

# **CHEMISTRY IN SOLID MATRICES**





AGLAE Association
Parc des Pyramides
427 rue des Bourreliers
59320 Hallennes lez Haubourdin - France
\$\mathbb{\alpha}\$ +33 (0)3 20 16 91 40

contact@association-aglae.fr
www.association-aglae.fr

# Participate in AGLAE's External Quality Control

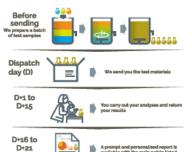


**A** WAY OF WORKING THAT PROVIDES YOU WITH THE HIGHEST STANDARD OF RESULTS WITH CONFIDENTIALITY AND IMPARTIALITY

Each step of the way, AGLAE is there supporting you.

REGISTRATIONS FOR PROFICIENCY TESTING ARE DONE KNOWING THE WHOLE PROCESS, WITH A

#### **DETAILED AND RIGOUROUS SCHEDULE**



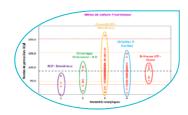
- The number of evaluations per year for each parameter is specified in the catalogue, concentration levels and stabilisation are available on request.
  - AGLAE uses "express" shipments for your samples and makes sure of their distribution to your laboratory.
- ✓ A sufficient delay to analyse and the report the results.
- Via your member area, enter your results and find instructions, assigned codes, reports, summaries of your results, certificate of participation...

#### THE OPTIMISATION OF RISK MANAGEMENT FOR YOUR LABORATORY



You have a better visibility of potential anomalies through:

- ✓ An appropriate test design (duplicate samples, repeaed measurements),
- ✓ A large number of participants: around 200 laboratories in the field of 'base' microbiology and 'base' physico-chemical analyses.



#### AGLAE's detailed study:

- Influence of the analytical methods, manufacturers (equipment and consumables)... factors that we study to help you improve the quality of your analyses,
- For waters intended for medical use and water microbiology, estimation of your own uncertainties in microbiology,
- Check of your uncertainty estimates in chemistry (zeta-score),
- A report validated by experts of the field and personalised for most tests.

# ATTRACTIVE DISCOUNTS, PAYMENT CONDITIONS MADE EASIER

- Choose among the various programmes and benefit from discounts up to 15%,
- A possible payment in 2 or 3 folds depending on the amount your participation.
- Payment possible by cheque (in €), bank transfer, credit card on <a href="https://www.helloasso.com/associations/a-g-l-a-e/paiements/aglae">https://www.helloasso.com/associations/a-g-l-a-e/paiements/aglae</a>

Amount of your invoice (excluding transport fees)	Discount
3000 ≤ Amount < 6000 € excl. VAT	5%
6000 ≤ Amount < 9000 € excl. VAT	10%
Amount ≥ 9000 € excl. VAT	15%

And exclusively for AGLAE's members: experimental tests at an attractive price during the year



# **PROGRAMME 9: CHEMICAL ANALYSES AND METALS IN SEDIMENTS**



**394 € excl. VAT** – total amount for 2 tests (excluding transport costs)

### 44 participants in 2022 – EXPERIENCE > 20 YEARS



Quality Control Materials coming from proficiency tests available 20 € excl. VAT per bottle (excluding transport costs)
Materials are available once the test report is issued.

### 23M9.1 - Sediment - sent in January 2023

total organic carbon (TOC), Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mn, Mg, Mo, Na, Ni, Pb, pH, Sb, Se, Sn, Ti, Tl, Total Kjeldahl Nitrogen (TKN), Total-P, U, V, Zn, total-C, total-N

dry matter, grain size distribution<sup>[1]</sup>, loss on ignition at 550°C

# 23M9.2 - Sediment - sent in July 2023

total organic carbon (TOC), Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mn, Mg, Mo, Na, Ni, Pb, pH, Sb, Se, Sn, Ti, Tl, Total Kjeldahl Nitrogen (TKN), Total-P, U, V, Zn, total-C, total-N

dry matter, grain size distribution<sup>[1]</sup>, loss on ignition at 550°C

[1] parameter not covered by accreditation (see general conditions of registration)

### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.



# **PROGRAMME 10: ORGANIC MICROPOLLUTANTS IN SEDIMENTS**



532 € excl. VAT – total amount for 2 tests (excluding transport costs)

#### 27 participants in 2022 – EXPERIENCE > 20 YEARS



Quality Control Materials coming from proficiency tests available 20 € excl. VAT per bottle (excluding transport costs)
Materials are available once the test report is issued.

#### 23M10.1 - Sediment - sent in March 2023

PCBs: congener 28, congener 52, congener 101, congener 118, congener 138, congener 153, congener 180

Organochlorines: aldrin, dieldrin, heptachlor, heptachlorepoxyde (total), lindane

Organophosphorus: diazinon

**PAHs:** acenaphtene, acenaphtylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3 - cd]pyrene, 2-methylfluoranthene, 2-methylnaphtalene, naphtalene, phenanthrene, pyrene,

#### total hydrocarbons index - C10-C40 range

Organotin compounds: monobutyltin cation, dibutyltin cation, tributyltin cation, tetrabutyltin, triphenyltin cation

# 23M10.2 - Sediment - sent in July 2023

PCBs: congener 28, congener 52, congener 101,

congener 118, congener 138, congener 153, congener 180

Organochlorines: aldrin, dieldrin, heptachlor, heptachlorepoxyde (total), lindane

Organophosphorus: diazinon

**PAHs:** acenaphtene, acenaphtylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3 - cd]pyrene, 2-methylfluoranthene, 2-methylnaphtalene, naphtalene, phenanthrene, pyrene

#### Total hydrocarbons index - C10-C40 range

Organotin compounds: monobutyltin cation, dibutyltin cation, tributyltin cation, tetrabutyltin, triphenyltin cation

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

Total hydrocarbons index - C10-C40 range: sum of the concentrations of compounds extractable with a hydrocarbon solvent, boiling point between 36 °C and 69 °C, not adsorbed on Florisil and which may be chromatographed by GC-FID, with retention times between those of n-decane (C10H22) and n-tetracontane (C40H82).



# PROGRAMME 40: CHEMICAL ANALYSES AND METALS IN RECOVERABLE SEWAGE SLUDGES



**492** € excl. VAT – total amount for 2 tests (excluding transport costs)

#### 43 participants in 2022 – EXPERIENCE > 25 YEARS



**Quality Control Materials** coming from proficiency tests available for pretreated materials only.

**20 € excl. VAT** per bottle (excluding transport costs). Materials are available once the test report is issued.

#### 23M40.1 - Pretreated sludge - sent in April 2023

total organic carbon (TOC), Ag, Al, As, B, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sum (Cr + Cu + Ni + Zn), Total Kjeldahl Nitrogen (TKN), total-C, total-N, Total-P, Total-S, Ti, V, Zn, dry matter, loss on ignition at 550°C, pH

#### 23M40.2 - Raw sludge - sent in October 2023

total organic carbon (TOC), Al, As, B, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sum (Cr + Cu + Ni + Zn), Total Kjeldahl Nitrogen (TKN), total-C, total-N, Total-P, Total-S, Zn, dry matter, loss on ignition at 550°C, pH

# **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

- ✓ Pretreated material: material dried, crushed and sieved.
- ✓ Raw material: material dried, lightly crushed but not sieved. If we are not able to guarantee the presence of all the parameters listed, an evaluation of your results will still be carried out (check of false positives).



# PROGRAMME 41: ORGANIC MICROPOLLUTANTS IN RECOVERABLE SEWAGE SLUDGES



**554 € excl. VAT** – total amount for 2 tests (excluding transport costs)

### 19 participants in 2022 – EXPERIENCE > 25 YEARS



**Quality Control Materials** coming from proficiency tests available for pretreated materials only.

**20 € excl. VAT** per bottle (excluding transport costs). Materials are available once the test report is issued.

#### 23M41.1 - Pretreated sludge - sent in April 2023

#### dry matter

**PAHs:** acenaphtene, acenaphtylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3 - cd]pyrene, naphtalene, phenanthrene, pyrene

**PCBs:** congener 28, congener 52, congener 101, congener 118, congener 138, congener 153, congener 180, Sum of congeners 28, 52, 101, 118, 138, 153, 180

### 23M41.2 - Raw sludge - sent in October 2023

#### dry matter

**PAHs:** acenaphtene, acenaphtylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3 - cd]pyrene, naphtalene, phenanthrene, pyrene

**PCBs:** congener 28, congener 52, congener 101, congener 118, congener 138, congener 153, congener 180, Sum of congeners 28, 52, 101, 118, 138, 153, 180

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

- ✓ Pretreated material: material dried, crushed and sieved.
- ✓ Raw material: material dried, lightly crushed but not sieved. If we are not able to guarantee
  the presence of all the parameters listed, an evaluation of your results will still be carried out
  (check of false positives).



# PROGRAMME 43: CHEMICAL ANALYSES AND METALS IN CONTAMINATED SITES AND SOILS



294 € excl. VAT – total amount for 2 tests (excluding transport costs)

#### 24 participants in 2022 - EXPERIENCE > 10 YEARS



**Quality Control Materials** coming from proficiency tests available for pretreated materials only.

**20 € excl. VAT** per bottle (excluding transport costs). Materials are available once the test report is issued.

### 23M43.1 - Pretreated soil - sent in May 2023

total organic carbon (TOC), dry matter, Al, As, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Total-P, Sb Se, Sn, Zn

#### 23M43.2 - Raw soil - sent in November 2023

total organic carbon (TOC), dry matter, Al, As, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Na, Ni, Pb, Total-P, Se, Zn

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

- ✓ **Pretreated material:** material dried, crushed and sieved.
- ✓ Raw material: material dried, lightly crushed but not sieved. If we are not able to guarantee
  the presence of all the parameters listed, an evaluation of your results will still be carried out
  (check of false positives).



# PROGRAMME 44: ORGANIC MICROPOLLUTANTS IN CONTAMINATED SITES AND SOILS



**442** € excl. VAT – total amount for 2 tests (excluding transport costs)

# 24 participants in 2022 - EXPERIENCE > 10 YEARS



**Quality Control Materials** coming from proficiency tests available for pretreated materials only.

**20 € excl.** VAT per bottle (excluding transport costs). Materials are available once the test report is issued.

### 23M44.1 - Pretreated soil - sent in May 2023

**PAHs:** acenaphtene, acenaphtylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3 - cd]pyrene, naphtalene, phenanthrene, pyrene

#### Total hydrocarbons index - C10-C40 range

PCBs: congener 28, congener 52, congener 101, congener 118, congener 138, congener 153, congener 180

#### 23M44.2 - Raw soil - sent in November 2023

**PAHs:** acenaphtene, acenaphtylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3 - cd]pyrene, naphtalene, phenanthrene, pyrene

#### Total hydrocarbons index - C10-C40 range

PCBs: congener 28, congener 52, congener 101, congener 118, congener 138, congener 153, congener 180

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

Total hydrocarbons index - C10-C40 range: sum of the concentrations of compounds extractable with a hydrocarbon solvent, boiling point between 36 °C and 69 °C, not adsorbed on Florisil and which may be chromatographed by GC-FID, with retention times between those of n-decane (C10H22) and n-tetracontane (C40H82).

- ✓ Pretreated material: material dried, crushed and sieved.
- ✓ Raw material: material dried, lightly crushed but not sieved. If we are not able to guarantee the presence of all the parameters listed, an evaluation of your results will still be carried out (check of false positives).



# PROGRAMME 46: VOLATILE ORGANIC COMPOUNDS IN SOLID MATRICES

**260 € excl. VAT** – total amount for 1 test (excluding transport costs)



**New in 2023** 

# 23M46.1 - Pretreated sediment - sent in March 2023 - Refrigerated parcel

Dry matter

Benzene, toluene, ethylbenzene, xylene ortho, xylene para + xylene meta, total xylenes

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.



# PROGRAMME 51: CHEMICAL ANALYSES AND METALS IN WASTE (LEACHING)

Wastes can be polluted soils, ashes, clinkers, residues from industrial activity, sludges from wastewater treatment plants.



**681 € excl. VAT** – total amount for 2 tests (excluding transport costs)

44 participants in 2022 – EXPERIENCE > 20 YEARS

### 23M51.1 - Waste - sent in May 2023

conductivity, dry matter, dry residue at 105°C of the eluate, pH, soluble fraction, total organic carbon (TOC), unburned rate at 500°C

As, Cd, Cr, Cr<sup>+6</sup>, Cu, Hg, Ni, Pb, Zn, Cl<sup>-</sup>, F<sup>-</sup>, SO<sub>4</sub><sup>2-</sup>

#### 23M51.2 - Waste - sent in October 2023

conductivity, dry matter, dry residue at 105°C of the eluate, pH, soluble fraction, total organic carbon (TOC), unburned rate at 500°C

As, Ba, Cd, Cr, Cr $^{+6}$ , Cu, Hg, Mo, Ni, Pb, Sb, Se, Zn Cl $^{-}$ , F $^{-}$ , SO $_4$  $^{2-}$ 

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples.

Register quickly.

Leaching of the waste carried out with a ratio L/S=10 (L/kg) and contact duration of 24h.



# PROGRAMME 51A: CYANIDES AND PHENOL INDEX IN WASTE (LEACHING)



This programme meets in particular the requirements of the German regulation dealing with waste intended for landfill or recycling ('LAGA/DepV': 'Länder-Arbeitsgemeinschaft Abfall / Deponieverordnung').



**599** € excl. VAT – total amount for 1 test (excluding transport costs)

21 participants in 2022 – EXPERIENCE 5 YEARS

# 23M51A.1 - Waste - sent in September 2023

Easily liberatable cyanide, total cyanide, dry matter

phenol index<sup>[1]</sup>, dry matter

[1] parameter not covered by accreditation (see general conditions of registration)

### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

The unit to report the results is expressed per liter of eluate. Leaching of the waste carried out with a ratio L/S=10 (L/kg) and contact duration of 24h.



# PROGRAMME 51C: PAHS IN BITUMINOUS WASTE

**245** € excl. VAT – total amount for 1 test (excluding transport costs)



18 participants in 2021 – EXPERIENCE: 1 YEAR

#### 23M51C.1 - Bituminous waste - sent in June 2023

Dry matter

**PAHs:** acenaphtene, acenaphtylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3 - cd]pyrene, naphtalene, phenanthrene, pyrene

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

Bituminous waste sieved at 500 μm.

Biannual periodicity: this programme is provided one year out of two. It will be provided again in 2025.



# **PROGRAMME 120: SOLID FUEL PRODUCTS**

147 € excl. VAT – total amount for 1 test (excluding transport costs)

16 participants in 2022 - EXPERIENCE: 3 YEARS

# 23M120.1 - Solid Recovery Fuel - sent in August 2023

Moisture content, Cl, H, S, GCV at constant volume, NCV at constant volume

#### **PARTICULARITIES**



The number of participants for the proficiency tests in solid matrices is limited. Registrations are possible within the limits of available samples. Register quickly.

The analyses of NCV at constant pressure, O, C and N can be carried out on these samples. Data statistical treatment may be performed if the number of participants is sufficient. On the contrary, only a review will be presented in the test report (no z-scores calculation).