

**X4C is a recently created spin-off company from Brussels University (ULB) that wants to become a leader in innovative surface coating solutions for high-end applications (diagnostic, (bio)electronic, medical devices and optic).**

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# X4C OFFERING TO CREATE YOUR PERFECT COATING

## FEASIBILITY STUDY

Grafting's validation on specific surface

## OPTIMIZATION PROJECT

Tailored surface for specific application

## LICENCE

Granting of rights (including production) for selected application

## Services

X4C offers a global solution for customers. For that purpose, modified surfaces is tailored at the request of customers for a specific application. To obtain the target surface, two phases are considered:

- **Feasibility study:** First, X4C validates the grafting of calix[4]arenes on the specific surface that is provided by the customers. Furthermore, the modification of these surfaces is assessed using a probed molecule that can be analysed by XPS and contact angle analyses.
- **Optimization project:** If necessary, X4C develops new graftable calix[4]arenes for specific application. The process (grafting and post-modification) is optimized for each application. This step includes the surface characterization by different analyses (XPS, contact angle, IR, ellipsometry). Modified surfaces are then provided to the customer in order for him to test the surfaces towards its specific application. Finally, a detailed protocol to obtain the target surface is provided to the customers including the choice of calix[4]arene, grafting process, quantity of calix[4]arene, solvent, volume of solvent, conditions for post-modification.

## Licences

If the tests towards the specific application are convincing, X4C sells a licence to the customer in order to use the *X4C technology* for its industrial production process.

## Products

- Obviously, the different calix[4]arenes developed during the optimization project are sold to different customers.
- Moreover, modified nanoparticles (gold, silver, platinum, iron oxide,...) could be also sold by X4C.