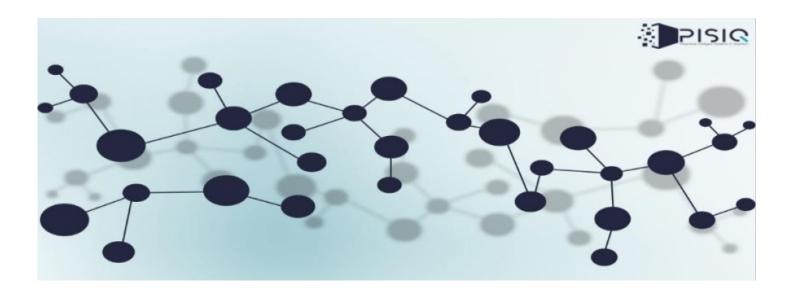
Graphene: A way forward to strengthen the defence system



United Arab Emirates, Dubai, May 28, 2021 (<u>Issuewire.com</u>) - Graphene is prefigured as a "miracle material," Graphene possesses the breadth of superlatives, devising its personification for countless applications.

- It is quite a lot tougher and more robust than steel, yet implausibly frivolous and lithe.
- It is the world's foremost 2D material and is one million times thinner than the diameter of a single human hair.
- It is electrically and thermally conductive and still translucent.

Medicine, Transportation, electronics, energy, defense, and desalination; the numbers of industries create a significant result on graphene research. **PISIQ researchers** weigh up. This is only the beginning. These are barely the primary steps. The potential of Graphene is narrowed just by our contemplation. And the best is yet to come.

<u>Mudar Muhissen (CTO – PISIQ)</u> alleged that Graphene is conferring a new momentum to the arms industry for the reason that its band arrangement permits its properties to be vividly altered and modified by chemical or electrochemical doping methods.

Nanotechnology, apart from its multiple applications; it's just a beginning to be utilized for the benefit of the arms industry. Military, where the prevalent investments are made. This elevates the opportunity for

highly productive and dreadful new weapons. **PISIQ Scientists** and Researchers are thankful to Graphene and nanotechnology that all sorts of rifles can be contrived, integrated computers would permit the remote control of any weapon, plus a more dense supported operation would ease superior robotics. Besides, these materials would be manufactured with a minimum amount of metal, so it would be too intricate to track them by radar. These ideas are only a cameo of all the potentials that would bring out the best use of Graphene in the arms industry.

While talking about its structure, the company (**CEO – PISIQ**) **Nihal Mohammad Shaikh** talked "Graphene is a substance formed by pure carbon atoms arranged in a hexagonal structure. It is quite a light sheet of 1 square meter weighs only 0.77 milligrams. It's considered 200 times stronger than steel, and its density is roughly similar to that of carbon fiber, being approximately five times lighter than steel. This & some other peculiar characteristics of Graphene allow its application in numbers of industries."

Defense and Military Applications of Graphene

The R & D firm PISIQ conferred, "One of the most popular military applications of Graphene is the possibility of manufacturing robot suits. These costumes provide soldiers with the ability to defend themselves against any attack similarly; Graphene has diverse applications in the military industry:"

- 1. Graphene for ballistic protection applications
- 2. Graphene to reduce the weight of protection armor
- 3. Graphene in Aviation: New Opportunities for Military Aircrafts
- 4. Graphene to manufacture lightweight and more comfortable military helmets

PISIQ (CEO – PISIQ) Nihal Mohammad Shaikh stated that Researchers from PISIQ had created a nanocomposite material toughened with Graphene that has drastically enhanced the mechanical chattels of the actual amalgamated material, as verified by tests conceded with the bash of military ammunition.

According to **Mudar Muhissen (CTO – PISIQ)**, "In the terms of structural properties (impact resistance, breaking stress, Young's modulus, delamination, and others), the nanocomposite developed in this work is more resistant than unmodified laminate. This is due to the Graphene strengthening power to improve the interface between the matrix and the fibers on a nanometric scale."

Is conferring: As a result, the scientific communities, industries, and militaries all over the world are enthralled by a new material that, by its excellent properties and numerous practicable applications, will revolutionize countless expressions of our lives.

It is a transparent material, extremely thin (the finest possible), very light (0.77 milligrams per square meter), impermeable, elastic, flexible, and, simultaneously, extraordinarily resistant. Also, Graphene is the best conductor of electricity known to date, and besides, it exists in plenty in nature, which makes it inexpensive. **PISIQ asserts** with pride that all these characteristics unleash its potential in the Military sector. In the Military industry, graphene can be employed for making lightweight and more resistant military aircraft, advanced vehicles, bulletproof jackets, lightweight and more strong helmets, etc. It is anticipated that in the years to come, many more uses of Graphene in the military sector will be revealed, which will significantly augment the competence of armies globally.

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