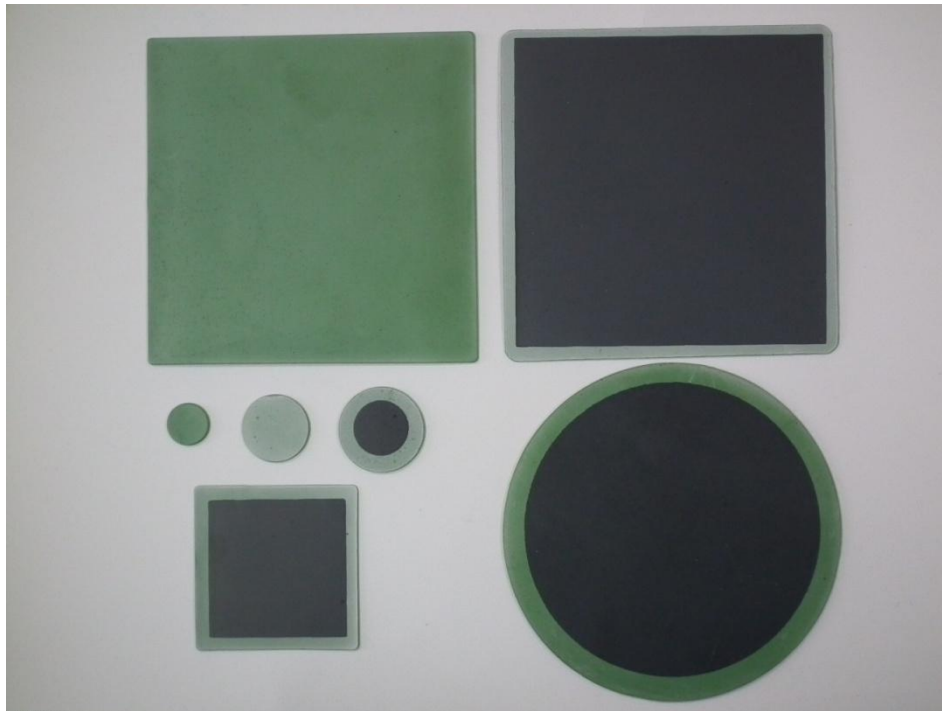
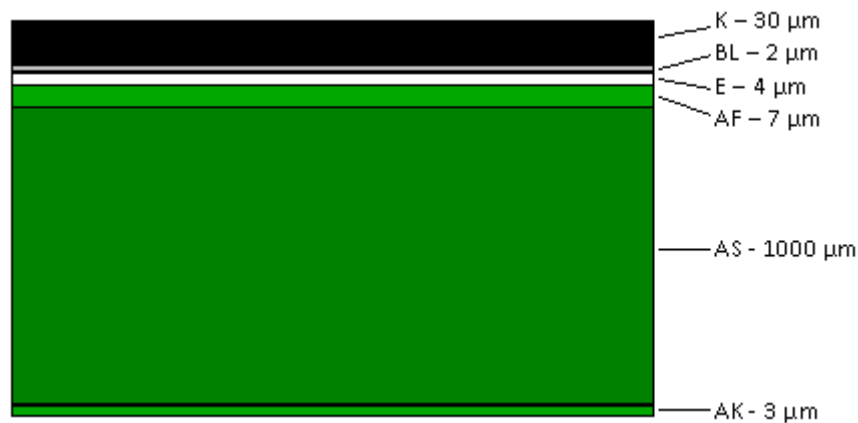


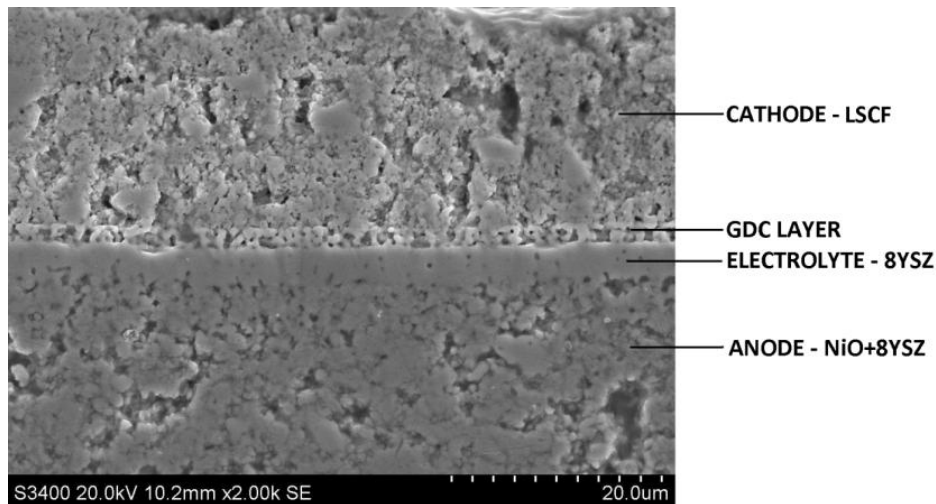
**Anode Supported Solid Oxide Fuel Cells (AS-SOFC) made in Institute of Power Engineering
Ceramic Department CEREL (IEn OC CEREL) .**



Standard configuration of anode supported solid oxide fuel cells made in IEn OC CEREL is as follows:



- K – Cathode layer – $\text{La}_{0,6}\text{Sr}_{0,4}\text{Fe}_{0,8}\text{Co}_{0,2}\text{O}_{3-\delta}$, porosity 25 vol.%.
- BL – barrier layer $\text{Gd}_{0,1}\text{Ce}_{0,9}\text{O}_2$,
- E – electrolyte 8YSZ,
- AF – anode functional layer – NiO/8YSZ
- AS – anode support – NiO/8YSZ, porosity 25 vol.%, **thickness 0,55 or 1,0 mm**
- AK – anode contact layer – NiO,



Microstructure of cross section of anode supported solid oxide fuel cells made in IEn OC CEREL

We can also make half-cells or cells for research purposes with functional layers (not anode support) defined by the customer or by using customer's materials.

In our offer we have AS-SOFC of various shapes and sizes. Standardly we offer 8 types of cells with shape and dimensions as follows:

1. square AS-SOFC 100 x 100 x 0,55 mm (cathode dimension 90 x 90 mm)
2. square AS-SOFC 100 x 100 x 1 mm (cathode dimension 90 x 90 mm)
3. square AS-SOFC 50 x 50 x 1 mm (cathode dimension 40 x 40 mm)
4. square AS-SOFC 50 x 50 x 0,55 mm (cathode dimension 40 x 40 mm)
5. circular AS-SOFC \varnothing 100 x 1mm (cathode dimension \varnothing 80 mm)
6. circular AS-SOFC \varnothing 100 x 0,55mm (cathode dimension \varnothing 80 mm)
7. circular AS-SOFC \varnothing 25 x 1mm (cathode dimension \varnothing 16 mm)
8. circular AS-SOFC \varnothing 25 x 0,55mm (cathode dimension \varnothing 16 mm)

We also can make special orders:

1. Cells with dimensions and shape established with customer (with max. dimensions 100 x 100mm),
2. Anode support both in "green" and sintered state,
3. Half-cells or cells for research purposes with functional layers (not anode support) defined by the customer or by using customer's materials.

Prices are fixed individually depending on quantity and type of the cells.