



# Case Study

## digestec DAB-2 | INCDTIM Cluj-Napoca, Romania

### User

The group of Porous Materials and Carbon Nanostructures of the National Institute of Research and Development for Isotopic and Molecular Technologies – INCDTIM in Cluj-Napoca, Romania, focuses on the design and development of porous and nanostructured materials and composites for applications in catalytic processes (thermal, electro and photocatalysis). Materials such as ordered porous oxides, metal organic frameworks (MOFs), graphenes, N and/or S doped graphenes and their composites with metal nanoparticles are envisaged, activities being focused on the synthesis, characterization and testing in the selected catalytic processes.



### Product

The Berghof pressure vessels **digestec DAB-2** are used.

### Application

The research group uses the DAB-2 pressure vessels for the synthesis of both metal-organic frameworks and ordered mesoporous oxides under solvothermal conditions. For these applications, the vessels are exposed to temperatures in the range of 120 to 220 °C and pressures around 5 bar (depending on the vapor pressure of the solvent) for up to three days.

### Customer Testimonial

„The autoclaves are easy to handle, while mounting and dismounting of the PTFE liners is straightforward. Moreover, these inserts are resistant under different operating conditions, as well as very easy to clean. Handy and safe – best description for the Berghof vessels.“

Dr. Mihaela D. Lazar (INCDTIM, Cluj-Napoca)