PERCEPTION

A PSG IAS MAGAZINE

JULY 2018 | VOLUME 1 | EDITION 7

OUR PARTNER INSTITUTIONS

University of
South Australia

CONTENTS

Dr. P. Radhakrishnan

Director's note

I am happy to note that the students of our International Programs are bringing out the latest version of Perception. I appreciate the excellent initiative and effort put in by the editorial team. The purpose of the student's journal is not only to chronicle the events, but also provide a platform for the creative talents for the students. I look forward to more and more students coming forward to contribute and enrich the contents of Perception.

AMBIGEIZ

2018-2019

AMBIGEIZ is the techno cultural club of PSGIAS. It was founded by the students of the 2011 batch. It opens doors for the students of PSGIAS to pursue achievements in their field of interest. The various clubs and associations come under Ambigeiz. Nebula, the biggest cultural fest on the PSG Tech campus is organised by the members of Ambigeiz. Office Bearers of the academic year 2018-19 were appointed. S.P. Garghi Seenevas was appointed as the Chairman, Keshav as the Vice chairman, assisted by 3 secretaries and 2 vice secretaries, followed by council members.

Graduation

2014-2018

It is with immense pleasure that we announce that our students of the 2014-18 SUNY Farmingdale and Hartford batch have graduated and obtained their BS Mechanical Engineering degrees. We congratulate them and we wish them all the very best for their future endeavours.

Summa cum laude

2014-2018

We are proud to share with you that our senior from the 2014-18 batch, Sri Varssha G, was honoured with the Summa Cum Laude. Summa cum laude is an academic level of distinction used by educational institutions to signify a degree that was earned "with highest honour." Summa cum laude is the highest distinction of three commonly used types of Latin honours recognised in the United States. The other two are called magna cum laude and cum laude. Students who graduate with honours may wear coloured stoles or other designation during commencement ceremonies, and the honour is read aloud along with the person's name. Latin honours generally appear on a student's official transcript and diploma after graduating. Criteria for Latin honours may include grade point average (GPA), class rank, number of hours completed and honours designations from an academic department.

NEBULA - 2018

Anirudh Rajesh

Nebula 2018 , an event spread across two days, the day 1 consisting of Technical activities and other fun games, which involved the entire PSG family from across all disciplines. The day began with technical presentation where few bright minds used the event as a launch pad for their ideas. Mr. Machinist was a huge hit as students operated CNC

machines where their ideas could be physically presented. Tik Talk, Jam and other events were also conducted. Treasure hunt was a smash hit as the entire college were flooded with enthusiastic students finding the hidden treasure.

Day two had a disappointing start as rains lashed out on cultural events. Rains couldn't or wouldn't dampen the energy and enthusiasm of the organisers and students shifted the whole outdoor set inside the

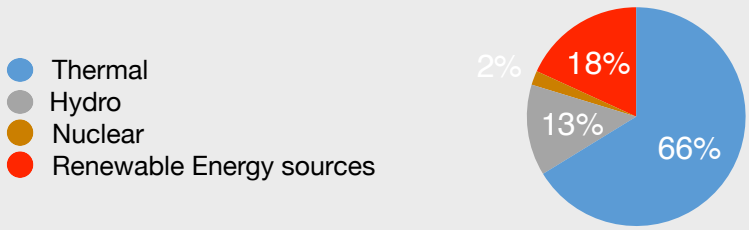
auditorium. Students stunned the audience with their performances. All the events where captured by phones and DSLRs by the students and designated student photographers.

ELECTRIC DREAM OF INDIA

Mitul Sivakumar

Electric cars have been the buzzword for the last couple of years, with each country trying to bring it into their mobility system. For its share the Indian government has released its vision to have only electric cars by 2030.

Will electric car reduce the pollution drastically? To answer this question we have to consider some facts. Our major source of electric production is through our thermal power plants, 66.3% and the rest is as illustrated in the chart.



There are around 28.6 million cars in India (as of 2015) and the amount of fuel consumed by these cars are 22.09 and 35.84 percentage of the overall diesel and petrol consumed. In the year 2012-2013, 157.1 MMT (million metric tonne) of petroleum products were consumed. Out of this 44 % (69.12 MMT) was diesel and 10 % (15.71 MMT) was petrol.

The amount of diesel and petrol consumed by four wheelers are 15.26 MMT (22.09 %) and 5.63 MMT (35.84 %). Hence the amount of fuel consumed by a single car will be 5.49 MMT that is 8578.125 Liter (taking the density as 640 kg /m). If the mileage of a car is averaged at 10 km / Litre the number of kilometres driven by a car in a year is 85781. If an electric car travels 344 km for a power of 75 kW then the amount of power required by a car in a year will be 18702.25 kW. Hence if we replace all our cars then we would need additional 5.34*10^11 kW of electricity to power our cars. That is 534 TW, the total electricity generated is around 1400 TW. There will be a rise of 38.14 percentage in electricity consumption. Since our major source of electricity is not renewable it does not necessarily bring down pollution. We must first prepare for the change by shifting to more renewable energy sources to achieve our vision to reduce pollution.

OUR TRIP TO GERMANY

Anirudhan

Our journey started from Bombay's International Airport on the 3rd of June. With smiling faces, filled with excitement, we started off to Dusseldorf. To our surprise we were picked up from the airport by a Mercedes from IIK. We checked into our respective flats and had a nice sleep to get over our jet lag. We went to classes the next day and we were so nervous. There were students from many countries. We couldn't talk properly on the first day, due to fear. But as time passed by, we got to know everyone and we were very comfortable in communicating with them. That was the moment, I personally understood what getting out of the comfort zone meant. We were performing well in the classes and we were taught in a really interactive way. Another aspect is that, not many from our class knew English, so we had to communicate in German, which helped us get better at it. We went to Frankfurt, Brussels, Amsterdam and Cologne. The climate was really good and we thoroughly enjoyed the stay and the trips. We had friends from China, Korea, Tunisia, Greece, Israel etc. We were fortunate to be there during the FIFA World Cup. Germans are crazy about football and watching a German match in a German crowd is one of the best feelings ever. One thing which we were not comfortable with was the food. Although, later we started cooking on our own. To sum up, we had an awesome summer class at Germany and we all are looking forward to go there next year, for our final year.

FORMULA 1 - An Endangered Sport ?

Joseph Daniel

In an era where the very word 'sport' often refers to cricket or football, it is very difficult to even think about motorsport. With the ever-growing dominance of cricket and football, the growth of motorsport in India is going from bad to worse. And to add to this woe, the only Formula 1 circuit in India "The Buddh international circuit", was suspended from hosting international races due to financial problems. But all these reasons can not stop an average F1 fan from following his favourite sport. The rush of adrenaline and thrill that ensues while watching a live F1 race, is what grabs followers from all over the world to support their favourite drivers on the track. The sight of a driver overtaking his rival, brings the audience to the edge of their seats.

With that being said, how does an F1 driver prepare for his time on the track? During the race, an F1 driver reaches a maximum speed of 350km/hr and sometimes he has to turn corners at speeds of 250km/hr. Because of this, he is very likely to experience G-forces up to 5G. All of this demands extreme levels of mental, physical and psychological fitness. Formula 1 drivers rank amongst the fittest sports persons in the world.

This is due to their unimaginable levels of dedication and passion towards their work. Some drivers spend about 5-6 hours in the gym, preparing their bodies for the extreme conditions they have to go through. They also have to keep their bodies hydrated all the time. Even during the race, drivers continuously sip water to maintain the required levels of hydration required to complete the race. The interesting fact here is, after every race(which is 300-310 km), a Formula 1 driver loses weight of about 5-6kg due to the huge amounts of G-force that he experiences. A race is held twice or thrice a month, so that means, every Formula 1 driver loses 15kilos every month. A drivers hard work lies in regaining the weight that he lost during the race and getting his body physically fit for the next race.

And it is not only the driver, but the entire team of engineers who help in making a car that is worthy of taking part in a race. There is a lot of precision engineering that goes behind the making of a good race car. A minor engineering error can cause the driver to feel uncomfortable in his car and can cause other technical errors like engine failure or gear box failure. To avoid such catastrophes, F1 teams recruit highly skilled engineers. Some of the best engineers in the world work for top F1 teams like Mercedes, Ferrari, etc. These engineers work day and night, giving their all, in order to make the best possible car for the drivers. F1 is a fast sport and even a minor technical error could make the driver lose time while taking a turn, which can eventually cost him the race. Unfortunately, when a team wins a race, it is the driver who steals the limelight and gets all the accolades. But the old saying goes this way, " An engineer is the heart of the car".

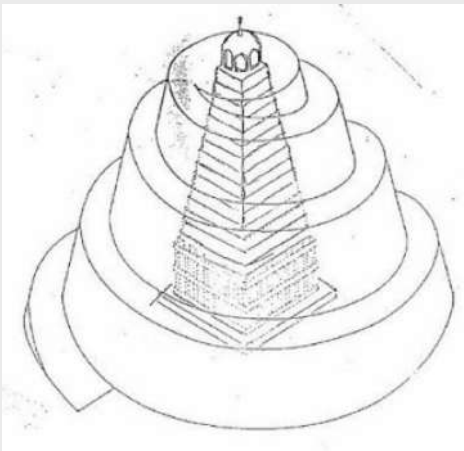
It is a combination of all these factors- a driver's hard work and passion, an engineer's commitment and a normal fan's enthusiasm that makes this sport a spectacle to watch. Unfortunately not many people actually follow this great sport. One of the main reason is that, motor racing is actually very expensive. Tickets for a single race cost a minimum of 5000 Indian rupees. One more reason is that the sport is not glamorous like football or baseball. There is no hype created around Sebastian Vettel like that around Messi and Ronaldo. Some more reasons include lack of interests and technical knowledge among viewers.

With such minimal audiences, the sport is actually on the verge of what we can call an 'extinction'. If this scenario continues, F1 races may be stopped from being streamed live on TV. It is up to the governments of the countries in which the races are held, to provide the necessary support for the promotion of this fascinating sport.

Siva Pooja

This temple is one of the UNESCO World Heritage Sites, situated at Thanjavur. It is profoundly called as the Brihadeeshwarar Temple or the Tanjai Periya Kovil, but was named after the king who built this temple, **Raja Raja Chozhan**, as **Rajarajeshwaram**. This temple was built in **1010 AD** in a time period of 7 years. (Construction period : 1003 AD to 1010 AD) The Vimanam (the tall structure above the sanctum sanctorum in which the Lord resides) stands **217 feet** tall, for over 1000 years. It was during his reign that the Vimanams were constructed taller than the Gopurams(The entrances). This temple was constructed as an inspiration from the Kailashanadar temple at Kanchipuram. The king's idea behind building this temple was to **depict the Kailash** (the holy place for Hindus) at Himalayas**, in the South India.** The Vimanam was constructed using granite stones and interlocking system. The entrance to the Sanctum Sanctorum is not wide enough to place the Lord, after constructing the temple. So they had to place the Lord and construct the temple around him. The ideology they have used in 1010 AD is :

Elephants climbed over the ramp which was made of sand carrying the granite stones. The width of the pathway is about 3 meters, which means that 4 elephants can cross at a time! The top most stone at the Vimanam weighs 7 tonnes and is a single stone, carried to a height of 200 feet, by elephants, in 1010 AD!



The Lord inside the Sanctum Sanctorum is Shiva, in Linga form. The temple consists of two Gopurams : The Keralanthakan Thiruvasal and the Rajarajan Thiruvasal.

The first comes the Keralanthakan Thiruvasal. (Kerala + Anthakan - The one who killed the Kerala king.) This entrance was constructed to talk about the bravery of Raja Raja Chozhan. Once when the king sent his messenger to Kerala, the messenger was ill-

treated. Raja Raja Chozhan got furious and crossed 13 forests in one night and killed the Kerala king. This tells us about the importance and honour that a messenger received, and about the king's persistence. The temple consists of panchabhoothas (the five elements that constitute the existence of this world) - air, water, fire, land and space. The Keralanthakan Thiruvasal represents fire (anger), the Rajarajan Thiruvasal represents water (sculptures of Ganga, Cauvery can be found). The Lord inside the Sanctum Sanctorum depicts earth. There is a secret pathway around the Sanctum Sanctorum, that consists of paintings of the king and his guru, etc. There exists a hollow above the Linga which depicts space. One of the beauties in this temple is the Dwara Palakas.

The Dwara Palakas are the guardians of the temple. There is a small nuance, that depicts the greatness of the Lord. There is a snake tied to the ankle of the Dwara Palaka, that is swallowing an elephant. This is to make us imagine the size of the Dwara Palaka. He holds Vismaya Hasta in his right hand. (Gesture to show amazement) This tells us how great the Lord inside the temple is, using height as a measure. Raja Raja Chozhan was the first king to document his works. There are inscriptions all over the Vimanam and the Gopurams, that talk about the contributions made by his relatives, Neighboring kingdoms, his kingdom people to the temple. He goes on to specify about dancers who engaged their lives for this temple's livelihood. There were 400 dancers, whose addresses and the lands that were given to them for a living, are all inscribed around the temple's Vimanam. Raja Raja brought all the people together by engaging work for each family and the contribution they had to make to the temple, was also inscribed. The temple stands with utmost majestic look over 1000 years, because of the immense contributions done by those who lived during Raja Raja's reign.

Sleep

Blink. Everything goes out of focus... all sharp lines grow wider, infinitely, till i can see no more.

Blink. Once again I see light. She's dancing around in joy, skipping her way through... gone.

Blink. She's in a cave now, the void so deafening she flickers out. Lost... I am lost, engulfed by darkness. I hear her, her voice so distant. I run through the sludge, toward her voice, yet moving away.

Blink... blink, blink, blink! Can't blink anymore, can't fight... Stop! I drop down, letting itself sink into the murk. Dissolving away I let go... all the exhaustion drowning me, claiming me for its own.

Blink... I open my eyes to a new calm and peace. Sleep.

- Sashwatha

Surrender

My life I surrender
To your memories;
The whole blood that streams
Gush with the hyper in your heart.

The breath I take,
Whispers your secrets.
The water I drink,
Gurgles your sweetness.

The drops of rain unseeingly,
Screams your name.
My blossoming garden,
Sizzles with your glory.

Through dusk and dawn,
The shadows bygone.
I step into reality
For it was just me in liberty.

-Sharmitha

MRITYUNJAYA AADITYAA

2012-2016 Batch- IGCHE Mechanical Engineering

Mr. Rudra Keerthan, born on 21 November was employed at Schneider Electric Automation, Marktheidenfeld, Germany and is working under Global Supply Chain management.

During his Internship the main task was to boost the planning processes from the demand forecast to production planning and finally to purchase forecast.

Moreover, he improved the Internal Demand Forecast on DRP. He also improved the data collection process, introduced DRP result as input and measured the accuracy. His ability to speak fluently in German was a strong asset.

2014-2018 Batch- State University of New York, Farmingdale.

Mr. Nishanth Balu graduated from State University of New York, Farmingdale and went on to work full time as a Design Engineer in New York. Previously he also worked as a story analyst with Mr. Gautham Vasudev Menon and part time as Building Manager at Suny Farmingdale.

2010-2014 Batch- IGCHE Mechanical Engineering

Mr. Aravindraman works as a Senior Business consultant in Robert Bosch.

2012-2014 IGCHE- Mechanical Engineering

Ms. Samyuktha Pandian works as Business Development Engineer at Sharp Industries.

EDITED BY
Mitul Sivakumar
Velesh Dharmaraj