



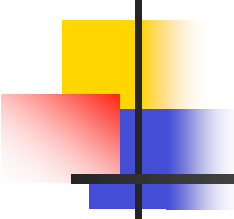
Scientific Wisdom in Quran

ICS Conference
Tucson, AZ
August 6-8, 2004



All Knowledge is with GOD

- With Him are the keys to all secrets; none knows them except He. He knows everything on land and in the sea. Not a leaf falls without His knowledge. Nor is there anything wet or dry that is not recorded in a profound record. [6:59]

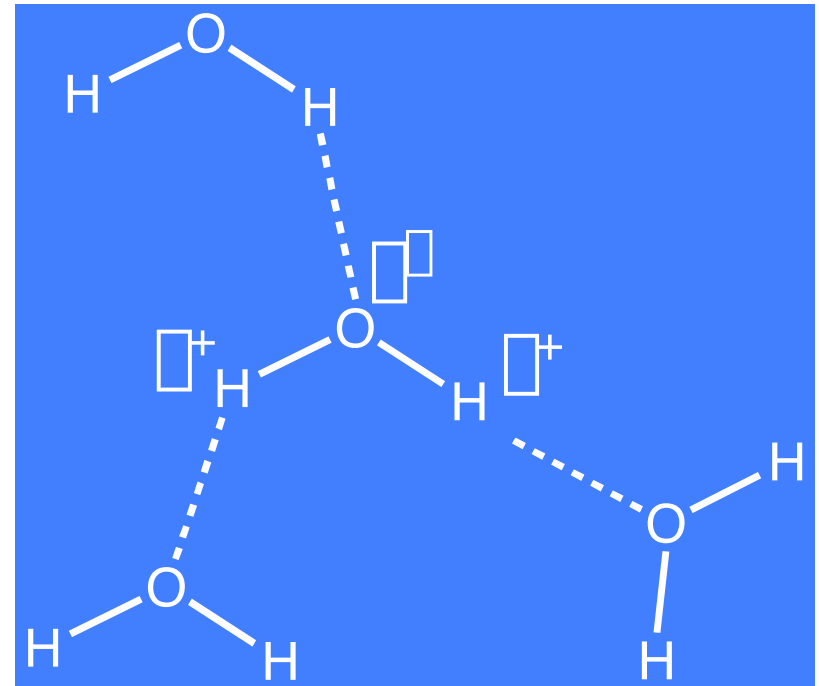


Sufficient Physical and Scientific Proofs!

- In the *creation of the heavens and the earth*, the alteration of night and day, the *ships that roam the ocean* for the benefit of the people, the water that God sends down from the sky to revive dead land and to spread in it all kinds of creatures, the manipulations of the winds, and the clouds that are placed between the sky and earth, there are sufficient proofs for people who understand. [2:164]
- And from *water (H₂O)* we made all living things. [21:30]

Water is a Miracle Liquid

- Essential for all living things.
- Considered the **universal solvent** because it dissolves more substances than any other solvent. This property is responsible for **sea formation (high salinity)**.
- Surface tension, drop formation, and other unique properties are defined by water's ability to form hydrogen-bonding.
- Present in all three states (ice, water, and vapor) on earth.





Physical Properties of Water

- Your Lord is the One who causes the ships to float on the ocean, that you may seek his bounties. He is Most Merciful towards you. [17:66-67]
- Do you not see that the ships roam the sea, carrying God's provisions, to show you some of His proofs? Indeed, these should be sufficient proofs for everyone who is steadfast, appreciative. [31:31]
- Among His proofs are the ships that sail the sea with sails like flags. [42:32]

Diversity of Life in Brackish Water



- The two seas are not the same; one is fresh and delicious, while the other is salty and undrinkable. [35:12]
- Who is the one who made earth habitable, caused rivers to run through it, placed on it mountains, and created a barrier between the two waters? Is another god with God? Indeed most of them do not know. [27:61]
- He separates the two seas where they meet. [55:19]



Quran on Creation

- Do the unbelievers not realize that the heaven and the earth used to be **one solid mass** that we **exploded** into existence? And from water we made all living things. Would they believe? [21:30]
- We constructed the sky with our hands, and we will **continue** to **expand it**. [51:47]

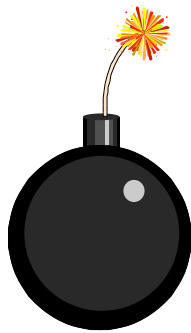


Modern Science is Confirming Quran

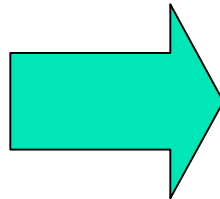
- In 1998, two groups of astronomers presented strong evidence that the expansion of the universe is accelerating, despite the inevitable slowing down induced by gravity's pull. ...this suggests the action of an “antigravity” force at the largest scale of the universe.

M. Livio, “Cosmic Explosions in an Accelerating Universe” *Science* **1999**, 286, 1689.

The Age of the Universe



~ 18 billion years



- The angels, with their reports, climb to Him in a day that equals fifty thousand (50,000) years. [70:4]
- A **day** of your Lord is like a **thousand of your years**. [22:47 & 32:5]
- A simple calculation gives:

$$50,000 \times 365.2564 \times 1000 = 18.3 \text{ billion years}$$

Periodic Table of the Elements

Los Alamos National Laboratory Chemistry Division

Periodic Table of the Elements

1A 1 H Hydrogen 1.008	2A																8A 2 He Helium 4.003	
3 Li Lithium 6.941	4 Be Beryllium 9.012																	10 Ne Neon 20.18
11 Na Sodium 22.99	12 Mg Magnesium 24.31																	18 Ar Argon 39.95
19 K Potassium 39.10	20 Ca Calcium 40.08	21 Sc Scandium 44.96	22 Ti Titanium 47.88	23 V Vanadium 50.94	24 Cr Chromium 52.00	25 Mn Manganese 54.94	26 Fe Iron 55.85	27 Co Cobalt 58.93	28 Ni Nickel 58.69	29 Cu Copper 63.55	30 Zn Zinc 65.39	31 Ga Gallium 69.72	32 Ge Germanium 72.58	33 As Arsenic 74.92	34 Se Selenium 78.96	35 Br Bromine 79.90	36 Kr Krypton 83.80	
37 Rb Rubidium 85.47	38 Sr Strontium 87.62	39 Y Yttrium 88.91	40 Zr Zirconium 91.22	41 Nb Niobium 92.91	42 Mo Molybdenum 95.94	43 Tc Technetium (98)	44 Ru Ruthenium 101.1	45 Rh Rhodium 102.9	46 Pd Palladium 106.4	47 Ag Silver 107.9	48 Cd Cadmium 112.4	49 In Indium 114.8	50 Sn Tin 118.7	51 Sb Antimony 121.8	52 Te Tellurium 127.6	53 I Iodine 126.9	54 Xe Xenon 131.3	
55 Cs Cesium 132.9	56 Ba Barium 137.3	57 La* Lanthanum 138.9	72 Hf Hafnium 178.5	73 Ta Tantalum 180.9	74 W Tungsten 183.9	75 Re Rhenium 186.2	76 Os Osmium 190.2	77 Ir Iridium 192.2	78 Pt Platinum 195.1	79 Au Gold 197.0	80 Hg Mercury 200.5	81 Tl Thallium 204.4	82 Pb Lead 207.2	83 Bi Bismuth 208.9	84 Po Polonium (209)	85 At Astatine (210)	86 Rn Radon (222)	
87 Fr Francium (223)	88 Ra Radium (226)	89 Ac~ Actinium (227)	104 Rf Rutherfordium (261)	105 Db Dubnium (262)	106 Sg Seaborgium (263)	107 Bh Bohrium (264)	108 Hs Hassium (265)	109 Mt Meitnerium (266)	110 Ds Darmstadtium (271)	111 Uuu Ununundium (272)	112 Uub Ununbium (277)	114 Uuq Ununquadium (296)		116 Uuh Ununhexium (298)		118 Uuo Ununoctium (?)		
Lanthanide Series*		58 Ce Cerium 140.1	59 Pr Praseodymium 140.9	60 Nd Neodymium 144.2	61 Pm Promethium (147)	62 Sm Samarium (150.4)	63 Eu Europium 152.0	64 Gd Gadolinium 157.3	65 Tb Terbium 158.9	66 Dy Dysprosium 162.5	67 Ho Holmium 164.9	68 Er Erbium 167.3	69 Tm Thulium 168.9	70 Yb Ytterbium 173.0	71 Lu Lutetium 175.0			
Actinide Series~		90 Th Thorium 232.0	91 Pa Protactinium (231)	92 U Uranium (238)	93 Np Neptunium (237)	94 Pu Plutonium (242)	95 Am Americium (243)	96 Cm Curium (247)	97 Bk Berkelium (247)	98 Cf Californium (249)	99 Es Einsteinium (254)	100 Fm Fermium (253)	101 Md Mendelevium (256)	102 No Nobelium (254)	103 Lr Lawrencium (257)			

- Elements 43 (Tc) and 61 (Pm) do not occur in nature.
- From element 84 (Po) radioactive decay ensues.



element names in **blue** are liquids at room temperature
 element names in **red** are gases at room temperature
 element names in **black** are solids at room temperature



Sura 84: The Rupture

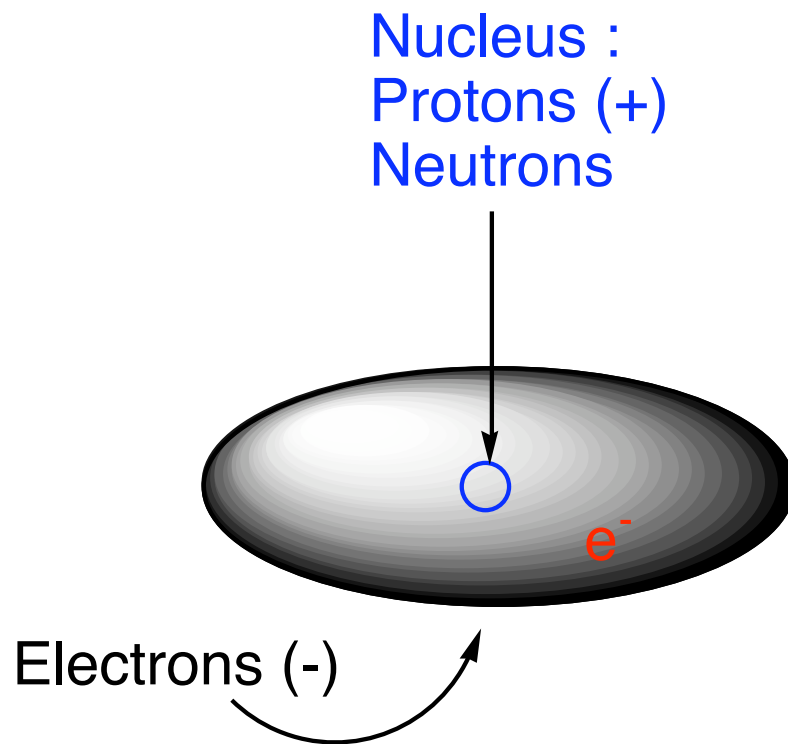
- The time will come when the sky is ruptured.
- It will submit to its Lord and expire.
- The earth will be leveled.
- It will eject its contents, as it erupts.
- It will submit to its Lord and expire.
- O humans, you are irreversibly heading for a meeting with your Lord.



GOD's Signature is Everywhere

- $(1+2+3+\dots)-(43+61) = 3382 = 19 \times 178$
- Suras 43 (89 numbered verses) and Sura 61(14 numbered verses).
 $43 + 89 + 1 = 133 = 19 \times 7$
 $61 + 14 + 1 = 76 = 19 \times 4$
- From 43 to 61, there are exactly **19** elements!

Composition of an Atom



- Iron is mentioned in Quran 57:25

$$5+7+2+5 = 19$$

- Fe: $Z = 26$

$A = 56$ (most common isotope)

$$5+6+2+6 = 19$$

- Atomic number (Z) = # Protons or Electrons
- Mass number (A) = Z + # Neutrons (N)



Pure Isotopes

	Pure isotope	Sura no.	no. of verses
<i>even</i>	⁴ Be	4	176
1.	⁹ F	9	127
2.	¹¹ Na	11	123
3.	¹³ Al	13	43
4.	¹⁵ P	15	99
5.	²¹ Sc	21	112
6.	²⁵ Mn	25	77
7.	²⁷ Co	27	93
8.	³³ As	33	73
9.	³⁹ Y	39	75
10.	⁴¹ Nb	41	54
11.	⁴⁵ Rh	45	37
12.	⁵³ I	53	62
13.	⁵⁵ Cs	55	78
14.	⁵⁹ Pr	59	24
15.	⁶⁵ Tb	65	12
16.	⁶⁷ Ho	67	30
17.	⁶⁹ Tm	69	52
18.	⁷⁹ Au	79	46
19.	⁸³ Bi	83	36

$$813 + 1429 = 2242 = 19 \times 118$$



Double Isotopes

	Double isotope	Sura no.	No. of verses
<i>even</i>	² He	2	286
1.	³ Li	3	200
2.	⁵ B	5	120
3.	⁷ N	7	206
4.	¹⁷ Cl	17	111
5.	²³ V	23	118
6.	²⁹ Cu	29	69
7.	³¹ Ga	31	34
8.	³⁵ Br	35	45
9.	³⁷ Rb	37	182
10.	⁴⁷ Ag	47	38
11.	⁴⁹ In	49	18
12.	⁵¹ Sb	51	60
13.	⁵⁷ La	57	29
14.	⁶³ Eu	63	11
15.	⁷¹ Lu	71	28
16.	⁷³ Ta	73	20
17.	⁷⁵ Re	75	40
18.	⁷⁷ Ir	77	50
19.	⁸¹ Tl	81	29

$$833 + 1694 = 2527 = 19 \times 19 \times 7$$



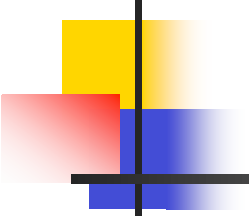
Our Own Creation!

- God brought you out of your mother's bellies knowing nothing, and He gave you the (1) *hearing*, the (2) *eyesight*, and the (3) *brains*, that you may be appreciative. [16:78]



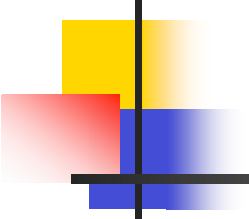
Conclusion

- They say, “How come no miracle came down to him from his Lord?” Say, “The future belongs to God; so wait, and I am waiting along with you.” [10:20]
- Those who possess no knowledge say, “If only God could speak to us, or some miracle could come to us!” Others before them have uttered similar utterances; their minds are similar. We do manifest the miracles for those who have attained certainty. [2:118]



Purpose of the **19** Mathematical Miracle [Quran 74:31]

“... (1) to disturb the disbelievers, (2) to convince the Christians and Jews (that this is a divine scripture), (3) to strengthen the faith of the faithful, (4) to remove all traces of doubt from the hearts of Christians, Jews, as well as the believers,



Purpose of the **19** Mathematical Miracle [Quran 74:31]

(5) to expose those who harbor doubt in their hearts, and the disbelievers; they will say, ‘What did GOD mean by this allegory?’

GOD thus sends astray whomever He wills, and guides whomever He wills
...”



Our Responsibility

- **“You shall not accept any information, unless you verify it for yourself. I have given you the (1) hearing, the (2) eyesight, and the (3) brain, and you are responsible for using them.”**

[Quran 17:36]