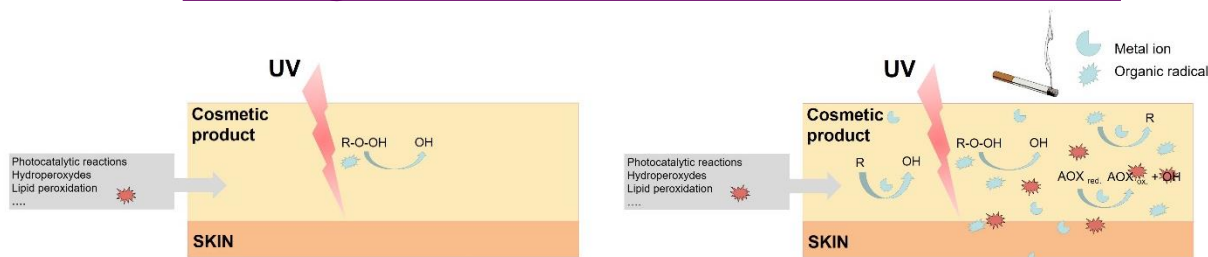


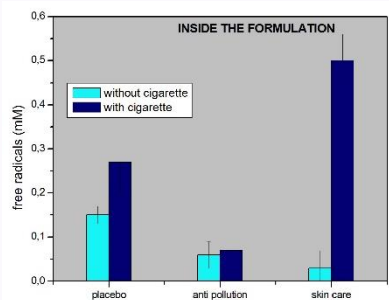
Antipollution RP on skin

- ❑ Measures the free radical amount inside a cosmetic formulation when applied on skin and exposed to cigarette smoke air pollution.
- ❑ Oxidative stress will generate peroxide and lipid peroxide free radicals in the stratum corneum layers.
- ❑ Determines the interaction between pollutant and formulation applied on the skin surface using ESR spectroscopy.
- ❑ Efficient Anti-pollution products or actives reduce the peroxidation value of the skin.

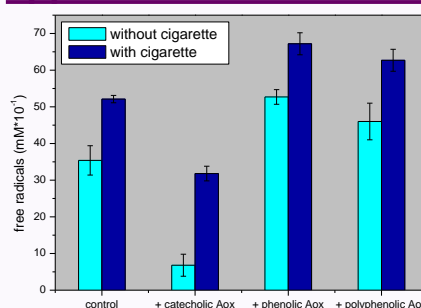
Radical generation inside the formulation on the skin



Radicals inside the formulation



Radicals inside the formulation applied on the skin's surface



Test Products:

cosmetic formulations, raw materials

Nota Bene: a placebo formulation is required.

Principle:

ESR spin trapping technique in formulations applied on skin biopsies.

Conditions:

Measurements are performed at RT. Fresh pig skin biopsy samples, 1 cm²

Kinetic measurements 0-10 min.

Concentration: t.q. 2 mg/cm²

Application time: 20 min.

Cigarette smoke: 5 min

UV-radiation: 300 W Newport-Oriel UV- sun simulator

(23,5 W/cm² UVB, 180 W/cm² UVA)