SODIUM CHLORIDE

I am sodium

The 11th element on the table Soft, silvery-white, highly reactive In the free state, I'm unavailable

I am chlorine

Atomic number- seventeen A halogen, the second most abundant With the third highest electronegativity

There are many like me they say Li, K, Rb, Cs Yet we never click with each other I can never coexist with them

I have my own family of halogens All similar to me in every way But even though our properties are all alike

I don't imagine us mingling any day

In this big group of alkali metals I find myself alone and unwanted Sure, we were ALL born in the earth's crust

Then why do I feel so secluded and haunted?

Highly social and reactive we seem to be Yet to each other we're mere strangers All so lost in this fight for nobility No one wants their electron stabilities endangered

(But sometimes)

Sometimes I wonder who is beyond my group

Could there be a possible friend? Maybe all there is across that period Are elements with their own different trend

Sometimes I wander in my gaseous state Aimlessly stumbling upon possible

So alone so unstable So distant so incapable Do I belong here? But this is my family Says who I ask Says Mendeleev's periodicity But just because Yes, just because They all have the same electronic configuration as me



Doesn't mean at all By any law of chemistry That together we're meant to be

(Long pause)

All I want to do Is gather enough enthalpy To turn myself around And glance at what's behind me (Sodium slowly turns around during this para)

But if I turn, I'm afraid They'll see how imperfect I am Incomplete is my valence shell I'm not as noble as I think I am (Chlorine slowly turns around during this para)

So I look around anxiously Finding someone whose valencies would be a match Not catching anyone's eye Stifling all urges to say a 'Hi' (Both try to wave but stop themselves mid-way)

But one fine day When we both least expected it We both left our respective groups And went our way Lost but not astray Hope that chemical kinetics

- Its role would soon play As it turns out All we needed was an accidental collision A collision in the correct orientation For our energy barriers to be crossed For our instability to be lost And all that remained Was an introduction, two valencies, two names But I was scared She's nothing like me I'm electropositive I'm electronegative Poles apart A whole period apart
- Can this brief encounter This one 'chance meeting' Give me a friend? Or be my end? Our equation seems unbalanced somehow Maybe it isn't meant to be Should we even bother attaining equilibrium now? Or would it be a waste of energy? A waste of substrate? Maybe we should just go our different directions now

(They walk separate ways, two seconds later sodium looks back)



Hey wait! Yeah? I know you're really busy Yeah right! Making people dizzy? But maybe you'd want to Probably meet sometime? Share an electron maybe That sounds fine So I'll meet you there By the shore of the sea? And maybe interact for a while At -757.3 kJ/mol enthalpy You never know How this may turn out for you and me We might even start bonding Bonding a bit ionically.

And that's the story of how a great friendship began Who would have thought two opposites could complete each other's electron band? So much is still said about this legendary pair Sustaining life both on land and air Who would have thought that beyond yours and my comfort zone? Was present an element in whom we'd find home Someone to share with, someone to interact Someone to dissipate with, someone to hold intact But that does not mean things won't turn exothermic Sometimes the heat will become too much to take But just because there's an uproar and an effervescence Does not mean our bonds have to break So every time we seem distant I'll ride the Haber's cycle down your lane

Until we both are ready To rebuild our lattices Every single time Again, and again



Notes:

- 1. Sodium and Chlorine, two elements from across the periodic table and with very different properties, come to form one of the most iconic and underrated chemical compounds of all time. Inspired by my bond with my best friend Anshu Saran, this spoken word poem (narrated through the perspective of both elements) explores how the unlikeliest but greatest friendships form only when we dare to venture outside our comfort zones. How to read the poem: The poem is a verse-based skit (written to be performed on stage) with the sections in purple being spoken by 'Sodium', those in red being spoken by 'Chlorine', and sections in black being spoken by both.
- Source of the image used in the background of the article title: Poem. Credits: Idearriba, Pixabay. URL: https://pixabay.com/photos/poem-butterfly-literature-tale-1104997/. License: CCO.
- 3. The three illustrations for this poem were inspired by sketches of the sodium and chlorine atoms by Dalia Saldanha (the author). They were conceptualised & created by Vidya Kamalesh (Artist, i wonder...) & Chitra Ravi (Editor, i wonder...). To reuse, please include following details: Credits: Dalia Saldanha, i wonder..., Jun 2022 issue. License: CC-BY-NC.



Dalia Saldanha is a PhD candidate in the Department of Chemical Engineering at McGill University, Canada. She works on developing skin sensors from eco-friendly protein-based biomaterials. Outside of the lab, Dalia enjoys writing scientific poetry, swimming, and exploring indie bookstores. Feel free to contact her at: daliasaldanha96@gmail.com.