

Research Interest **2017**

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My research interest is in the field of High Voltage Engineering , GIS (Gas Insulated Systems) , Gas Discharges. and Insulation Design of High Voltage Equipments.

I have been working in the field of High Voltage Engineering for many year and have produced numerous international papers related to gas insulated systems and insulation design of switch gear products.

In the field of crossed field discharges , my research activities concern limiting electric field response of electronegative binary gas mixtures for possible application in special power switches where application of crossed magnetic fields resulted in increased levels of breakdown voltages. The mean electron energy of electron swarms can be controlled and reduced with the crossed magnetic fields and the ionization frequency can be decreased accordingly .

I am also interested in discharge development in the vicinity of the electrodes where the electron swarm is not in equilibrium and back diffusion occurs. Back scattering of electrons can alter the secondary electron emissions and the process is important in the calculations of the breakdown voltages.

Currently, with respect to insulation design ,I am interested in the application of environmentally friendly insulation with reduced global warming potentials in load break switches and circuit breakers.