

Paris Police Brace for May 1 Rallies

France's zero-tolerance approach to protest violence will be tested Wednesday when a heady mix of labor unionists, "yellow vest" demonstrators and hardline hooligans are expected to hit the streets on Labor Day. Authorities have warned that this year's May 1 marches could be tense, coming barely a week after leaders of the yellow vest anti-government movement angrily dismissed a package of tax cuts by President Emmanuel Macron. And with trade unions hoping to raise their profile and thuggish "casseurs" vowing to turn Paris into "the capital of rioting", the government has pledged to deploy security on an "exceptional scale" throughout the capital.

Officials are bracing for a repeat of last year's May 1 violence, when they were caught off guard by some 1,200 trouble-makers who ran amok in Paris, vandalizing businesses and clashing with police.

More than 7,400 police and gendarmes will be deployed across Paris on Wednesday, with orders from Macron to take an "extremely firm stance" if faced with any violence, government spokeswoman Sibeth Ndiaye said.

Interior Minister Christophe Castaner said the authorities had found several groups on social media urging protesters to transform the city into "the capital of rioting", with police gearing up for the arrival of up to 2,000 activists bristling for a fight, AFP reported.

"Based on the information we have, 1,000 to 2,000 radical activists, potentially reinforced by individuals coming from abroad, who could try to spread lawlessness and violence," he told a press conference.

Pakistani Politician Urges US to Reconsider Iran Policy

A senior Pakistani politician says that the US has to reconsider its policy towards Iran because confrontation leads to nowhere. Former Senator Afrasiab Khattak said no country in the world has a right to take decisions about other countries unilaterally.

After withdrawing from Joint Comprehensive Plan of Action (JCPOA) and re-imposition of unilateral sanctions against Iran, the US had agreed to let eight countries, including China, Japan, India and South Korea, Taiwan, Italy and Greece keep buying Iranian oil.

However, in a statement, the White House said US President Donald Trump has decided not to renew waivers that allow eight countries to buy Iranian oil without facing Washington's sanctions.

Afrasiab Khattak expressing his views said United Nations (UN) is the real forum to decide about the conduct of other countries and it is not fair that the US is taking unilateral decisions against Iran without the approval of the UN.

"We are concerned about the people of Iran and we don't like them to see in any trouble," he said.

Iraqi Steel Market Has Potential of Halal Tourism; Efficient Way to Boost Islamic World Economy

The secretary general of the Joint Iran-Iraq Chamber of Commerce said the Iraqi steel market has at least \$4 billion potential for Iran, and the Iranian companies need to be more active in branding, product quality and holding exhibitions in this country.

Seyyed Hamid Hosseini said at the Fifth International Conference of Steel Price in Tehran, '2018 was very suitable for Iran's trade with Iraq, and export of steel productions to the country has a good growth.'

The official made the remarks that the Islamic Republic of Iran should be thinking of diversifying its export markets and the best of these markets is Iraq.

'The combination of mine and energy due to cheap gas in our country could be the best strategy for development, and would save the Islamic Republic from dependence on oil, so that wherever the government uses this policy, we succeeded in that industry.'

The secretary general of the Joint Chamber of Commerce of Iran and Iraq referred to the great advantages of the Iraqi market and went on to say that the destruction of Iraq's infrastructure, its high financial ability and the need for goods and services, the lack of efficient manpower, Iran's competitive advantage in the construction materials and food industry, petroleum, chemical, petrochemical, technical and engineering services, medical and therapeutic, lack of security and favorable business environment, lack of banking system and efficient insurance are among the advantages that have attracted the Iranians to Iraqi market. He said the Iraqi population survey shows that 65 percent of the country is under 45, while Iraq's population under the age of 20 has a share of over 45 percent, which is a demographic characteristic of their desire for consumption.

Hosseini noted that the development of construction and infrastructure is the fourth priority of the central plans of the Iraqi government, which should be addressed by Iranian exporters of Iranian goods and services.

Halal tourism, as a new phenomenon based on demographic factors and needs relevant in tourism destinations, is currently more of a neglected industry in the Islamic World while paying enough attention to it could lead to a more flourishing economy.

According to World Tourism Organization (WTO), 'Halal' tourism is clearly a growing market segment, with Muslim tourists seeking destinations which meet their needs, in terms of diet, dress or rituals.

Translated from Arabic, 'Halal' means permissible in accordance with Islamic teaching, Alcohol, pork, nudity and gambling are off limits.

There are flights with no alcohol on the drink carts, resorts with separate swimming pools for men and women, and daily itineraries with built-in break times for the five daily calls to prayer. 'One of the ways that can help the future of the Islamic world is paying attention to tourism industry especially Halal tourism among these countries', Director of the Iran Airline, official flag carrier of the Islamic Republic, Farzaneh Sharafbafi, said at the international conference of Future of Islamic World in the Horizon of 2035 held in Tehran. The task of the air industry in this light is to develop tourism among the countries of the Islamic world, added Farzaneh Sharafbafi. 'The use of the airline's capabilities in developing tourism among the Islamic countries is so important in this aspect', Sharfbafi stated that these flights can be used to connect cultural sites between Muslim countries.

'If we want to write the future of the Islamic world, we should think about it now,' she continued. The International Conference of Future of Islamic World in the Horizon of 2035 held in 28-29 April 2019 at the conference centre of Faculty of Law and Political Science, University of Tehran, at Tehran.

The purpose of the conference was to achieve a scientific understanding of the present situation and possible futures of the Islamic world.

Malek House; A Historical House in A Big City

Malek House was built in Qajar era. It is located in Imam Khomeini Street in Iran's northeastern holy city of Mashhad. Near the house, there is a park named Bagh-e Melli.

The house has two floors that just the top floor has a roof. Materials used for the roof are like a lattice. In this floor, there is a very beautiful fireplace that is made of plaster.

The Malek House is decorated so beautiful and if we say it's



unique, it's no exaggeration. The house is also known as a place for handicrafts and classical arts.

Haj Hussein Malek was the owner of the house and also he had a garden named Vakil Abad garden and he donated it to the poor people after his death.

This house was bigger in the past but today the external part of that is remained. This place is a good destination for pas-

Magnets Can Help AI Get Closer to the Efficiency of the Human Brain

Computers and artificial intelligence continue to usher in major changes in the way people shop. It is relatively easy to train a robot's brain to create a shopping list, but what about ensuring that the robotic shopper can easily tell the difference between the thousands of products in the store? Purdue University researchers and experts in brain-inspired computing think part of the answer may be found in magnets. The researchers have developed a process to use magnetics with brain-like networks to program and teach devices such as personal robots, self-driving cars and drones to better generalize about different objects.

"Our stochastic neural networks try to mimic certain activities of the human brain and compute through a connection of neurons and synapses," said Kaushik Roy, Purdue's Edward G. Tiedemann Jr. Distinguished Professor of Electrical and Computer Engineering. "This allows the computer brain to not only store information but also to generalize well about objects and then make inferences to perform better at distinguishing between objects."

The work also appeared in the *Frontiers in Neuroscience*. The switching dynamics of a nano-magnet are similar to the electrical dynamics of neurons. Magnetic tunnel junction

devices show switching behavior, which is stochastic in nature. The stochastic switching behavior is representative of a sigmoid switching behavior of a neuron. Such magnetic tunnel junctions can be also used to store synaptic weights.

The Purdue group proposed a new stochastic training algorithm for synapses using spike timing dependent plasticity (STDP), termed Stochastic-STDP, which has been experimentally observed in the rat's hippocampus. The inherent stochastic behavior of the magnet was used to switch the magnetization states stochastically based on the proposed algorithm for learning different object representations. The trained synaptic weights, encoded deterministically in the magnetization state of the nano-magnets, are then used during inference. Advantageously, use of high-energy barrier magnets (30-40KT where K is the Boltzmann constant and T is the operating temperature) not only allows compact stochastic primitives, but also enables the same device to be used as a stable memory element meeting the data retention requirement. However, the barrier height of the nano-magnets used to perform sigmoid-like neuronal computations can be lowered to 20KT for higher energy efficiency. "The big advantage with the magnet

technology we have developed is that it is very energy-efficient," said Roy, who leads Purdue's Center for Brain-inspired Computing Enabling Autonomous Intelligence. "We have created a simpler network that represents the neurons and synapses while compressing the amount of memory and energy needed to perform functions similar to brain computations." Roy said the brain-like networks have other uses in solving difficult problems as well, including combinatorial optimization problems such as the traveling salesman problem and graph coloring. The proposed stochastic devices can act as "natural annealer," helping the algorithms move out of local minimas. Their work aligns with Purdue's Giant Leaps celebration, acknowledging the university's global advancements in artificial intelligence as part of Purdue's 150th anniversary. It is one of the four themes of the yearlong celebration's Ideas Festival, designed to showcase Purdue as an intellectual center solving real-world issues. Roy has worked with the Purdue Research Foundation Office of Technology Commercialization on patented technologies that are providing the basis for some of the research at C-BRIC. They are looking for partners to license the technology.

33-Year Study Shows Increasing Ocean Winds and Wave Heights

Extreme ocean winds and wave heights are increasing around the globe, with the largest rise occurring in the Southern Ocean, University of Melbourne research shows. Researchers analysed wind speed and wave height measurements taken from 31 different satellites between 1985-2018, consisting of approximately 4 billion observations. The measurements were compared with more than 80 ocean buoys deployed worldwide, making it the largest and most detailed dataset of its type ever compiled.

The researchers found that extreme winds in the Southern Ocean have increased by 1.5 metres per second, or 8 per cent, over the past 30 years. Extreme waves have increased by 30 centimetres, or 5 per cent, over the same period.

As the world's oceans become stormier, Professor Young warns this has flow on effects for rising sea levels and infrastructure. "Although increases of 5 and 8 per cent might not seem like much, if sustained into the future such changes to our climate will have major impacts," Professor Young said. "Flooding events are caused by storm surge and associated breaking waves. The increased sea level makes these events more serious and more frequent."

"Increases in wave height, and changes in other properties such as wave direction, will further increase the probability of coastal flooding."

Professor Young said understanding changes in the Southern Ocean are important, as this is the origin for the

swell that dominates the wave climate of the South Pacific, South Atlantic and Indian Oceans.

"Swell from the Southern Ocean determine the stability of beaches for much of the Southern Hemisphere, Professor Young said. "These changes have impacts that are felt all over the world. Storm waves can increase coastal erosion, putting coastal settlements and infrastructure at risk."

International teams are now working to develop the next generation of global climate models to project changes in winds and waves over the next 100 years. "We need a better understanding of how much of this change is due to long-term climate change, and how much is due to multi-decadal fluctuations, or cycles," Professor Young said.

Diet Affect on the Heart

One of the top killers in the world is cardiovascular disease, or disease related to the blood vessels of your heart. There are many types of cardiovascular diseases that are responsible for death. Cardiovascular disease is responsible for more American deaths than cancer. It is a wonder that so many people die from cardiovascular disease, yet for many the chances of dying from it could have been reduced by two things: diet and exercise.

The heart's arteries are the vessels that carry blood to the body, while the veins make the return trip. Arteries and veins need oxygen and a clear path to perform their circulatory function. If there is anything that impedes their paths or causes the vessels' walls to harden, the heart must pump harder and harder to get the blood going, creating unnecessary strain. With coronary heart disease, the leading cause of heart

attacks, plaque forms along the cardiovascular walls and restricts the blood flow.

The heart becomes overtaxed and some parts fail, causing a heart attack. So how does this deadly plaque form? It can be from the foods that you eat.

When you eat foods high in saturated fat, you introduce harmful lipids and "bad" cholesterol (LDL) to the blood. Those lipids and cholesterol tear at your arteries. White blood cells try to get rid of the lipids.

Unfortunately, platelets try to help by causing a "clot," thinking the body is losing blood from the tear. When the platelets, white blood cells, LDL and lipids get together along with those torn artery muscle fibers, they form plaque. Over time this plaque builds up to the point where your heart is strained.

Although saturated fats are part of a diet that can negatively affect cardiovascular health, there are healthful foods that can put a positive spin on your heart's vessels. Research shows that dark chocolates, nuts and wines are foods that reduce LDL. Consuming foods that are high in Omega-3 fatty acids are another great way to keep your blood vessels in shape. Foods that contain Omega-3-like fatty fish- introduce acids that reduce fats in the blood vessels. Canola oil, soy foods and leafy greens also contain good Omega-3 levels. Although it is suggested that raising your good cholesterol (HDL) fights cardiovascular disease, there is no actual foods that have been scientifically proven to raise HDL.

With a combination of moderate exercise and a good diet, you can prevent yourself from becoming a victim to one of top killers.

