

## Research on Modern Semiconductor Converters and the Usage of SiC Devices in the Technology Centre of Ostrava

**Authors :** P. Vaculík, P. Kaňovský

**Abstract :** The following article presents Technology Centre of Ostrava (TCO) in the Czech Republic. Describes the structure and main research areas realized by the project ENET-Energy Units for Utilization of non-traditional Energy Sources. More details are presented from the research program dealing with transformation, accumulation, and distribution of electric energy. Technology Centre has its own energy mix consisting of alternative sources of fuel sources that use of process gases from the storage part and also the energy from distribution network. The article will focus on the properties and application possibilities SiC semiconductor devices for power semiconductor converter for photo-voltaic systems.

**Keywords :** SiC, Si, technology centre of Ostrava, photovoltaic systems, DC/DC Converter, simulation

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