Research on the chemical and physico-chemical properties of insulating paper to:
- Improved dielectric performance
- Improving durability of the insulating paper

Currently, two initial studies are ongoing:
- Study of the role of lignin in methanol production during paper ageing
- Study of the role of metallic cations in paper ageing and in its dielectric properties

Methods

Modification of the physico-chemical properties of paper:
Addition of novel functionnal groups, addition of nano particules into the paper fibers, chemical modification of existing functional groups.

Assessment of dielectric and aging properties of the modified papers:
- Dielectric tests: very high voltage discharges, rapid electrical and optical metrology
- Aging test: accelerated thermal degradation followed by physico-chemical characterizations

Conferences:
Programmed attendance at EWLP 2020