

**Ecphrastic poetry & the  
development of professional  
literacy in chemistry**

# What is ecphrastic poetry?

- Ecphrastic poetry is the conversation between two pieces of art. The writer interprets a work of visual art and then creates a narrative in verse form that represents his or her reaction to that painting, photograph, sculpture or other artistic creation.

<http://www.firkinfiction.com/11.html>

# Ecphrastic poetry and chemistry

- How do you write a chemistry-related poem in an ecphrastic manner?
- Complete the following steps:
  1. View a stimulus image and identify a chemistry-related concept it evokes.
  2. If required, write down the concept, definition, law, formula etc.
  3. Identify a suitable poetry type and write the poem.

**What concept does this image evoke?**

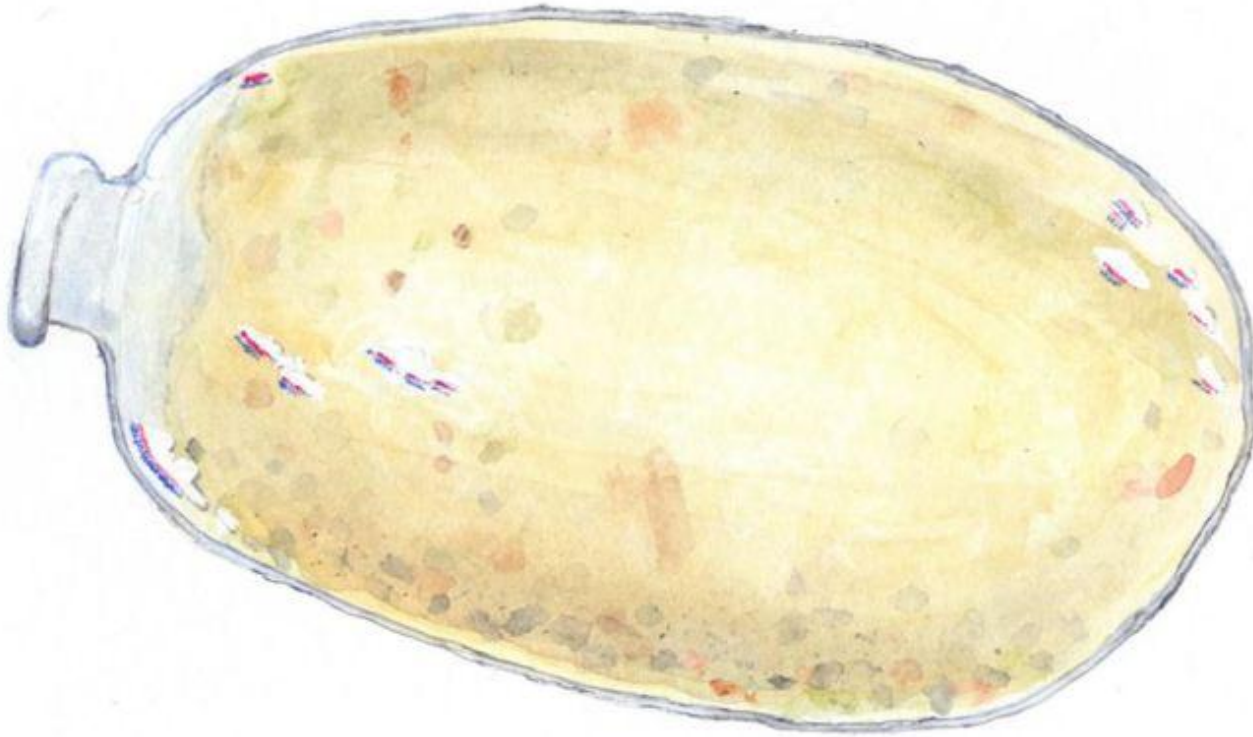


**H<sub>2</sub>O (droplets on flowers)**

# Example Haiku poem

*Water molecules  
have two hydrogen atoms  
and one oxygen.*

**What concept does this image evoke?**



*Gromia cf. oviformis*

**DNA/RNA sequencing  
of  
Gromia cf. oviformis**

# Example Concrete poem

TTT  
GACTCAACAC  
GGGAAACTTACCAGG  
TCCAGACATAACAAGGATTG  
TCAGATTGAAGATCTTACTTGATT  
TTATGGGTGGTGGTGATGGCCGTTCT  
TAGTTGGTGGAGTGATTTGTCTGGTTAATT  
CCGTTAACGAACGAGACCTCAGCCTACTAA  
CTAGTAGTGCTTATCCTTTTTGGTTCGTTGCT  
TGTCACACGACACAATGGGCTGATTTTCATGGAT  
AGGGTTTGATAATCTACTTCTTAGAGGGACTTTG  
GTGCTTAGCGGAAGGAAGTTTGAGGCAATAACAGT  
CTGTGATGCCCTTAGATGTTCTGGGCCGACGGG  
CTACACTGATGCGCTCAACGAGTTACGATCTTC  
TGAAATGGCTGGGTAATCTTTTTAAAACGATCG  
TGATGGGGATAGATCATTGCAATTATTGATCTT  
CAACGAGGAATTCCTAGTAAGCGGAGTCATC  
AGCTCGTCTGATTACGTCCCTGCCCTTTG  
TACACACCGCCCCTCGCTCCTACCATT  
GAGTGATCCGGTGAATAATTCGGACTGA  
TGCACTGCTCAGCTTCTGGGCGTTGCG  
TTGGAAAGTTTAGTGAAACCTTATCAC  
TTAGAGGAAGGAGAAGTCGTAACA  
AGGTTTCCGTAGGTGAACC  
TGCAAGGATCAACG  
TTGGAT

**What concept does this image evoke?**



**Acid**

# Example Acrostic poem

**A**nions are used for naming purposes

**C**orrosion can be removed through its use

**I**norganic forms also occur

**D**issociation constant is  $K_a$

**What concept does this image evoke?**



# Hydrocarbons

# Example Limerick poem

There once was a girl named Irene,  
who lived on distilled kerosene.  
But she started absorbin'  
a new hydrocarbon,  
and since then has never benzene!

**What concept does this image evoke?**



# **Oxidisation (Rusting)**

# Example Free Verse poem

When iron goes, and oxidizes,

It gives us all a few surprises...

When ladder looks, a little rusted,

It really can't be, so well-trusted...

Rust corrodes, over time,

Might make ladder, bad to climb...

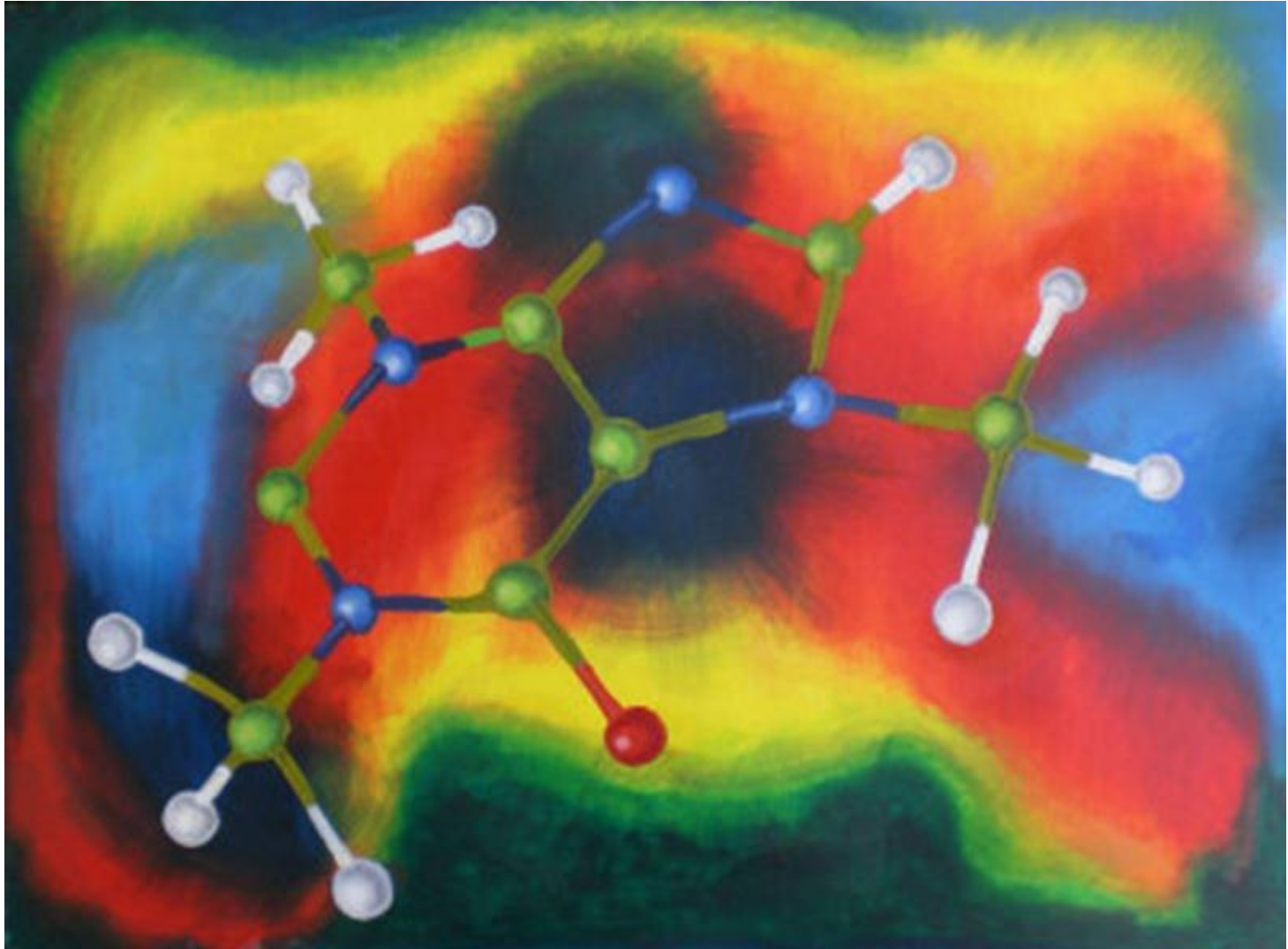
Rusty iron?

Not too strong, disintegrates, before too long...

# Example Free Verse poem

When iron's reddish, it's just rust,  
Can turn some metal, into dust!  
Yes, iron mixed with oxygen,  
throw a little moisture in,  
Oxidizes, makes it rust,  
And rusty iron's, hard to trust...

# What concept does this image evoke?



# **Molecular structure**

# Example Cinquain poem

*Molecule*

*Small particle*

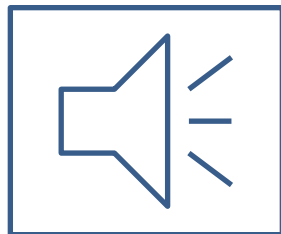
*Vibrates very quickly*

*Evokes excitement in my heart*

*Atom*

# What concept does this musical composition evoke?

*I'm a Lumberjack*  
(from *Monty Python*).



# **The chemistry profession**

# Example re-worked song lyric

I'm in chemistry and I'm okay, I sleep all night and I work all day.  
He's in chemistry and he's okay, he sleeps all night and he works all day.

I clean my flasks, I read my JACS, I do reactions well.

He cleans his flasks, he reads his JACS, he does reactions well.

Someday I'll be unlucky and blow myself to Hell.

Someday we'll all be lucky and watch him blown to Hell.

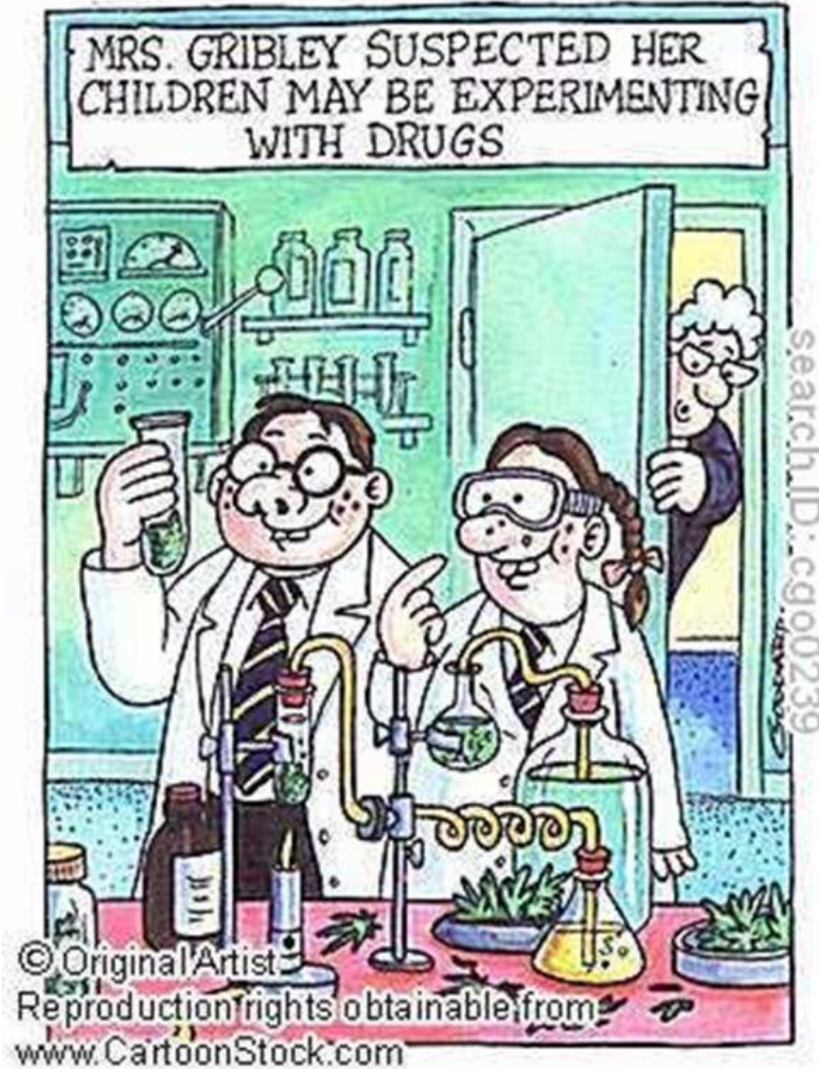
**\* JACS = Journal of the American Chemical Society**

# Activity

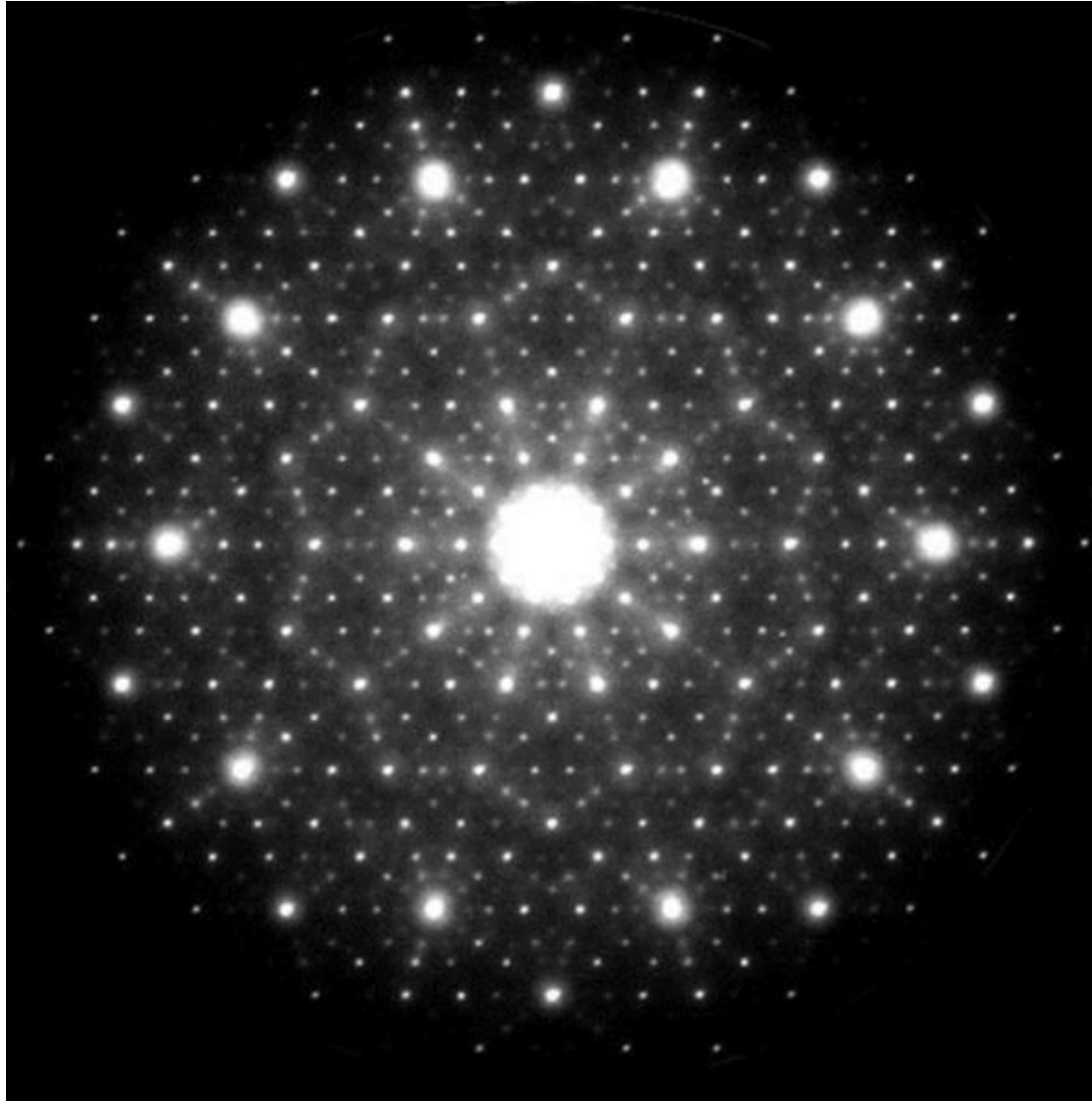
Using the given stimulus material, create the following types of poetry:

- Free verse
- Acrostic
- Cinquain
- Haiku
- Limerick

# STIMULUS IMAGE 1



# STIMULUS IMAGE 2



# STIMULUS IMAGE 3



# STIMULUS IMAGE 4



# STIMULUS IMAGE 5



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