







# 1<sup>st</sup> International Conference INNOVATIONS IN CARBON CAPTURE AND WASTE MANAGEMENT

# InnoCO<sub>2</sub>Sorbent - FFH-CO<sub>2</sub>

"Capture of carbon dioxide by an innovative sorbent" (InnoCO₂sorbent). International title: "Utilization of carbon dioxide by using iron compounds" (FFH-CO2).

# within initiative EUREKA - Marked Driven Innovative Projects

# 14 -16 September 2022, Częstochowa Poland

The aim of the 1<sup>st</sup> International Conference Innovations in Carbon Capture and Waste Management is to present the issue of CO<sub>2</sub> capture generated from exhaust fumes by using an innovative nanoparticle ferriferous hydrosol (FFH). Innovative sorbent, besides reactions with carbon dioxide, also possess coagulating and catalytic characteristics. It can also be suitable for the removal of many other substances during burning processes. The market demands on effective methods of CO<sub>2</sub> capture from industrial, power plants, combined heat and power plants, coke plants, waste disposal plants. The low-cost and effective sorbents for CO<sub>2</sub> capture are need. The residual wastes after CO<sub>2</sub> removal require management.

#### The thematic areas are as follow

- Innovations in carbon capture
- Innovations in waste management
- Panel Discussion on key challenges facing industry in innovations in carbon capture and post-process waste management.

#### **Scientific Committee**

- Assoc. Prof. Magdalena Zabochnicka, Częstochowa University of Technology, Poland, Chairwoman
- Mr. Danas Budilovskis, JSC Ineko, Lithuania
- Dr. Vadimas Dudoitis, SRI Center for Physical Sciences and Technology, Lithuania
- Assoc. Prof. Tomasz Kamizela, Czestochowa University of Technology, Poland
- Assistant Prof. Urszula Kępa, Częstochowa University of Technology, Poland Assistant Prof.
- Assoc. Prof. Mariusz Kowalczyk, Częstochowa University of Technology, Poland
- Mrs. Bożena Kuzio-Wasilewska, IGO, Poland
- Dr. Szymon Kuzio, IGO, Poland
- Mrs. Grażyna Rymarz, IGO, Poland
- Prof. Peter Strizhak, L.V. Pisarzhevskii Institute of Physical Chemistry, National Academy of Sciences of Ukraine, Ukraine
- Dr. Vidmantas Ulevicius, SRI Center for Physical Sciences and Technology, Lithuania
- Assistant Prof. Małgorzata Worwag, Częstochowa University of Technology, Poland

# Important dates

- Abstract submission of oral/poster presentation (one page A-4): 15 June 2022
- Registration and payment of conference fee are required to make a hotel reservation:
   15 June 2022r.
- Sending presentations: 15 August 2022
- Conference: 14-16 September 2022 (15 September InnoCO<sub>2</sub>Sorbent FFH-CO<sub>2</sub>)
- Full Manuscript Submissions: 31 August 2022

#### **Forms of Presentations**

The papers can be presented in oral or E-poster sessions. The presentation requirements are as follows: Oral presentation – 20 minutes (15 minutes presentation, 5 minutes discussion; electronic presentations). Questions will be asked to individual Authors immediately after their presentation (oral and poster).

#### Conference venue

Arche Hotel Częstochowa, ul. Oleńki, tel. + 48 343 474 074

### **Registration form and Payments methods**

Registration fee 2200 PLN (1800 PLN without accommodation) includes attendance in conference sessions, accommodation, meals and all accompanying events. To achieve invoice, please indicate the address and tax number of the institution.

**Registration form** by the main Conference web page:

https://wis.pcz.pl/konferencje/konferencja-ece-jubileusz-25-lat-wydzialu/wazne-terminy-oplaty

# **Papers**

Abstracts will be available on USB.

Articles can be published by IWA Publishing (IWAP) Water Science & Technology (IF - 1,915). It is free Open Access Journal with no charges to the authors. Submission the paper using the instruction to authors of IWA will be provided later.

# **Organizing Committee**

Assoc. Prof. Magdalena Zabochnicka, magdalena.zabochnicka@pcz.pl

Asst. Prof. Urszula Kępa, urszula.kepa@pcz.pl

Asst. Prof. Małgorzata Worwąg, malgorzata.worwag@pcz.pl

Department of Sanitary Networks and Installations
Faculty of Infrastructure and Environment
Częstochowa University of Technology
Brzeźnicka 60a
42-200 Częstochowa, Poland

We are pleased to announce that the Conference is covered by the Honorary Patronage of the National Center for Research and Development (NCBR)

https://www.gov.pl/web/ncbr



# **Conference Program Framework**

(Central European Time (CET)

# 14.09.2022 (Wednesday) - I day

# **Energy Climate Environment Conference** [in Polish]

- 9:00 10:00 Registration
- 10:00 12.00 Opening ceremony
- 12:00 13:00 Lunch
- 13:00 15:00 Sessions
- 17:00 23:00 Jubilee Gala Dinner Faculty of Environmental Engineering

# 15.09.2022 (Thursday) - II day

# Conference InnoCO<sub>2</sub>Sorbent – FFH-CO<sub>2</sub> [in English]

- 8:00 9:00 Breakfast
- 9:00 9:15 Opening ceremony
- 9:15 11:00 Session 1 online
- 11:00 11:30 Coffee brake
- 11:30 12:30 Session 2 on site
- 12:30 13:30 Session 3 Panel Discussion with industry / E-Poster session online
- 13:30 14:30 Lunch
- 14:30 15:30 Consortium online meeting on *InnoCO<sub>2</sub>Sorbent FFH-CO<sub>2</sub>* (closed session)
- 14:00 16:00 Trip to the Jasna Góra Library and the Monastery
- 19:00 22:00 Conference dinner

## 16.09.2022 (Friday) - III day

## **Energy Climate Environment Conference** [in Polish]

- 8:00 9:00 Breakfast
- 9:00 13:00 Energy Climate Environment Conference
- 13:00 13:15 Closing Ceremony
- 13:15 14:30 Lunch