IJU condemns UP Government t for case against Journalist

IT News
New Delhi/Hyderabad, Sept 4

The Indian Journalists Union strongly condemns the Uttar Pradesh government for filing an FIR against a journalist in Mirzapur district for reporting the truth and demands that it be withdrawn forthwith.

Pawan Jaiswal, with Hindi publication *Jansandesh,* had shot a video, showing children sitting on the floor and eating *rotis* with salt at the district's primary government school, which went viral a week ago, and blowing the lid over the State government's flagship mid-day meal scheme. The Block Education Officer filed a complaint against, Pawan, and two others, including a representative of the local village head accusing them of 'criminal conspiracy to defame the UP government.'

In a statement, IJU Acting President Geetartha Pathak and Secretary General and IFJ Vice President Sabina Inderjit demanded the Yogi Adityanath government withdraw the case immediately as Pawan was doing his duty, reported the truth and in fact drew the attention of the authorities to the irregularities in the scheme, which boasted of an elaborate menu.

The IJU also drew the Government's attention to the fact that the video of children being given roti and salt was confirmed by none other than the Mirzapur DM Anurag Patel, who is quoted by news channels saying, "As soon as the issue came to my notice, I ordered an inquiry. After the allegations of serving roti and salt were found true, two people Murari and Arvind Tripathi have been suspended and strict action will be taken further," he had added.

The IJU said that media's freedom to report and carry out its responsibility was heavily curtailed in Uttar Pradesh and this is not the first instance when an FIR has been lodged against a journalist. It cautioned the government, saying instead of harassing journalists and attacking the freedom of the press in the State, it must put its house in order and not mislead the people.

Assam Rifles observed National Nutrition Week

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Observing the National Nutrition Week, Tulihal Battalion of 9 Sector Assam Rifles under the aegis of IGAR (south) organised an awareness programme on good health along with a medical camp at Sneha Bhawan Orphanage, Imphal on 3rd September 2019.

The event commenced with an informative lecture on good health and healthy living through nutrition by the Battalion Medical Officer. The children were educated about benefits of nutritious and balanced diet and advised to adhere to healthy and hygienic habits.

The lecture was followed by a medical camp for all the children. A dedicated medical team under the Medical Officer of the Battalion provided medical assistance to over 150 children. In addition to the medical checkup, consultation on various diseases and health related issues was carried out as well as free medicines were distributed to the needy children.

At the end of the event, a first aid kit with all basic medicines alongwith some nutritional supplements was also provided to the Orphanage as a kind gesture by the Battalion.

The earnest endeavor of the Assam Rifles to bring smiles to the faces of children at Sneha Bhavan was appreciated by all staff and inmates.

AR conducts security meet at Aishi

IT News
Imphal, Sept. 4

With the objective of interacting with the villagers near Indo-Myanmar border, Chassad Battalion of 10 Sector Assam Rifles under the aegis of IGAR (S) conducted security meet cum interactive session with the prominent personnel of the border villages of Kamjong district at Aishi post.

The meet was attended by the village Chairmen, members of village youth club, and locals of the respective areas. During the meet, locals were sensitized about the current situation prevailing in the area alongwith an interactive session on necessary measures to be undertaken for maintaining a strict vigil in the border villages and to ensure that no untoward incident takes place.

The chairmen of bordering villages shared various issues concerning their villages during the session. The meet concluded with lunch for the attendees. The village chairmen expressed their full fledged support to the Assam Rifles for maintaining peace and vigil in the area.The locals appreciated the efforts of Assam Rifles for conduct of such security meetings with village authorities to synergise the efforts and enhance civil-military cooperation.

Assam Rifles conducts friendly volleyball match

IT News
Imphal, Sept. 4

Mantripukhri Battalion of 9 Sector Assam Rifles under the aegis of IGAR (South) organised a friendly volleyball match at Koriengei Company Operating Base (COB), Imphal East district on 02 September.

With an aim to foster competitive spirit and sportsmanship amongst youth of the area, the match was played between the teams of Heingang Star Club and troops of Koriengei COB. Both the teams played with great zeal and enthusiasm showcasing true team spirit during the game and gave their best efforts on the field. At the end of the match, the winning and the runner up teams ware felicitated with tokens of appreciation. The event concluded with tea and refreshment for all.

State Govt. issues advisory on influx

Source – NPN
Dimapur, Sept. 4

Nagaland State government has issued advisory as a preventive measure against possible influx of illegal immigrants in the state.

In an order, principal secretary Abhijit Sinha stated that all entry points/ check gates manned by the Police should be suitably strengthened to prevent any possible influx of illegal immigrants and mobile patrolling in vulnerable locations should be activated in the respective jurisdictions.

The government has ordered that non-locals entering the State should not be allowed without the valid pass issued by the District Administration and any unusual influx of outsiders without valid pass should be promptly brought to the knowledge of the District Administration.

All the village/town/ municipal authorities have been directed to take measures to strictly monitor the influx of people from outside the state in violation of the existing rules/norms.

The antecedents of any new incoming tenants should be properly checked and verified by the District Administration and Police.

District Administration and Police have been directed to strictly monitor the regulation of ILP, especially along the Border Areas.

Tuensang police seizes illegal drug

Agency
Dimapur , Sept 4

Tuensang police carried out raid and seized 20,059 SP capsules and arrested one person from St. John 'B' sector Tuensang on August 31. According to SP Tuensang, the drug was recovered from possession of Wongtochu Chang (35), son of Bakong Chang, Yimpang village, Noklak, Tuensang, and a resident of St. John 'B' sector Tuensang. In this connection, a criminal case has been registered at Tuensang police station.

Science and Tecnology

India's lander Vikram completes 2nd and final de-orbiting maneuver successfully

AIR
New Delhi, Sept. 4

India's moon lander Vikram is all set to land on the moon on September 7 with Indian Space Research Organisation completing the second and final de-orbital operations successfully this morning.

According to ISRO, Vikaram's second de-orbital operations began at 3.42 AM using the on-board propulsion system and was completed in nine seconds. With this operation, the required orbit for the Vikram to commence it descent towards the surface of the Moon is achieved.

The touchdown on the Moon's south polar region will be between 1.30 AM and 2.30 AM on September 7.

After the touch down by Vikram, the rover Pragyan will roll down from the former to carry out the research for which it has been designed.

On Monday afternoon, the Vikram separated from its mother spacecraft Chandrayaan-2. Chandrayaan-2 was launched into the space by India's heavy-lift rocket Geosynchronous Satellite Launch Vehicle-Mark III (GSLV Mk III) in a text book style on July 22.

Reactor turns greenhouse gas into pure liquid fuel

Lab's 'green' invention reduces carbon dioxide into valuable fuels

Courtesy : Rice University

A common greenhouse gas could be repurposed in an efficient and environmentally friendly way with an electrolyzer that uses renewable electricity to produce pure liquid fuels.

The catalytic reactor developed by the Rice University lab of chemical and biomolecular engineer Haotian Wang uses carbon dioxide as its feedstock and, in its latest prototype, produces highly purified and high concentrations of formic acid.

Formic acid produced by traditional carbon dioxide devices needs costly and energy-intensive purification steps, Wang said. The direct production of pure formic acid solutions will help to promote commercial carbon dioxide conversion technologies.

The method is detailed in *Nature Energy*.

Wang, who joined Rice's Brown School of Engineering in January, and his group pursue technologies that turn greenhouse gases into useful products. In tests, the new electrocatalyst reached an energy conversion efficiency of about 42%. That means nearly half of the electrical energy can be stored in formic acid as liquid fuel.

"Formic acid is an energy carrier," Wang said. "It's a fuel-cell fuel that can generate electricity and emit carbon dioxide — which you can grab and recycle again.

"It's also fundamental in the chemical engineering industry as a feedstock for other chemicals, and a storage material for hydrogen that can hold nearly 1,000 times the energy of the same volume of hydrogen gas, which is difficult to compress," he said. "That's currently a big challenge for hydrogen fuel-cell cars."

Two advances made the new device possible, said lead author and Rice postdoctoral researcher Chuan Xia. The first was his development of a robust, two-dimensional bismuth catalyst and the second a solid-state electrolyte that eliminates the need for salt as part of the reaction.

"Bismuth is a very heavy atom, compared to transition metals like copper, iron or cobalt," Wang said. "Its mobility is much lower, particularly under reaction conditions. So that stabilizes the catalyst." He noted the reactor is structured to keep water from contacting the catalyst, which also helps preserve it.

Xia can make the nanomaterials in bulk. "Currently, people produce catalysts on the milligram or gram scales," he said. "We developed a way to produce them at the kilogram scale. That will make our process easier to scale up for industry."

The polymer-based solid electrolyte is coated with sulfonic acid ligands to conduct positive charge or amino functional groups to conduct negative ions. "Usually people reduce carbon dioxide in a traditional liquid electrolyte like salty water," Wang said. "You want the electricity to be conducted, but pure water electrolyte is too resistant. You need to add salts like sodium chloride or potassium bicarbonate so that ions can move freely in water.

"But when you generate formic acid that way, it mixes with the salts," he said. "For a majority of applications you have to remove the salts from the end product, which takes a lot of energy and cost. So we employed solid electrolytes that conduct protons and can be made of insoluble polymers or inorganic compounds, eliminating the need for salts." The rate at which water flows through the product chamber determines the concentration of the solution. Slow throughput with the current setup produces a solution that is nearly 30% formic acid by weight, while faster flows allow the concentration to be customized. The researchers expect to achieve higher concentrations from next-generation reactors that accept gas flow to bring out pure formic acid vapors.

The Rice lab worked with Brookhaven National Laboratory to view the process in progress. "X-ray absorption spectroscopy, a powerful technique available at the Inner Shell Spectroscopy (ISS) beamline at Brookhaven Lab's National Synchrotron Light Source II, enables us to probe the electronic structure of electrocatalysts in operando — that is, during the actual chemical process," said co-author Eli Stavitski, lead beamline scientist at ISS. "In this work, we followed bismuth's oxidation states at different potentials and were able to identify the catalyst's active state during carbon dioxide reduction."

With its current reactor, the lab generated formic acid continuously for 100 hours with negligible degradation of the reactor's components, including the nanoscale catalysts. Wang suggested the reactor could be easily retooled to produce such higher-value products as acetic acid, ethanol or propanol fuels.

"The big picture is that carbon dioxide reduction is very important for its effect on global warming as well as for green chemical synthesis," Wang said. "If the electricity comes from renewable sources like the sun or wind, we can create a loop that turns carbon dioxide into something important without emitting more of it."

Co-authors are Rice graduate student Peng Zhu; graduate student Qiu Jiang and Husam Alshareef, a professor of material science and engineering, at King Abdullah University of Science and Technology, Saudi Arabia (KAUST); postdoctoral researcher Ying Pan of Harvard University; and staff scientist Wentao Liang of Northeastern University. Wang is the William Marsh Rice Trustee Assistant Professor of Chemical and Biomolecular Engineering. Xia is a J. Evans Attwell-Welch Postdoctoral Fellow at Rice.

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