

THE SCOOP

The January Newsletter is OUT!!!

Scientist of the Month

Ernest Jones

"Man's chief enemy and danger is his own unruly nature and the dark forces pent up within him."

Scientist Birthday:

January 1st, 1879

Trivia about the scientist

Welsh psychoanalyst who introduced psychoanalysis into Great Britain and North America. His admiration for Sigmund Freud's approach to neurosis led him to learn German to read Freud's work. This led to a lifelong association with Freud from 1908.

Jones founded the International Journal of Psychoanalysis (1920), and was its editor for two decades.

Discovery in the month February, 2018:

NASA's NICER Mission Maps 'Light Echoes' of New Black Hole:

Scientists have charted the environment surrounding a stellar-mass black hole that is 10 times the mass of the Sun using NASA's Neutron star Interior Composition Explorer (NICER) payload aboard the International Space Station. NICER detected X-ray light from the recently discovered black hole, called MAXI J1820+070 (J1820 for short), as it consumed material from a companion star. Waves of X-rays formed "light echoes" that reflected off the swirling gas near the black hole and revealed changes in the environment's size and shape.



"NICER has allowed us to measure light echoes closer to a stellar-mass black hole than ever before," said Erin Kara, an astrophysicist at the University of Maryland, College Park and NASA's Goddard Space Flight Center in Greenbelt, Maryland, who presented the findings at the 233rd American Astronomical Society meeting in Seattle. "Previously, these light echoes off the inner accretion disk were only seen in supermassive black holes, which are millions to billions of solar masses and undergo changes slowly. Stellar black holes like J1820 have much lower masses and evolve much faster, so we can see changes play out on human time scales."



In 1925, he founded and was director of the London Clinic of Psycho-Analysis. When the Nazis invaded Austria in 1938, Jones went to Vienna to enable Freud's escape with his family to London. He published extensively, including a definitive three-volume biography of Freud (1953-57). His interests included chess, and as a youth, figure skating about which he later wrote a textbook.

A paper describing the findings, led by Kara, appeared in the Jan. 10 issue of Nature and is available online.

Watch how X-ray echoes, mapped by NASA's Neutron star Interior Composition Explorer (NICER) revealed changes to the corona of black hole MAXI J1820+070.

Discovery/Invention in the month February, Previously:

1913 - Patent Number 1,049,667 was granted to William Burton for the manufacture of gasoline

Gasoline was not invented; it is a natural by-product of the petroleum industry, kerosene being the principal product. Gasoline is produced by distillation, the separating of the volatile, more valuable fractions of crude petroleum. However, what was invented were the numerous processes and agents needed to improve the quality of gasoline making it a better commodity

Atul Ltd:

Atul Ltd was founded in September, 1947. The company is one of the top 10 chemical companies in India and it is headquartered in Gujarat. The company is a part of the **Lalbhai Group**. The company operates through two segments- Life Science Chemicals, and Performance and other chemicals.

The life science segment consists of active pharmaceutical ingredients (APIs), API intermediates, fungicides and herbicides. The performance segment consists of adhesion promoters, bulk chemicals, epoxy resins and hardeners, intermediates, perfumery and textile dyes.

Joke of the month-

A chemist, a physicist, and an engineer are sailing out at sea. The boat sinks & they're marooned on a desert island. Luckily, they have a bag with a can of food in it, but no tin opener.

The chemist tries to open the can first by trying to erode it. No luck.

The physicist takes off his glasses and focuses sunlight on the can to try and burn the lid off. No joy.

Finally, the engineer shouts "Hold on, I've got an idea! Let's assume the can is open!"

Event of the month-

Alumni Meet

So we invited some of our graduated chemical engineering students. Some of them are studying in abroad, some were preparing for various entrance exams. It was designed for the undergraduate chemical students to solve their doubts regarding the entrance exams, about their career, basically a guidance session where they got to interact with their seniors and had an opportunity to learn many things from the experiences they shared. A great learning experience!