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INSPIRING STORY OF MADAM CURIE: "THE PASSION AND GRIT"

§ EDITORIAL BOARD §

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Seven Storey Building in 45 days A Success Story of DRDO - Conclusion

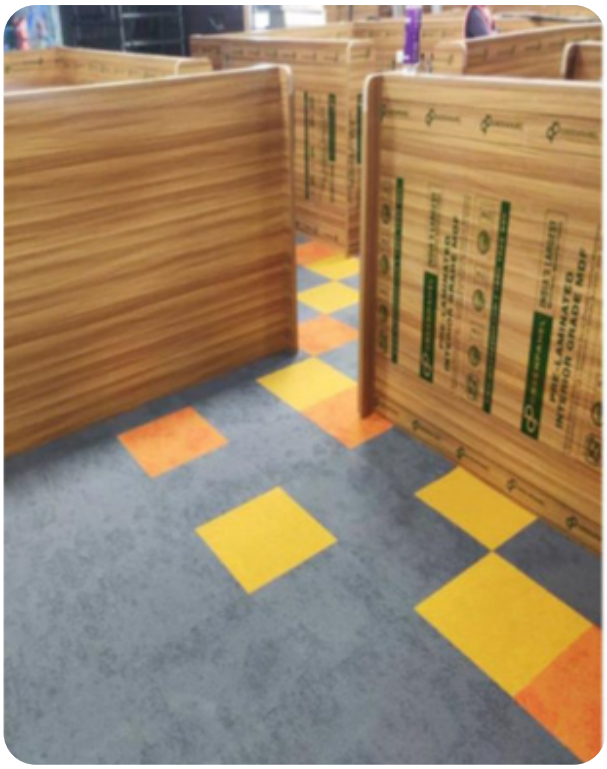
On March 17, 2022, Hon'ble Raksha Mantri Shri Rajnath Singh inaugurated a seven-storey technical facility with 1.3 lakh square feet of plinth area in Bengaluru. The seven-storey technical facility was built by the Defence Research and Development Organization (DRDO) in a record time of just 45 days using in-house hybrid technology. The construction began on 1st of February and ended on 17th March 2022 in 45 days. The inauguration took place on the premises of the Aeronautical Development Establishment (ADE) Bengaluru by Raksha Mantri Shri Rajnath Singh. The building called as FCS complex is built to support the Aeronautical Development Establishment (ADE) Bengaluru's R & D activities in developing avionics for fighter aircraft and flight control systems (FCS) for other aircraft and unmanned aerial systems. By using composite construction technology, DRDO was able to build the cutting-edge infrastructure in just 45 days. This milestone thus sets a unique record for the construction industry in the country in completing a permanent building of seven stories utilizing hybrid technology, and that too, in ready-to-move condition.

Picture: On March 17, 2022, Hon'ble Raksha Mantri Shri Rajnath Singh inaugurated the seven-storey FCS Complex with 1.3 lakh s.ft. of plinth area in Bengaluru

Day 29 & 30, March 1 and 2, Unitized Structural System for the second floor are installed.

Day 31 & 32, March 3 and 4, Unitized Structural System for the third floor are installed.

Day 33,March 5, Façade Panels for fifth and sixth floor are installed



Day 34, March 6, Modular tile based carpet flooring is laid in the interiors of the second floor

Day 35, March 7, Façade panels fixed in the fourth and fifth floor.

Day 36, March 8, Terrace floor slabs and beams erected.

Day 37 & 38, March 9 &10, Façade Panels fixed in the sixth floor

Day 39 & 40, March 11 &12, False flooring laid in all the floors.

Day 41 & 42, March 13 & 14, Road and external electricfication , water supply aned seweage works completed

Day 43 & 44, March 15 & 16, Furniture for the complete building placed and deep cleaning works begin

Day 45, March 17, FCS Complex completed

This is a continuation and concluding part of the article published in March 2022 Issue 3. The article has been prepared by the editorial team of 'Tech Ananth' to commemorate the achievement of the premier organization of our country.

INSPIRING STORY OF MADAM CURIE: THE PASSION AND GRIT

Celebrating International Womens Day

Prof.P.R.Bhanu Murthy

Madam Curie
1867–1934

Madam Curie was the first woman scientist to win the Nobel Prize and she also holds the distinction of winning two Nobel Prizes in two different fields of science, namely Physics and Chemistry. Madam Curie has faced many challenges in her life in the journey to fulfil her aspiration of becoming a scientist. No other woman in the history had such passion for science and struggled so hard personally and professionally in pursuit of her passion.

Maria Sklodowska (original name of Madam Curie) was born on November 7, 1867. She was the youngest of five children, with three older sisters and one brother. Her parents were both teachers. Her mother was the principal of a school. Her father taught science. She was very much influenced by her father in her childhood and took great interest in his scientific equipment. She could speak five languages fluently like her father. Though she was born in Warsaw, the capital city of Poland, Poland did not exist as a country at that time. It was divided into three parts, each part occupied by one of the neighbouring countries and the region in which Marie was born was controlled by Russia. People of Poland were oppressed by Russians and she hated Russians in her childhood.

She had elementary education in several schools with great difficulty and her ambition to join a university for higher studies could not be fulfilled because females were not permitted into Warsaw University at that time. The only University which permitted female students was in Paris, University of Sorbonne. Maria had a sister, Bronia, who wanted to study Medicine. But the family did not have enough money to support the education of both Maria and Bronia. Maria and Bronia came up with a plan. They would take turns! Bronia would go to Paris first to study. Maria would stay in Poland to earn money for them both. After Bronia graduated from the Sorbonne, it would be Maria's turn. So, Maria stayed back and started working as a Governess. At the age of eighteen, she left her family to serve as a Governess in a rich family in the countryside. Her job as governess was to teach the children in that family. One of her students was a girl a year older than Maria!

Finally, her sister Bronia wrote to her from Paris. Bronia had finished her studies and had married a man Kazimierz, who was also a doctor. Bronia and her Kaz invited Maria to come and live with them so she could attend the Sorbonne. In 1891, Maria boarded a train for Paris. When she arrived, she would begin to use a new name—Marie. It was the French version of Maria. A whole new life was about to begin. The train trip to Paris took three days. Marie couldn't pay for a seat. She rode the whole way on a stool that she brought with her! The train car was so cold, she kept herself wrapped in blankets. She barely had enough food to eat during the trip. It was just the first of many hardships that would soon be part of her everyday life.1

Marie was very happy because Sorbonne was a different type of School. There was lot of freedom. She could attend the classes whenever she wanted and lso she could attend any class she wanted. But slowly Marie felt a little bit uncomfortable staying with Bronia. Because both Bronia and her husband were Doctors, always there were patients in their apartments and Marie was not getting enough privacy to study. Marie moved out and rented her own place closer to the Sorbonne. Her apartment was a tiny single room on the top floor of an apartment building. She had no kitchen, so she did all her cooking over an alcohol lamp! Her meals were skimpy—just bread with maybe a cup of hot chocolate, an egg, or fruit. One time, Marie was so hungry that she fainted while studying in the library. In winter, her room was so cold that water would freeze in a bowl! If she wanted heat, she had to buy coal and carry it up six flights of stairs. She couldn't always afford coal. Most of the time she slept with all her clothes piled on top of her, to keep warm!

Now that she was finished studying, Marie thought she would go home to Poland. She had promised her father to come back and take care of him. Then something lucky happened. She got a scholarship to stay another year. This time she would study math! Marie couldn't resist. Learning was the most satisfying thing she had ever done in her life. Why would she want to stop now! For the next year, Marie studied math at the Sorbonne.

When she took her exams, she came in second in the class! Was it time now to go back to Poland as she had promised? Not quite yet.

It was a hard time for a woman to live alone in Paris. Very few women went to college. When Marie entered the science department at the Sorbonne, there were 1,825 students—but only twenty-three of them were women! There were so few women studying in France that the French didn't even have a word for "female student." Marie spoke French but not very well at first. She had to work hard to understand French people and to make sure she pronounced words correctly. Still, Marie was happy. Years later, she called it one of the best memories of her life. She loved her classes and spent every waking minute studying. She didn't care about anything except science, and she was being taught by some of the most famous scientists in all of Europe. One of her professors, Gabriel Lippmann, would later win a Nobel Prize for inventing a way to make colour photographs. After three years of hard work and constant study, Marie took her final exams in science. Only two women graduated that year. Marie was first in her whole class—ahead of all the men!

Marie's professor, Gabriel Lippmann, found her a job in a lab at the Sorbonne. Her task was to study magnetism and steel. Magnetism is the force that causes magnets and metal to stick together. It was perfect for Marie—she was always happiest doing experiments.

There was only one problem—the lab didn't have the best equipment. Marie struggled with her experiments. She couldn't get good results. To help her, some friends from Poland introduced Marie to a Frenchman named Pierre Curie. Pierre was a scientist who had become famous at a very young age. When Pierre was twenty-one, he and his brother had discovered that quartz crystals could hold an electrical charge. After that, he invented a scientific tool called an electrometer. It was used to measure very small amounts of electricity. Marie needed his electrometer for her experiments.

The day Marie met Pierre Curie her whole life changed. She was planning to devote her life solely to science. But Pierre was so special, so different from other men. He was smart, quiet, and he loved science as much as she did. In so many ways, he was just like Marie. Pierre had been brought up in a family just like Marie's, too. His father was a doctor and scientist. His parents thought education was extremely important— just like Marie's. Unlike Marie, Pierre had had trouble learning in school, so his parents taught him at home. They let him find his own way. When he discovered how much he liked math and science, he went from being a slow learner to being super fast. By the time Pierre was twenty-three years old he was teaching college! The minute Marie and Pierre met, they each knew that the other was special. Pierre felt he had found a "woman of genius." Marie knew that Pierre was the kind of man she could talk to and trust. She invited him to her tiny room to discuss science and sip tea. Pierre Curie and Marie finally got married on July,26,1895.

Today we know that uranium is one of several metals that give off powerful radioactive rays. But when Marie Curie started her research, the word radioactive didn't even exist! No one knew why uranium gave off energy or why it could make things glow in the dark. No one knew then that uranium could be used to make a bomb or a nuclear power plant. Marie's research was going to open the door for all that knowledge. Marie set up a laboratory with Pierre's help. They shared the lab together. It was cold and grungy—just an old storage room in the school where Pierre taught. Marie didn't mind. Work was all she cared about. In the lab, Marie used Pierre's electrometer to measure rays coming from different metals. The tests were very tricky. She had to have very steady hands. No one else could do the tests as well as Marie. Even Becquerel had tried and failed!

After a honeymoon, when they came back to Paris in the fall, they quickly got to work. Nothing made them happier than spending all day—and even all night—in a lab. For the next few years, Marie kept studying. At the same time, she kept her job doing research in magnetism. On September 12, 1897, Marie and Pierre had a baby girl. They named her Irene.

In those days, women almost never worked outside of the home, but Marie was different. She wanted to do some important research so that she could get her PhD—the degree that would make her a professor. The only question now was: What should she work on? Marie and Pierre lived during an exciting time in Paris. The whole world was going crazy for a new scientific discovery—X-rays! The mysterious X-rays had just been discovered two years earlier. Scientists were trying to figure out how X-rays really worked. They soon noticed that X-rays could make some things glow in the dark. But Marie wanted to study a topic of her own. She decided to study a different kind of rays, called Becquerel rays. These rays were named for Henri Becquerel, the man who discovered them. The rays came from a metal called uranium.

At first, Marie tested uranium. Then she tested other metals, including gold and copper. Only the uranium gave off rays. Then Marie did something brilliant—something that would change science forever. She decided to test a rock called pitchblende. Pitchblende is a rock that contains a lot of uranium. But it has other metals in it, too.

When Marie tested the pitchblende, she found it gave off even more rays than uranium alone! How could that be? Marie figured out the answer. There had to be something else—another metal— mixed into the pitchblende! That other metal, whatever it was, had even more energy than uranium. Soon Marie realized the truth. She had discovered a new element that the world didn't know about! Marie named the new metal after her homeland of Poland. She called it polonium. Then she came up with a word for the rays that the metals gave off. She called it "radioactivity." It meant that metals like polonium and uranium were able to release energy into the air.

The scientists were interested in Marie's report, but no one was amazed—not yet. They weren't sure she was right. Marie still had to prove that polonium existed. How? By separating it out of the pitchblende. She had to hurry! Now that the world knew about polonium, other scientists might want to study it. Even Becquerel was interested in Marie's work. In those days, just like today, scientists tried to help one another, but they also competed with one another to be the first with new ideas. Becquerel was both a friend and a competitor. He helped Marie get some money for her experiments, but instead of telling Marie about the money, he told Pierre! He treated her like she wasn't as important as Pierre because she was a woman. Becquerel also took ideas from Marie's work and tried to do similar experiments himself.

To let the world know about her new discoveries, Marie did what scientists always do: She wrote a report. She wanted to read it to a group of other scientists in the Academy of Sciences in Paris.

The Academy was like a fancy science club for the most important scientists in France. It was hard to join and members had to be voted in. Marie and Pierre were not members of the Academy. At that time, Pierre couldn't even get a job teaching at the Sorbonne! Other scientists thought Marie and Pierre weren't good enough because they didn't have PhDs from the best colleges. Besides, Marie was a woman. The Academy never let women in. Women weren't even allowed inside the Academy's rooms! Luckily, though, Marie and Pierre had important friends. All the famous scientists in Europe and America knew one another. In April 1898, Marie's report about her discoveries was read to the Academy by her teacher and friend Gabriel Lippmann.

Pierre was totally the opposite. He didn't like to compete. He simply loved science for its own sake. Marie was the ambitious one. She wanted credit for her discovery. She was determined to be first to prove that her new metal existed. Marie got to work. She tried to separate the polonium from the pitchblende— but she failed. The amounts of polonium in the pitchblende were too tiny. While she was trying, though, she stumbled onto something else. Something even better! The pitchblende contained another mysterious metal that was giving off rays. This one was even more radioactive than polonium. What was it? Marie did a series of tests to find out. After several experiments, she realized she had found another new element! She and Pierre named this new metal radium. Radium was so powerful that even the tiniest amount was a million times more radioactive than uranium.

It was an amazing year for Marie and Pierre. By December 1898, she had discovered two new chemical elements that the world hadn't known about! Other scientists were began noticing her work. However, some scientists still wanted more proof. They weren't sure she was right. They wanted to see the radium and touch it. Was it even possible to separate the radium from the pitchblende? Marie was determined to try.

Now that Marie was a little bit famous, she hoped the scientific world would show her some respect. She and Pierre asked the Sorbonne for a bigger, better laboratory. They wanted a clean space with new equipment so she could continue her work. The Sorbonne refused. Instead, they said she could take over a huge, dirty, leaky, old building near the college. The building had been used by medical students to cut up dead bodies for experiments! There was no heat in her lab. In the winter, the place was horribly cold. Marie and Pierre had to huddle around a small stove to keep warm, sipping cups of tea. Some days Marie forgot to eat, she was so busy with her work. Some nights, she went home to see her daughter, but then went back to her lab after Irene was asleep.

For three long years, Marie sifted through tons of pitchblende. It was backbreaking work. The crushed rocks were delivered to the courtyard outside her lab. She stirred huge amounts of brown dust in a giant pot with other chemicals. She had to boil the mixture, then wash it to separate out the metals. It took fifty tons of water to wash one ton of crushed rocks! All together, Marie used eight tons of pitchblende and four hundred tons of water before she was done! Little by little, Marie was succeeding.

She was getting tiny amounts of radium out of the pitchblende. At first it wasn't pure radium. It was just something called radium salts, but she kept working, trying to get a purer form of the metal. The radium salts gave off a lovely glow each night in the dark lab. Marie and Pierre brought a glass jar of it home to keep beside their bed. They liked to watch it glow in the dark.

Marie didn't know it at the time, but handling radium wasn't a good idea. The rays it gave off were dangerous. Touching it damaged her skin, although slowly. Henri Becquerel had carried a glass tube of radium salts around in his jacket. A few weeks later, his skin was burned in the spot where the radium had been. Pierre found the same thing happened to him. Being around radium damaged the insides of their bodies, too. It was making them sick. Still Marie kept working and writing research reports about her discoveries. Sometimes she and Pierre wrote them together. Marie and Pierre were still not fully respected. Often, Becquerel was given more attention and respect. It must have been hard to work side by side with Becquerel, especially when Pierre thought that Becquerel was secretly trying to keep him out of the Academy of Sciences.

Sometimes she and Pierre wrote them together. Marie and Pierre were still not fully respected. Often, Becquerel was given more attention and respect. It must have been hard to work side by side with Becquerel, especially when Pierre thought that Becquerel was secretly trying to keep him out of the Academy of Sciences.

Finally in July 1902, after nearly four years, Marie had a few grains of pure radium! It was enough to prove it really existed. Other scientists tested the metal and agreed she was right. Marie wrote another long research paper about her discovery. With this report, she could now get her PhD from the Sorbonne. Marie had never cared about clothes, but she bought a new dress for the occasion. In June 1903, she had a celebration dinner. Besides Pierre, several friends and famous scientists joined her, including Gabriel Lippmann. They were all so proud of her.

Now Marie and Pierre hoped that they would both be able to get good jobs with a decent laboratory. That's all they wanted: a clean, quiet place to work. But they were about to receive something even more exciting. They were about to win the Nobel Prize! The Nobel Prize is the highest honor a scientist can receive today. However, when Marie and Pierre received the letter saying they had won, it didn't give them very many details. It didn't say the king of Sweden would be there to hand out the award, and it didn't tell them that they would be getting a huge amount of money—worth more than half a million dollars today! So Pierre did something shocking. He wrote back to the Nobel Prize committee and said they couldn't come! He thanked them for the prize and explained that Marie was sick. The trip was too long, he said. They couldn't possibly take the time to travel to Sweden. They were too busy teaching their classes. Pierre and Marie probably didn't realize they were being rude. They also didn't know what a big deal the Nobel Prize was. The prize had only been around for three years. The Curies were supposed to share the Nobel Prize with one other scientist, Henri Becquerel. Becquerel went to Sweden and accepted the award instead. When he gave his speech, he made it sound like he had done all the work. He hardly mentioned Marie and Pierre at all.

Still, the Curies became famous overnight. All the newspapers wrote about them. People were fascinated by Marie—a woman scientist! Newspaper reporters came to her house day after day. When Marie wasn't home, the reporters talked to her daughter, Irene. The newspapers called Marie "Madame Curie." Madame is the French word for "Mrs." In a way, they were saying that Marie was only Pierre Curie's wife—not famous on her own. Marie was known as Madame Curie for the rest of her life.

One good thing came out of their fame. Now the Sorbonne was willing to give Pierre a job as a professor. Also, after all their years of begging, he and Marie were finally given a better lab. Meanwhile, the whole world was falling in love with radium. Why? Because it glowed in the dark! The glow seemed like a magic potion to many. People imagined it would cure illnesses—and they were partly right. Radium could help treat cancer, but the opposite was also true. Radium was making people sick, including Marie and Pierre. Rich people foolishly drank radium water every day until their jawbones broke into pieces! Actors and dancers put radium on their costumes so they would glow in the dark. Radium was painted on watches and clocks so the hands would glow.

One makeup company even put radium in their lipstick! All these radium products were hurting people. Radium hurt Marie and Pierre most of all because they handled it for so many years.

Pierre's hands were so damaged that he couldn't even dress himself. His bones ached. Pain made it hard for him to walk.

On April,19,1906, a terrible tragedy occurred in Marie's life. Pierre was killed in a road accident when he fell under a horse wagon while crossing the street. A few hours later, Marie heard the terrible news that her husband was dead. It struck her as hard as the wagon that killed Pierre. Marie felt as if there was no reason to be happy ever again. She became silent. She wouldn't eat and barely got out of bed. It seemed to her as if her life was over. For many months, Marie was miserable and alone. She later wrote that her children, Irene and Eve, were her only reasons to go on living. After a while, the Sorbonne invited Marie to take over Pierre's teaching job. Marie agreed, but it was a bittersweet triumph. While Pierre was alive, they would not let her be a professor! No woman had ever taught at the Sorbonne. Now that Pierre was dead, she was welcome to take his place. On the November day in 1906 when Marie arrived to teach her first class, hundreds of people lined the streets. Reporters and photographers came. The crowds waited to hear what the famous Madame Curie would say. Would she mention Pierre? Would she talk about how much he meant to the world of science? No. Marie simply began the science lesson where Pierre had left off. Even so, people in the audience cried. They all sensed how Marie felt, and how hard it was for her to go on without him.

One day, her friends noticed a change in Marie. Suddenly, she seemed happier! She was wearing a pretty dress with a flower, instead of the black dresses she had been wearing to mourn Pierre. Pretty soon, her friends figured out why Marie was happy.

She had fallen in love! The only problem was that the man she loved—Paul Langevin—was already married. Paul was part of Marie and Pierre's circle of friends. He had been Pierre's student. He was a brilliant scientist and a good friend. Paul was unhappily married. Sometimes his wife was violent. Paul wished he hadn't married her. Marie probably never wanted to fall in love with a married man. But she followed her heart and spent time with him anyway. It was the first happiness she had felt in years. Paul wrote love letters to Marie, and she wrote back to him. One day, Paul's wife, Jeanne, found the letters. She was furious. She threatened to kill Marie! She even followed Marie in the street! Marie tried to convince Paul to leave his wife and get a divorce. Paul had four children with Jeanne. He didn't want to break up his family. Finally, he promised his wife that he wouldn't see Marie again—except as a friend.

In 1911, Marie was on the verge of making history —again. She was nominated to become the first woman member of the French Academy of Sciences. Was France ready to treat women equally? There were strong feelings on both sides. Many newspapers wrote angry articles about it. They thought women should not be allowed into this private group of male scientists. Even though Marie was already one of the most famous scientists in the world, they thought she should be kept out. When it came time to vote, Marie was not even allowed inside the Academy's building to see what happened! The vote was held at exactly four o'clock on January 24, 1911. Marie was not elected. Her friends were angry about it, but Marie acted like she didn't care. She was not the kind of person to make a fuss about anything.

In November 1911, Marie went to a very important science meeting in Brussels, Belgium. All the most famous scientists from Europe were there, including Albert Einstein. Paul Langevin went, too. When Paul's wife found out he and Marie were in Brussels together, she was furious. She suspected that Paul and Marie were still in love. She sent Marie's love letters to the Paris newspapers! A terrible scandal broke out. There were stories about Marie and Paul in the newspaper every day. Many French people thought Marie was to blame. Marie was angry and horrified. She didn't want her daughters to suffer from the bad publicity. She didn't want it to ruin her career, either. It was an especially bad time for this kind of trouble. That same week, Marie had just gotten a letter from the Nobel Prize committee. They were giving her another Nobel Prize! This time, she alone would be the winner. It was an amazing honor. Only three other people have ever won the Nobel Prize twice!

Marie was afraid that the newspaper stories would somehow spoil the Nobel Prize. She was right. A few weeks later, the Nobel Prize committee sent her a second letter. After all the newspaper stories, they wanted Marie to refuse the prize! They asked her not to come to Stockholm. Marie was not going to miss out on this chance to make history. She told the committee that her private life was private. She was coming to Stockholm and accepting the prize. Marie believed they were giving her the Nobel Prize for science—nothing else. Nothing else should matter. In December 1911, Marie sat in a room with the king of Sweden. The king gave her the solid gold medal. Marie held her head high and made a speech.

A fancy banquet was served with artichokes, fish, chicken, and wine. Her daughter Irene and her sister Bronia were there to share her joy. It was a thrilling experience for them all, and fourteen-year-old Irene would remember it all her life. It wouldn't be the last time Irene would make that special trip to Stockholm.

Winning her second Nobel Prize must have been wonderful for Marie, but the terrible scandal with Paul Langevin had taken a toll on her. She was worn out in every way—sick, sad, and depressed. The radium poisoning was probably still making her weak. She had other illnesses, too. For the next few years, Marie went into hiding. Her love affair with Paul was over, but the world wouldn't forgive her for it. People threw stones at her windows. The newspapers kept writing stories about her. Marie couldn't bear all the bad things people were saying. She traveled from place to place, leaving her children behind with a governess. Marie used fake names wherever she went. She didn't want people to know who she was. If someone recognized her and asked, "Are you Madame Curie?" she would lie and say no.

As time passed, people forgot about the scandal. Once again, she was able to just be herself and do her work. Irene was growing up, too. She and Marie were becoming partners. They talked about science together, just like Marie and Pierre had. In 1914, a whole building was built for Marie's research. At first it was called Radium Institute, but later it was renamed the Curie Institute. Marie hoped that she and Irene would work there together there very soon. Before the lab opened, World War I broke out. The Germans invaded France.

Marie wanted to help. She decided her first job was to take all the radium in France and hide it! She didn't want the Germans to find it. Marie put the radium in a heavy suitcase and traveled ten hours by train. She stored the radium in a vault at a college in Bordeaux. Then she returned to Paris, having eaten nothing for a day and a half. When Marie was on a mission, nothing else mattered. Next, Marie invented a small X-ray machine that could easily be carried to wounded soldiers. Her machines were called "Little Curies." Marie and seventeen-year-old Irene drove the machines to hospitals near the battlefields.

Four years later, after Germany lost the war, Irene went back to her studies in Paris. Eventually she graduated and became a scientist, working alongside Marie. Then one day, Paul Langevin came back into their lives in a strange way.

Paul told Marie about a young student of his named Frederic Joliot. Frederic idolized Marie and Pierre Curie. He wanted to work in Marie's lab. Marie gave him a job, and soon Frederic fell in love with Irene. At first, Marie didn't trust Frederic. She thought he was just trying to get close to the famous Curie family, but eventually she came to like him. Irene and Frederic Joliot were married on October 9, 1926. Marie had always suspected that radium could be used to treat cancer, and she was right. She spent the rest of her years working on ways to use radium to help people. At the same time, her daughter and Frederic did their own research. They discovered artificial radioactivity! As Marie grew older and sicker, Irene took over the Radium Institute.

In May 1934, Marie began to feel very weak again. The radium was finally winning out. She was dying. Her daughter Eve took her to the mountains in France, to rest, but it didn't help. Marie died on July 4 at the age of sixty six. All of Marie's clothes, books, notebooks, and personal things were too dangerous to touch. They were radioactive! Everything she used in the lab had been affected by the radium. In fact, even after a hundred years, her things are still so radioactive that it wasn't safe to handle them!

The fame of the great Curie family didn't end there. The very next year, Irene and Frederic Joliot-Curie were given the Nobel Prize for their own discoveries in chemistry.

In 1995, France decided to dig up Marie's and Pierre's caskets and move them to the Panthéon. The Panthéon is an ancient building in Paris where France's most famous people are buried. The president of France came for the big ceremony. At last, it didn't matter that Marie Curie had been a woman. She finally was given the highest possible respect and the honor she had always deserved. Her work had changed the world, and her name would live on forever.

(Courtesy:Who_Was_Marie_Curie_by_Megan_Stine,_Nancy_Harrison, & Ted_Hammond)

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Contribution of Articles to the e - magazine Tech Ananth

The members of the JNTUA fraternity all students, faculty and alumni are requested to contribute for publication in the monthly illustrated on-line e magazine 'Tech Ananth' of the University. The members can send submissions to the editorial team email id <emagazine@jntua.ac.in>. The members can send reports of important events along with photos, details of achievements such as awards, prestigious assignments and funded projects,success/inspirational stories of alumni, articles on science and technology which induce technical and scientific thinking. Also students members seeking career counselling in their respective fields can write to the same email id by including <career counselling request> in the subject-line of the email id. Senior Professors of the University shall answer to the counselling related questions which will be published. Members contributing articles shall give their full details such as Name, Designation, College, and Department with mobile number and email id for correspondence.

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CELEBRATIONS MARKING INTERNATIONAL WOMENS DAY AT

J.N.T.U.A COLLEGE OF ENGINEERING ANANTAPUR

The women empowerment cell, J.N.T.U. A COLLEGE OF ENGINEERING (Autonomous) Anantapur Celebrated women's day on the occasion of INTERNATIONAL WOMENS DAY on MARCH 8th. There is a "Awareness session on Nutrition and diet and adoption of healthy lifestyle" on 08/03/2022. In this program the Vice chancellor of the university Prof. G. Ranga Janardhana, the Rector of the University Prof. M. Vijayakumar the Registrar of the university Prof. Shashidhar, the principal of the college Prof. P. Sujatha, the coordinator, women empowerment cell,.B.Ajitha, the Dietician and Nutrition specialist Dr. Naga Lakshmi KIMS SAVEERA Hospital Anantapur , all directors of the university ,various heads of the departments and all Teaching Staff and Non Teaching staff , and students were participated. The program main aimed how to maintain better healthy life style and also various fun programs were conducted to the staff and students. The first women principal of the college, Prof. P. Sujatha and Dr. Naga Lakshmi were honoured .

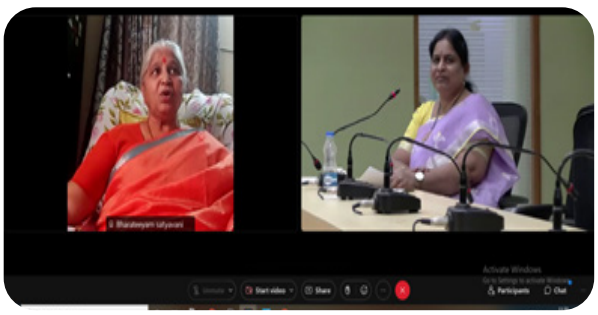
Report By
Prof. B.Ajitha
Coordinator
Women Empowerment cell
J.N.T.U.A COLLEGE OF ENGINEERING (Autonomous)
ANANTAPUR

CELEBRATIONS ON THE OCCASION OF INTERNATIONAL WOMENS DAY AT JNTUACEA ON 08/03/2022.

WEBINAR ON THE OCCASION OF INTERNATIONAL WOMEN'S DAY CELEBRATIONS ON 08 MARCH 2022

Report By Prof.R.Bhuvana Vijaya, Coordinator, Women Empowerment Cell, JNTUA

The women empowerment cell, J.N.T. University, Ananthapuramu conducted International Women's Day Celebrations 8th March 2022. A webinar on "The Women in Science and Technology" was conducted on 08/03/2022 in online mode for promoting awareness on education, women empowerment, nutrition, legal rights, medical care, protection and honor.. In this program the Chief Guest Vice chancellor of the university Prof. G. Ranga Janardhana, the Rector of the University Prof. M. Vijayakumar the Registrar of the university Prof. Sashidhar, the coordinator, women empowerment cell, Prof. R.Bhuvana Vijaya, the Guest of Honour Ms.Ushasri Tirumala, Senior vice president & Managing Director, Manhartan Associates Development Centre Pvt., Ltd., Sri. Bharatiyam Stayavani Garu, Resource Person Ms.Prasanna Dommu, Dhairya Founder, Ms.Apporva Gururaj, CEO Foodio.fit all directors of the university, various heads of the departments and all Women Coordinators, Teaching Staff of affiliated colleges and girl students participated.



AICTE-JNTUA sponsored two week workshop titled "Awareness on Soft Skills"

Report By Dr.B.Lalitha, Coordinator, Software Development Center, JNTUA

Software Development Centre(SDC) and Directorate of Faculty Development of JNTUA jointly organized AICTE-JNTUA sponsored two week workshop titled "Awareness on Soft Skills" for non-teaching staff of JNT University, Constituent units of JNTUA and Affiliated colleges of JNTUA from 03-03-2022 to 16-03-2022.

This workshop was inaugurated on 03-03-2022 by Hon'ble Vice-chancellor of JNTUA Prof G.Ranga Janardhana. The workshop is intended to give awareness on MS-Office which covered the topics like MS-Word, Excel, Access, Power point presentation and TALLY, not only limiting to this workshop also throwed a light on Internet concepts like, how to use online meeting platforms, search engines, conversions like PDF to word, word to PDF, Image to PDF and PNG to JPEG etc.

50 participants got registered for this workshop, and the participants were from JNT University Anantapur, constituent units of JNTUA and from various affiliated colleges of JNTUA, the participants were given with daily tasks and assignments, finally conducted an exam on the topics covered by various resource persons and were awarded with a certificate.

“SABALA” Empowering Women of Andhra Pradesh

Program by Prof. B.Ajitha, Coordinator, Women Empowerment cell, JNTUACEA

The women empowerment cell, J.N.T.U.A COLLEGE OF ENGINEERING (Autonomous) Anantapur conducted an essay writing and drawing competition on “DISHA APP and Safety and security of Women and Young Girls” in association with A.P. Women Commission on 23/03/2022. This program is the part of “SABALA” Empowering women of Andhra Pradesh. The main aim of the competition is to create awareness among girl students regarding safety Apps and how can they secure themselves.. The topic is “DISHA APP and Safety and security of Women and Young Girls”. Totally 55 girls took part in the competitions.The winners in the essay competition are 1. G.PREETHI , 2. P. KAVYA, 3. H.SAMHITHA, 4. V.SUDHA SREE. In the drawing competition the winners are : 1. C.VARSHITHA 2. S.ASMA 3. P. LAVANYA 4. K.PAVITHRA. A.P. Women Commission member Ms. Shaik Rukhayya Begum was honored during this program.

ISTE AP STATE AWARD Best EEE Teacher for Retd. Prof. V.Sankar

GIST State Award for Best Electrical and Electronics Engineering Teacher in A.P Sponsored by Geenthanjali Institute of Science and Technology, Nellore awarded to Prof. V. Sankar, Professor of EEE & Dean of Academics, Srinivasa Ramanujan Institute of Technology (Autonomous), Ananthapuramu.

About the Awardee

Sankar Velamury did his B.Tech (EE) in 1978 from JNTUCEA, M. Tech. EPS with HVE in 1980 from JNTUCEK, Ph. D. from IITD in 1994 in the area of Power System Reliability. He has guided 14 Scholars, One submitted, and three more are pursuing. He served in various capacities such as, HEED, Vice – Principal, and Principal of JNTUA CEA.

He has served as Registrar i/c, Director Foreign Affairs & Alumni Matters, Director Academic and Planning at the University JNTUA. He has got about 120 research publications in various International Journals / National Journals / International Conferences / National Conferences. He is a recipient of AP State Best Teacher Award (2010), Rayalaseema Vidya Ratna (2012), Best Educationist award in 2016 by Indus Global Foundation ISTE, Best Teacher in EEE for 2019 and received in March 2022. He has authored a book on System Reliability Concepts Published in 2015 by Himalaya Publications. He is a Senior Member of IEEE, IEEE Brand Ambassador and member of other societies like, FIE (I), ISTE, ISPE, IAE, AeSI, NIQR. He is Founder SBC of JNTUA (2012), Founder Coordinator SAC Anantha-puramu (2014 – 2016) Zone, Founder Chair Ananthapuramu Sub Section (ATPSC) (2017 – 2019) ECM as Immediate past Chair of ATPSS (2020 – 2021). Further, he is founder coordinator of nodal center at SRIT (A) for V Labs of IIITH from October 2020, and presently Vice – Chair of IEEE HS RSC since 23/01/2021. He is superannuated from JNTUACEA in February 2020 and joined at SRIT (A) in June 2020. He may be contacted at vsankar.eee@jntua.ac.in. His detailed profile can be seen via the id links given below.

Google Scholar ID:

https://scholar.google.co.in/citations?user=O_3XT5cAAAAJ&hl=en
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APSCHE

Andhra Pradesh State Council of Higher Education

From the Chairman's Desk

Emotional Intelligence

My dear students, very often in our lives, we face situations where something goes against our expectations or somebody may say or do something that annoys us, hurts us, and reacts immediately on our impulse. This happens in our family relationships, like your parents chiding you for something; like your friend making a casual remark that hurts your ego; or in your social relationships where your teacher comments on your work. Generally, we become emotional and pour our outbursts on the other person, hurting them which creates a dent in our relationship. Every second many relationships are getting broken due to a lack of "Emotional Intelligence (EI)".

Stephen Covey, the famous writer of many motivational books talks about a life-changing 90/10 principle. This principle says that a person does not have control over 10 percent of what happens in a given situation; but if he/she can handle his/her emotions properly, he/she can control what happens in the remaining 90 percent of the situation. You encounter many situations in your life in which you react on the spur of the moment. The result could be frustration, depression, or failure. Emotional Intelligence is the quality that enables us to confront, with patience, insight, and imagination, many problems that we encounter in our effective relationship with ourselves and with other people. Some people may be very intelligent and knowledgeable, but their personal life may be a disaster if Emotional Intelligence lacks in their lives. Emotional Intelligence in social life refers to the sensitivity to the moods of others and readiness to grasp what might be going on inside them. It's a quality that's important at every level of a person's career, from college students looking for internships to seasoned employees hoping to take on a leadership role.

It pains me so much when I read in newspapers that an intermediate student commits suicide just because his/her parents scolded him/her for spending all day with a smartphone, or a girl who gets a 9.6 score in 10th standard committing suicide because she did not get 10 points. Are these problems so important in life? Think about them. Realize life is a precious gift and it cannot be thrown away just like that. Develop Emotional Intelligence to balance and control your reactions. If you develop Emotional Intelligence, your life will be successful and cheerful.

"జీవితం దేవతల దరస్మితం
చిన్నారీ! పెదవిమీద సింగారించు
కలతవద్దు కొలతవద్దు
అలసట అలజడి వద్దు బాల!
అప్పుడు
బ్రతుకే లలిత లలిత లతాంతమాల.

-దేవరకొండ బాల గంగాధర్ తిలక్

Date: 25.02.2022

Prof. K. Hemachandra Reddy
Chairman, APSCHE

Tech Ananth

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

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