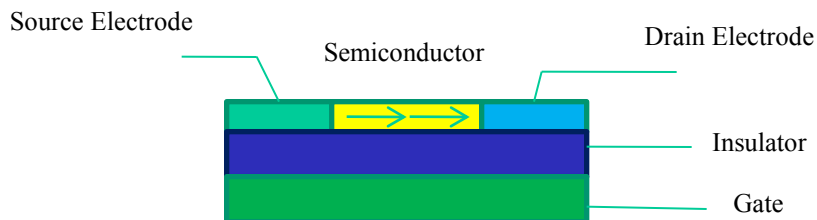


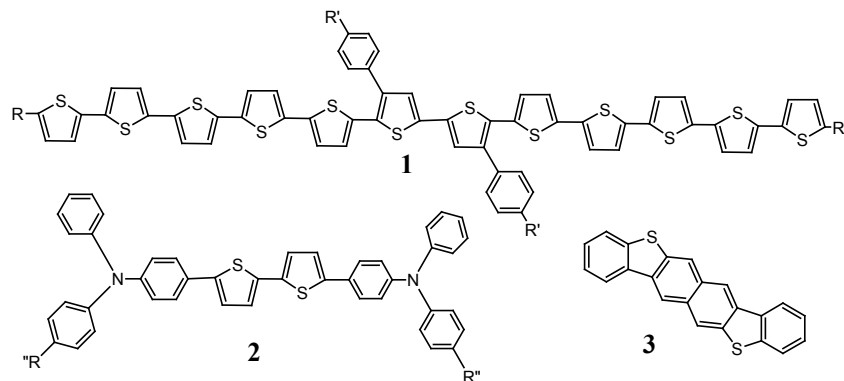
Development of Functional Organic Materials: solution-processable semiconducting materials

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Field effect transistor

Examples of solution-processable organic semiconductor



Content :

- 1) Development of organic electronic materials : Development of new electronic materials having aromatic chemical structure such as thiophene and benzene is carried out. One of the most important subjects, in Japan with no natural resources, is development of thin film semiconducting materials, which can convert from solar energy to electric energy. Synthesis and evaluation of aromatic compounds, which are promising as field effect transistor (FET), is carried out.
- 2) Synthesis and evaluation of organic compounds having recognition ability for molecules : New organic metal catalysts having ligand, which has new ring structure, are synthesized and development of its functionality is performed. The purpose of this development is synthesis of chiral materials having high efficiency.
- 3) Synthesis of new organic compounds having erasable functionality of active oxygen and its evaluation : Development of medicine having ability to erase active oxygen, which is considered as origin of aging, Alzheimer's disease, Parkinson's disease, cancer, etc. becomes important as applied research toward medical science.

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active oxygen)

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