

A Tale of Two Isotopes

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Olive the oxygen atom and her sister Ozzy lived in a fancy complex on some extensive property downtown. The structure of the complex was somewhat irregular but it had lovely symmetrical lattice work on the ground level where they resided. Inside their unit, their resting areas were separate but they frequently overlapped and occupied the same region of space and consequently had formed a fairly strong bond over the years. Rather than going it alone, like those snobbish Noble gases in the penthouse who always kept to themselves, Olive and Ozzy were pleased they had paired up locally. Although closely related, their physical properties were actually quite different. While Olive was quite stable, Ozzy had lost a neutron when she was young and consequently developed a much more unstable nature. Although, at times, Olive was perturbed by Ozzy's highly energetic nature, she tried to remain relaxed when Ozzy showed signs of continuous decay and hurled positrons around the place. As for Ozzy, she knew her life-time would be short and wanted to live life to the fullest. One Saturday, Ozzy had been active as usual and played tennis in the morning on the nearby quartz, followed later in the afternoon by an aerobic workout. Despite all this activity, Ozzy was nowhere near depleted, and was busy planning what she and Olive could do with their free energy as the evening approached.

"Let's do something relaxing," suggested Olive. "Ronald Ray-gun, who played the leading role in *Star Wars*, is in a film at the local cinnabar tonight. Afterwards we could stop at the fairgrounds and ride the ferrous wheel."

"How Bohring," replied Ozzy, "I want some excitement. Let's take the hetero cycles for a nitride and check out Avogadro's bar." Olive wasn't excited about bars. Furthermore, Avogadro's was in a seedy part of town where undesirable oxygen scavengers were known to lurk. Nevertheless, she reluctantly agreed to go. Avogadro's bar was a popular atomic hangout where Ozzy worked during the week. She liked the conditions there, which were pretty much standard; she liked the atmosphere and there wasn't a whole lot of pressure. Later that evening they arrived at Avogadro's and as she walked in, Ozzy went over to greet Sol Furic who was dispensing solvents at the bar.

"Hi Sol, give me a bowl of silicon chips and a plate of your extra hot gamma ray source," she said and introduced Olive to him. "I see the place is real busy."

"Yep, we're really close packed tonight. Now, do you two want any liquids?"

"I'll just have an iced limewater please," requested Olive.

"And the usual nonaqueous solvent for me, Sol," added Ozzy, "but no diet coke in that, I've given up trying to reduce. You should visit here more frequently," she remarked turning to Olive, "you see some unusual characters. Look there, a group of foreign Germaniums. And you know what they say about metalloids—they can go either way!" Ozzy turned to look at the band who were warming up.

"Hey Sol, I thought Benny Borane and the Dimer Dozen were playing here this week?" she asked.

"Well, Avogadro had to discharge Benny when he caught him packing anion," replied Sol. "But Freddy Lead and his heavy metal band finished playing a giga at the Monazite Sands yesterday and Avogadro signed them up

for the next few nights. Personally, I don't go for those metal bands, they tend to attract bad elements in here."

"Freddy Lead!!" exclaimed Olive suddenly much to Ozzy's surprise, "Wow, he's exothermic!"

"What?" cried Ozzy, "I thought you only liked the classical conductors?"

"Well I do, but when I heard Freddy's hit song, Indigo Blues, he smelted my heart instantaneously."

"I wouldn't get too excited about Freddy Lead," added Sol, "I've heard some pretty radical things about him. Oh I know, he may not seem like an active metal on the surface, but Freddy has the potential to come between you two. Rumor also has it that he recently spent some time in a mono clinic."

"I didn't think you would be attracted to the likes of him," said Ozzy in a surprised tone. "Believe me I've seen his type before, they're all just plumb bums. Trust me, he'd dump you when the first cute halogen drifted by and you would be reduced to nothing."

But Olive was not to be so easily dissolutioned. When Freddy and the band started playing she just sat at the bar in ore, and psi'ed. "Oh look," she cried "that's Cad Calloway on the drums and Old Mossy Zinc on base. And look there, it's Stan the Man on the tin whistle and symbols."

As the evening wore on, Ozzy circulated through the bar but Olive sat glassy eyed at a table watching Freddy Lead intensely and consumed an abundance of unfamiliar solvents. Sol beckoned Ozzy over to the bar. "I'm a little worried about Olive," he confided to Ozzy, "that's her third Raman coke tonight, I think she's had ampoule. And look at Freddy."

Freddy, who was well aware of Olive's interest in him, was himself becoming more and more charged as the evening progressed. Both Ozzy and Sol sensed he was about to lose it. As for Olive, although she had no intention of accepting electrons from a stranger, she found Freddy positively exciting. Eventually, during a break, Freddy slid over to her table and sat down. Up close, Freddy looked a bit dull, in fact he was downright dense, but Olive didn't notice as she peered at him through the dim limelight. Meanwhile, Ozzy was picking up bad vibrations from Olive who apparently wanted to be alone. Sensing the bond between them was somewhat strained that evening, Ozzy went back to the bar where a gorgeous hunk of a uranium atom had been eying her all evening. "Hi, my name's Uri," he said brashly, "you into radioactive dating? I know a little place near Three Mile Island where we could go fission. Interested?"

"Umm," mumbled Ozzy to Sol, "keep an eye on Olive will you? This one is really rad and is arousing my curiosity. Think I'll take him up on his offer." Although Uri was obviously much older than Ozzy, she was attracted to the strong, active type and she hoped that he wouldn't split like past dates had.

Back at Olive's table, Freddy was busy admiring her dimensions. "Hey babe," he said, "you certainly obey the law of definite proportions." Olive, a little embarrassed by such language, tried to ignore it.

"Could you play Indigo Blues for me? It's my favorite song. The first time I heard it I almost died," she admitted.

"Sure, no problem babe," responded Freddy with a grin a yard wide. "So tell me, what's a cute nonmetal like you doing in a place like this?"

"Well, my sister and I....," she began, pointing to Ozzy as she was leaving the bar, "we rode here on our hetero cycles and ..."

"Hey, not my scene babe," Freddy admitted, "never could get coordinated on those things. But maybe after the show you can take a spin with me and the band in our Mercury. We know a great Fluoro Spa down the slope a bit." Freddy and the three band members clustered around Olive. "So," said Freddy pressing closer to Olive's significant figure, "how about a tetrakis for me and the band?"

"Now hang on," said Olive growing impatient, "I may be a little saturated with alcohol, but I still need some time before I start face-sharing."

"Relax, be a bit more malleable like us," said Freddy lustering all over her. "We could have plenty of magnetic moments together after the show. I know we'd make a lovely redox couple." Olive didn't like the way Freddy and the band were analyzing her valence shell, and became quite irritated.

"Just because you heavy metals ionize easily you expect every non-metal you meet to crystallize with you on the first encounter," cried Olive, "what do you take me for, an oxy moron?"

"Come, come my dear. For a gas your behavior has hardly been ideal," he added. "Perhaps you could use a little catalyst to get you going," suggested Freddy as he thrust a cylinder of nitric oxide at her.

"Ugh, NO!" she exclaimed rotating in her seat. But Freddy put his neon the table preventing her from getting up. Poor Olive looked terafied, and Sol decided to step in.

"Okay Freddy break it up, keep your degenerate orbitals to yourself," Sol said acidly as he approached from the bar. Under ordinary conditions Freddy wouldn't have felt threatened by Sol, but he could see Sol was becoming hot under the collar and could dissolve the relationship he was trying to form with Olive. At that point the band's manager, Nate Hydroxide, diffused over to the table.

"What the photon's going on here?" Nate asked in a caustic tone.

"I wish you would keep the band away from our customers," yelled Sol, "Freddy's relaxation period is over. I don't know where you dig up these characters, now keep them away." But Nate wasn't ready to be so easily neutralized by Sol.

"Listen pal, don't mess with Freddy, he's got a low boiling point."

Sol, by now, was fuming and slapped Nate across the lobes.

"Hey watch it," yelled Nate, "you can't salt me, let's see how strong you really are."

Nate, of course, was no weak base himself. He lepton Sol and the two began to mix it up. As generally occurs in bars that contain bad elements, the place spontaneously erupted. In a matter of nanoseconds all manner of particles were in random motion: pitchers of heavy water flew across the bar, much to the horror of some hydrophobiacs at one table, bowls of sugars were inverted everywhere, and a party of graduated cylinders had their celebrations shattered as Nate and Sol rolled on top of them trying to neutralize each other. A terrible graphite broke out in one corner of the room, and even a group of aquamarines, green with envy, quickly joined in. Eventually all this dis-

turbance brought Avogadro, and his pet mole Millie, from his resting place upstairs. "Hey! Hey!" he yelled in vain, "stop all this phytin or I'll have to call some external forces." He beckoned to Leon and Noel the two enantiomeric bouncers. But it was useless, a chain reaction followed, and everyone was drawn into the turbulence.

"What a waste of energy," mumbled Avogadro to himself as he watched the bar's entropy soar. He called Sol. "Stop it at once!" But Sol didn't absorb his comments, he was too busy banging Nate against a bar magnet with great frequency.

"Ouch, that Hertz," sobbed Nate. Avogadro watched as Sol and Nate went round and round, but nothing indicated that the end point was in sight. Moments later, the resonance of sirens could be heard: someone had called the coppers. Since Millie mole was unlicensed, Avogadro didn't want the coppers to unearth her. Besides, she'd been into his methanol again and was blind drunk.

"Order, order," shouted the coppers bursting in, just as Avogadro and Millie disappeared upstairs. Having already captured some highly excited electrons that had been ejected from the bar during the fight they attempted to restore normality. "Umm," said one, "I have the ideal solution to break up this lot," and he turned on the fire hose. The aqueous environment diluted most of the violent activity. But there were a lot of broken bonds and quite a few minerals had fractures and were carried away for X-rays. When the salts began to settle down, the authorities searched for the radical initiator.

"It's all her fault," claimed Nate bitterly, pointing to poor Olive who was resting on the ground, trying to reestablish her equilibrium.

"I hate lyes," said Sol "now you and your formates get out of here." But before Sol could come to her defence, several coppers dragged Olive off.

"Sorry Miss," said the copper at the station, "afraid I'm going to have to formally charge you."

"With Watt?" cried Olive, "it wasn't my volt, I was just a spectator. I want to go ohm."

"Not until the circuit judge hears all the fac's tonight. How I hate these nitriles," he complained. "Come along now, we have a nice unit cell waiting for you. In you go." said the copper.

Meanwhile, Ozzy and Uri had a major fall-out on the way to Three Mile Island. As they travelled back, Ozzy telephoned Sol from Uri's carvone and learned what had occurred in the bar. She proceeded to the station and on arrival demanded to see Olive. "Just a moment," said the copper, "is she arylation of yours?"

"Weight a minute pal," said Ozzy impatiently, "let's see if we can't work something out here." Within minutes, Olive was released from her cell.

Back home, Ozzy explained to Olive how the copper was reluctant to release her, but changed his mind when Ozzy offered him some joules. "So what happened between you and Uri?" asked Olive.

"Well, our fishing trip got as far as Chernobyl's bait shop, when I discovered Uri had a bunch of daughter nucleotides, and was only seeking a parent for them. Never mind, thanks to mankind there's plenty more isotopes in the sea. And what a night for you," said Ozzy leading, mercifully, to the concluding moral of this tale. "I hope you have learned your lesson with Freddy: if you don't get the lead out of your life, you could end up lithargic."