

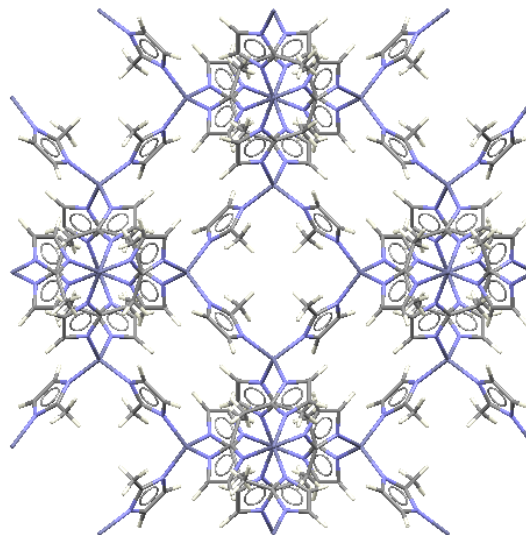


# ACSYNAM Product List

Contact: Cristina Mottillo, PhD  
CEO  
[cmottillo@acsynam.com](mailto:cmottillo@acsynam.com)  
514-756-0161

# Metal-organic frameworks

- ▶ ZIF-8 (Zinc methylimidazolate)
- ▶ Formula:  $C_8H_{12}N_4Zn$
- ▶ Formula Weight: 229.60 g/mol
- ▶
- ▶ Specifications:
- ▶ Color: White to off-white
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area: 1700-1850  $m^2/g$



# Metal-organic frameworks

▶ ZIF-90 (imidazole-2-carboxaldehyde, zinc salt)

▶ Formula:  $C_8H_{12}N_4Zn$

▶ Formula Weight: 287.54 g/mol

▶

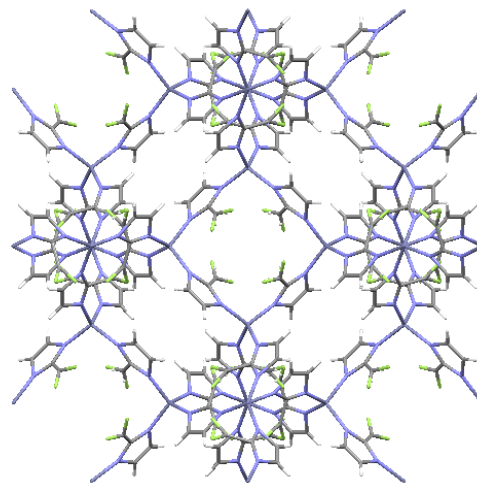
▶ Specifications:

▶ Color: White to off-white

▶ Form: Solid

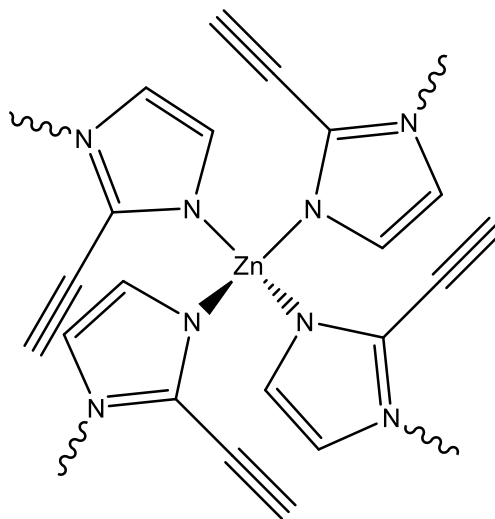
▶ Purity:  $\leq 99.5\%$  (TGA)

▶ Surface area: 1200-1400  $m^2/g$



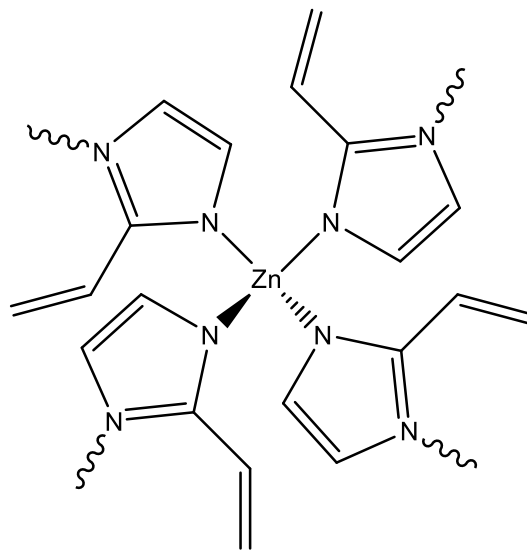
# Metal-organic frameworks

- ▶ Zinc 2-ethynylimidazolate
- ▶ Formula:  $C_8H_{12}N_4Zn$
- ▶ Formula Weight: 247.54 g/mol
- ▶
- ▶ Specifications:
- ▶ Color: White to off-white
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area: 1200-1400  $m^2/g$



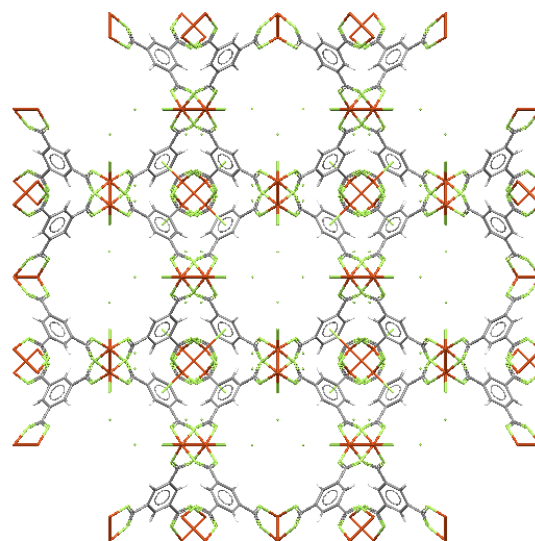
# Metal-organic frameworks

- ▶ Zinc 2-vinylimidazolate
- ▶ Formula:  $C_8H_{12}N_4Zn$
- ▶ Formula Weight: 253.6 g/mol
- ▶ Specifications:
- ▶ Color: White to off-white
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area: 1200-1400  $m^2/g$



# Metal-organic frameworks

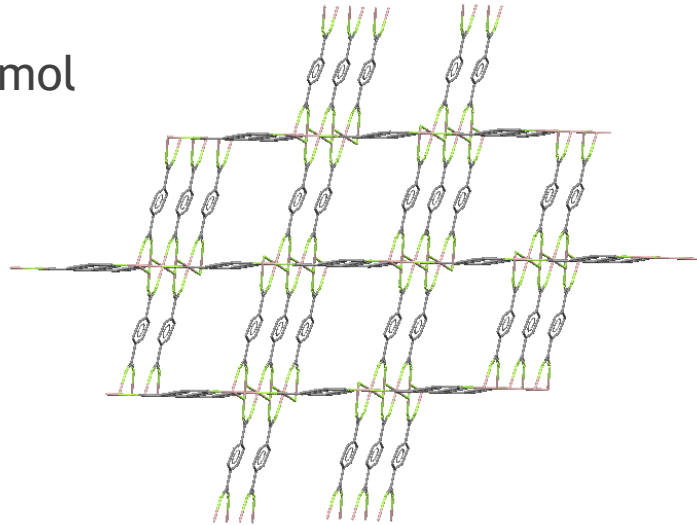
- ▶ HKUST-1 (Copper 1,3,5-benzenetricarboxylate)
- ▶ Formula:  $C_{18}H_6Cu_3O_{12}$
- ▶ Formula Weight: 604.87 g/mol



- ▶ Specifications:
- ▶ Color: Blue
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area:  $\sim 1800 \text{ m}^2/\text{g}$

# Metal-organic frameworks

- ▶ MIL-53 (Aluminum terephthalate)
- ▶ Formula:  $C_8H_5AlO_5$
- ▶ Formula Weight: 208.10 g/mol
- ▶
- ▶ Specifications:
- ▶ Color: White
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area:  $\sim 1100-1500 \text{ m}^2/\text{g}$



# Metal-organic frameworks

▶ MOF-5 (Zinc 1,4-benzenedicarboxylate)

▶ Formula:  $\text{Zn}_4\text{O}_5\text{C}_{24}\text{H}_{12}$

▶ Formula Weight: 775.9 g/mol

▶

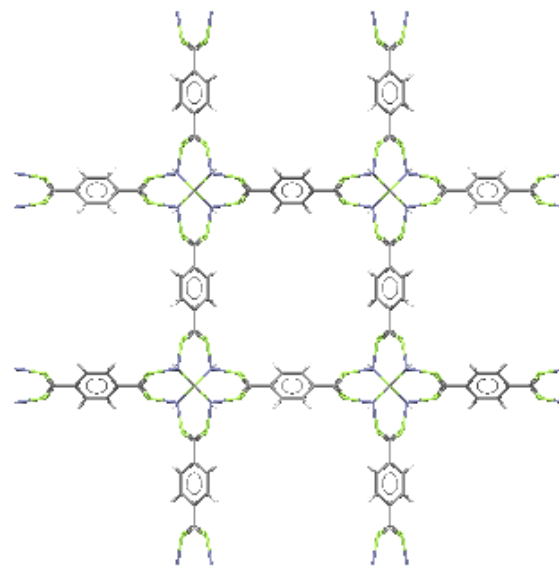
▶ Specifications:

▶ Color: White

▶ Form: Solid

▶ Purity:  $\leq 99.5\%$  (TGA)

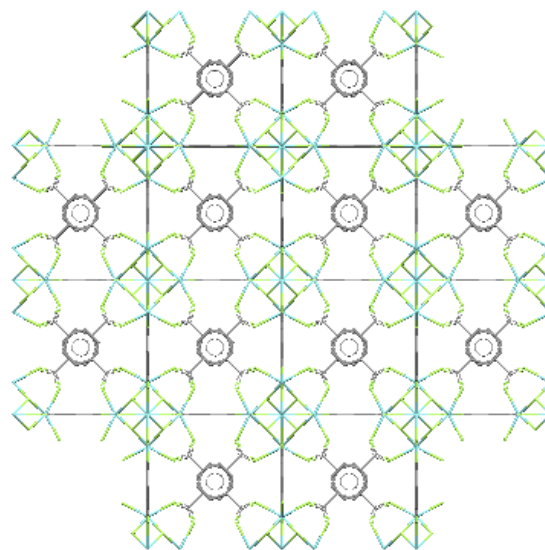
▶ Surface area:  $\sim 3500\text{-}4000 \text{ m}^2/\text{g}$





# Metal-organic frameworks

- ▶ UiO-66 (Zirconium terephthalate)
- ▶ Formula:  $C_{48}H_{28}O_{32}Zr_6$
- ▶ Formula Weight: 1664.06 g/mol
- ▶
- ▶ Specifications:
- ▶ Color: White
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area:  $\sim 1000 \text{ m}^2/\text{g}$



# Metal-organic frameworks

- ▶ UiO-66-NH<sub>2</sub> (Zirconium 2-aminoterephthalate)
- ▶ Formula: C<sub>48</sub>H<sub>40</sub>N<sub>6</sub>O<sub>32</sub>Zr<sub>6</sub>
- ▶ Formula Weight: 1760.19 g/mol



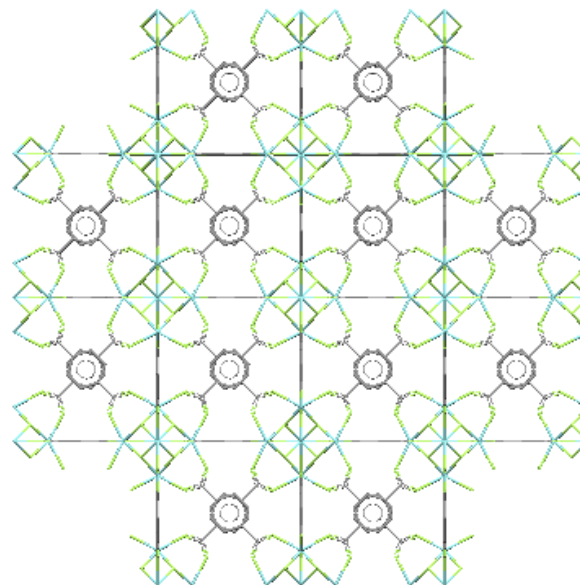
▶ Specifications:

▶ Color: White

▶ Form: Solid

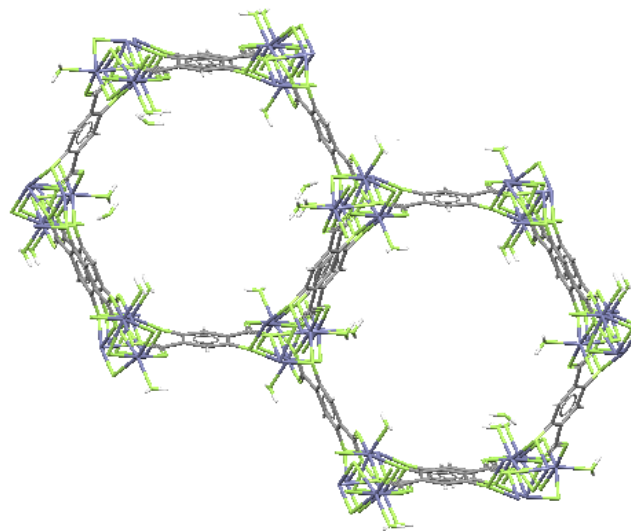
▶ Purity: ≤ 99.5% (TGA)

▶ Surface area: ~1000 m<sup>2</sup>/g



# Metal-organic frameworks

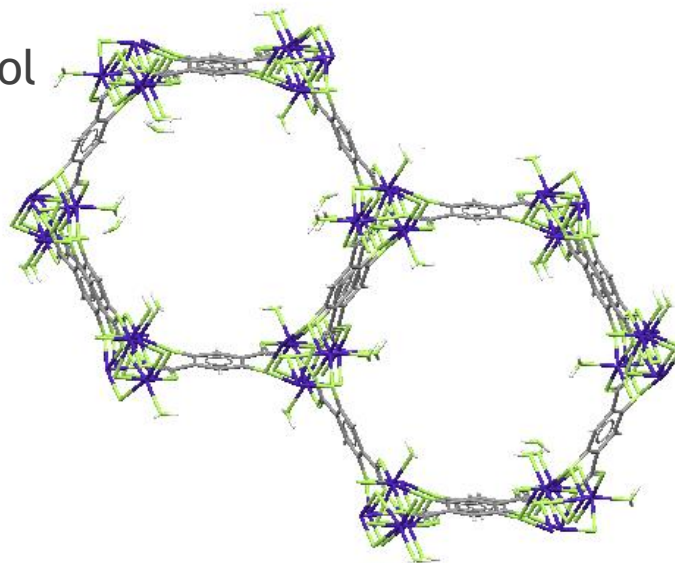
- ▶ Zn-MOF-74 (Zinc dihydroxyterephthalate)
- ▶ Formula:  $\text{Zn}_2\text{C}_8\text{H}_2\text{O}_6$
- ▶ Formula Weight: 324.88 g/mol



- ▶ Specifications:
- ▶ Color: Yellow
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area:  $\sim 1400 \text{ m}^2/\text{g}$

# Metal-organic frameworks

- ▶ Ni-MOF-74 (Nickel dihydroxyterephthalate)
- ▶ Formula:  $\text{Ni}_2\text{C}_8\text{H}_2\text{O}_6$
- ▶ Formula Weight: 311.48 g/mol



- ▶
- ▶ Specifications:
- ▶ Color: Yellow
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area:  $\sim 1400 \text{ m}^2/\text{g}$

# Metal-organic frameworks

- ▶ Mg-MOF-74 (Magnesium dihydroxyterephthalate)
- ▶ Formula:  $\text{Mg}_2\text{C}_8\text{H}_2\text{O}_6$
- ▶ Formula Weight: 242.71 g/mol
- ▶
- ▶ Specifications:
- ▶ Color: Yellow
- ▶ Form: Solid
- ▶ Purity:  $\leq 99.5\%$  (TGA)
- ▶ Surface area:  $\sim 1400 \text{ m}^2/\text{g}$

