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**Dataset name:** iCUPE Dataset (DS) from Deliverable 2.1.2:

**Dataset of anthropogenic contaminants in ice cores from polar regions**

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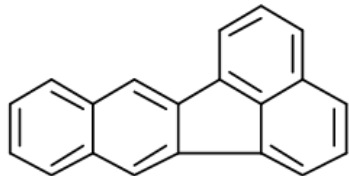
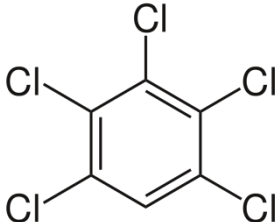
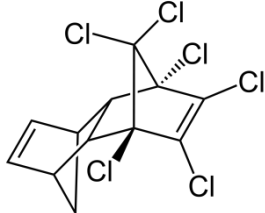
The produced dataset (in MS Excel format) contains depth profile concentrations of a 16.5 m deep shallow core (covering approx. 200 years before the present) drilled at the plateau site of Dome C, East Antarctica (75°06' S, 123°21' E), during the 23<sup>rd</sup> Italian Antarctic Expedition.

The concentrations of the Polycyclic Aromatic Hydrocarbon (*PAH*) Benzo[k]fluoranthene (*BKF*) and of Organochlorinated Pesticides (*OCP*) expressed as three single compounds (*PeCB*, *ALD* and *44D*) and total ( $\Sigma_{51}$  *Pesticides*) are given in ng L<sup>-1</sup>.

The ice core covers a time interval, which includes periods before and after the introduction of these Persistent Organic Pollutants (*POPs*) in commercial mixtures, as well as periods before the construction of research station facilities. However, in the top samples of the ice core, detected concentrations of analytes are ascribable to industrial anthropogenic activities.

Full name, acronym, class, Chemical Abstract System (*CAS*) number, molecular weight (*MW*) and chemical structure of the dataset compounds are summarized in Table 1.

**Table 1.** Full name, acronym, class (Polycyclic Aromatic Hydrocarbons - PAH or Organochlorinated Pesticides – OCP), Chemical Abstract System (CAS) number, molecular weight (MW) and chemical structure of the compounds presented in the dataset.

<i>Full name</i>	<i>Acronym</i>	<i>Class of compound</i>	<i>CAS number</i>	<i>MW g mol<sup>-1</sup></i>	<i>Chemical structure</i>
Benzo[k]fluoranthene	<i>BKF</i>	<i>PAH</i>	207-08-9	252.3	
Pentachlorobenzene	<i>PeCB</i>	<i>OCP</i>	608-93-5	250.3	
Aldrin	<i>ALD</i>	<i>OCP</i>	309-00-2	364.9	
4,4'-DDD	<i>44D</i>	<i>OCP</i>	72-54-8	320.0	