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PORTRAIT OF A RAFFLESIAN

NURTURING THE CURIOUS MIND

Like most children growing up, RGS alumna Rachel Qing Pang from the class of 2016 loved playing with toys. But before you think dolls and such, she is actually referring to physics toys, more specifically, the Levitron, which is essentially a device that displays the phenomenon known as spin-stabilised magnetic levitation. A fascinating device that captured her interest for the longest time, the toy naturally became her topic of choice during the A*STAR Talent Search 2017, wherein she won first prize for her scientific research on 'The Physics of the Levitron'.

From a young age, the curious and inquisitive Rachel would ask many questions about the physics phenomena shared with her by her father, and he would patiently explain the theories behind them all. While she may not remember everything that he had shared, she recalls the sparkle that filled her dad's eyes as he talked about physics, and the sense of wonderment that remains the fuel, up till today, for her passion towards the subject.

Fresh from her victory at the International Young Physicists' Tournament (IYPT), which is also the first time we have RGS alumnae selected to be part of the team (the other RGS alumna is Wang Huaijin from the class of 2015), we speak to Rachel to find out more about 'beating' the boys to be part of the IYPT team, her love for physics and her RGS experience.



Rachel attained the first prize for her research project on 'The Physics of the Levitron' during the A*STAR Talent Search 2017.

Arts or the Sciences?

"During lower secondary, I was still not quite sure whether I was more inclined to the Humanities or to the Sciences. The deciding factor was when I was given the opportunity to join the Raffles Academy or RA (Physics) in Year 3. What the RA offered really exposed me to the challenges of physics and encouraged me to participate more actively in my favourite field of science. The less structured approach of the RA forced me to look beyond textbooks for answers and I believe that helped to cultivate my confidence in research. The process also exposed me to additional topics outside of our textbook, and opened my eyes to the vastness of the world of physics, cementing my interest in the subject. Through the RA, I also managed to participate in more research projects and local and international competitions that allowed me to go beyond what I originally thought I was capable of."



Rachel (second from left) with her teammates at the International Young Physicists' Tournament, which was held on home ground for the very first time.

Being Part of IYPT 2017

"(laughs) I suppose destroying the existing stereotype (editor's note: past IYPT teams have comprised mainly boys) is a definite bonus, but no, I did not set out with the goal of 'beating the boys'. When my team and I decided to join the Singapore Young Physicists' Tournament, which is the prelude to the IYPT, we started with no aim in mind, other than to have a great time pushing our limits and forming some lasting memories of RGS before we all graduated. I believe we definitely managed to achieve that because while it was a two-month holiday spent on hard work (the SYPT was held in November 2016), we had lots of fun and laughter, and we managed to forge so many unforgettable experiences with each other. I daresay that for me, it was the absolute best way to round off a truly memorable four years in RGS."

Takeaway From Participating in Competitions

"I feel that beyond placings and rankings, the competitions, which I've had the opportunity to take part in, really pushes you to your limits, in that sense because you are representing your school, and sometimes, even your country, so there is this competitiveness and added pressure to perform. Most people, under that kind of circumstances, would perform their best and give it their all. Through that, you get the most enriching experience because you have put in a lot of effort into something that you feel passionate about. You don't always remember the exact moment when it is announced that your team has won or that you have achieved the top placing, but you will always remember the long hours, the hard work and efforts put into the preparation process for the competitions. That is what makes the experience memorable."

Plans for the Future

"I'm not entirely sure yet, but I do know that I would like to study Physics in university, which is in line with my interest and something that I enjoy learning about. In the future, I would also like to see more of the world, because I feel that travelling would be the best way for me to get exposed to the different cultures and geographies. These experiences would allow me to learn more about the people, and myself too, in the process." www.rgs.edu.sg JULY 2017

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Rachel with her classmates (class 401'16) during NetCarn 2016!

Her RGS Experience

"I would definitely say that my RGS experience was both exhilarating and interesting. The pace of work may be fast, but it is fulfilling, and the caring teachers are always there to guide you if necessary. Something that I have learnt from my time in RGS, is to live life to the fullest, because you really only 'get what you give'. Therefore, I learnt to take on challenges I was offered even if they seemed overwhelming at first, allowing me to test my limits and expose myself to varied experiences. I also constantly reminded myself to continue learning, and to make lasting memories while I was still at RGS, beyond just academics.'



After her last Math Lesson with teacher Ms Glenis Wong.

Favourite RGS Traditions

"The school cheers are one of my favourites! Beyond just the lyrics, which are very impactful and catchy, the school cheers embody the uniquely RGS culture because of the way we cheer very wholeheartedly. They are representative of a school that is not lacklustre, but one that is very lively, driven, passionate and united. Furthermore, I really like that the school makes an effort to hold celebrations for important occasions that bring everyone together. For example, during National Day celebrations at the Amphitheatre, we will link our arms, jump, cheer and sing songs. Such memories are what the RGS students will hold dear.'

Impact of Her RGS Experience

"The vibrant energy of the school culture that constantly radiated enthusiasm and passion is a key aspect that has transformed my outlook on life. Furthermore, RGS has filled me with a lot of experiences beyond my own field of expertise. For example, I was always encouraged to participate in other field trips and excursions outside of the physics subject, and with every other subject I took, my teachers adopted a holistic approach in teaching. So my learning experience has definitely been more enriched, well-rounded and interesting."



Rachel with her classmates after a Tennis lesson during PE.

New RGS Campus

"Personally, I do think that the physical building is important, to a certain extent, when it comes to preserving memories of my RGS experience. A lot of memories that I have forged in RGS are pegged to specific locations around the school, such as doing the school cheers in the Amphitheatre. But at the same time, school spirit and culture is something that cannot be taken away, no matter where the physical building of a school is. Therefore, while future school gatherings may not be held in the current Amphitheatre, the Rafflesian spirit will still carry on and be transferred to the new campus."

Hopes for RGS

"I sincerely hope that RGS will strengthen the school culture and spirit as they are facets that are uniquely RGS and they made my, and also others' RGS experience so memorable. In RGS, it is very easy to get competitive and feel overwhelmed because everyone around you is so multi-talented. But *I* do hope that my juniors and future batches of RGS students don't forget about making their very own RGS experience, and actually enjoy their time in school, be it during learning in the classrooms, celebrating important occasions or being fully immersed in various school activities.