

REFLECTIONS

Insect farming – A sustainable solution to global food crisis & waste disposal

Mr. Vinoth Rayar

(BSc Microbiology 2008, Founder & CEO @ Freshrooms Lifesciences Pvt. Ltd, India)

Freshrooms is an innovation-driven research company with the focus to provide superior solutions for organic waste management, sanitation, food security, animal and human nutrition.

Population growth, urbanization, and the rising middle class have increased the global demand for food, especially animal based protein sources. The UN Food and Agricultural Organization (FAO) estimates that the world will have to produce ca. 70% more food by 2050. If we were to extrapolate the growth rates of animal protein of the last forty years forward to 2050, this would in theory quadruple the needs. This poses severe challenges to the global capacity to provide enough feed in the very near future. Currently, fish meal and soybean meal are used as a major protein supplement for animal feed.

Scarcity of conventional protein sources for feed

Wild-catch fisheries and soybean are the major conventional protein sources for animal feed. Today, nearly 30% of wild-caught fisheries and 95% of soybean production – which depends on agricultural land and water – goes to feeding livestock, farmed fish, pet animals and exotic birds. By 2030, over 9 billion people will need to be fed, along with the billions of animals raised annually for food and recreational purposes and as pets. Moreover, externalities such as land and water pollution from intensive livestock production and over-grazing are leading to forest degradation, thereby contributing to climate change and other environmentally destructive impacts.

What can be done?

1. Produce sustainable protein source with very small inputs of water, food, and space.
2. Improve the food value chain by integrating excellent nutrient resources recovered from organic waste streams by creating a circular economy approach.

What else will fish and chickens eat if we could no longer produce fishmeal?

Insects! It's what fish and chickens naturally eat. The consumption of insect protein as a dietary feed ingredient on large scale is technically proven and feasible than conventional protein production industries. Many established companies such as Enterra Feed, Agriprotein technologies, Ynsect, etc. in various parts of the world are already commercializing insect protein as an alternate protein source to animal feed by replacing conventional protein.

Freshrooms Lifesciences Pvt. Ltd: India's first commercial edible insect farm!

We need a system-based approach towards waste management and resource recovery. Imagine a world that re-uses everything it discards by turning waste and its components into valuable materials that the world needs. At Freshrooms, we took this challenge and came out with a commercially viable, nature-friendly and sustainable solution to recycle nutrients effectively and efficiently.

Based in Tamil Nadu, Freshrooms industrially processes organic waste into higher grade protein, fat oil and organic fertilizer products for animal feed industry and agriculture sector in a socially responsible way. We believe food security can be improved by honoring nutrient upcycling using fly insect larvae, enabling sustainable markets for protein sources, supporting livestock farmers and entrepreneurs, improving the animal nutrition, fostering cooperation between public and private sectors, and encouraging investment in mini-livestock (insect) farming.

Black Soldier Fly Larvae – Multi-beneficial insect

Sustainable & Environment-friendly – Higher Waste Reduction – Short Life Cycle – High Fecundity – Excellent Nutritional Profile – Autogenous Species



Freshrooms bags its second project with Bill & Melinda Gates Foundation!



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IAS : K. S. Viswanathan



K. S. Viswanathan, an alumnus of SRM University with a degree in B. Tech. Biotechnology secured AIR of rank of 71 (CSE 2016, first attempt) in UPSC 2016 and hopes to make it to the IAS cadre. He believes that besides support from his parents, brother, and family members, the knowledge gained in the department of biotechnology helped him to improve his analytical ability and also to successfully face the interview panel as most of the questions were from biotechnology. In addition to Civil Services, there are other engineering services examinations like CAPF and CDS conducted by UPSC and many more conducted by the state governments, and he thinks that students should pursue these avenues besides the regular jobs and serve the country to make it better. Dedication, patience, time management, and focus on subject matter would help to clear this examination in order to have a chance to improve the lives of thousands of people, he says.

CONGRATS!

IAS : Pankaj Mishra

Heroes are not extraordinary people, they are ordinary people who put in a little extra effort. These efforts pay them back well and separate them from the ordinary. One such hero is UPSC 2016 qualifier Mr Pankaj Kumar Mishra with an all India rank 414. He has made all of us proud. An alumnus of SRM University (2007-2011), he holds a B.Tech in Information Technology. He was placed in TCS in the final year and worked in TCS Mumbai/Lucknow from October 2011 to March 2014. In March, he left TCS and started preparing for Civil Services. He cleared the exam in his fourth attempt this time but his willingness to not give up did wonders. He teaches us how one should follow their dreams and that never giving up is the key to success. He believes that smart work is better than hard work. He stresses on the importance of overall personality development rather than being solely dedicated to academics. This is what has helped him in his journey.

CONGRATS!



Prateek Shukla—FIRM Scholar

Prateek Shukla (2013 SRM Alumnus) has been selected as FIRM Risk Management Scholar at Frankfurt School of Finance and Management to attend Masters of Finance course with a scholarship of 12,100 Euros. This course is currently ranked first in Germany and in top 30 globally by Financial Times. Prateek says -

"I obtained my B.Tech in Computer Science and Engineering from SRM University in 2013. I was also the Management Coordinator for SRMSAT-1, our own nano-satellite launched in 2011 by ISRO. This was a huge learning opportunity to me especially to develop my managerial acumen by engaging in daily team collaborations and interfacing with top management within the university. I developed a strong business acumen handling day-to-day SRMSAT managerial tasks. I personally thank the strong pedagogy of SRM University, especially Directors of E&T and Research for their initiative with SRMSAT that provided an opportunity for me to learn and innovate. Moreover, my parents, professors and peers were instrumental in helping me develop a winning mindset and accomplish such milestones. I want to appreciate the efforts of Department of Computer Science and Engineering which has been open to student ideas and provided opportunities when it was necessary. SRM University truly justifies its motto to learn, leap and lead. I am hopeful to accomplish a great deal in life and make my alma mater proud."



Vineet Krishna—Cancer Research



Vineethkrishna Chandrasekar (B. Tech. in Biotechnology, 2015) was recently awarded with the Cancer Research UK Oxford Centre DPhil Prize Studentship (Awarded to 5 students all over the world, with the best proven and future potential towards cancer research:

<http://www.cancercentre.ox.ac.uk/gradua.../dphil-studentships/>) and

the Nuffield Department of Medicine Prize Studentship

(<https://www.ndm.ox.ac.uk/ndm-prize-studentships>) to carry out his doctoral studies in Clinical Medicine at the University of Oxford, UK with complete funding. He will commence his doctoral studies in clinical medicine at Oxford from October 2017 and his thesis will focus on pharmacogenomics and tumor immunology. He thanks his parents, friends, and SRM University for providing the right opportunities and exposure at the right time. He believes that the Department of Biotechnology provided him with a conducive learning and research environment. Coupled with this, his time at Dr. Berla Than-gam's lab at SRM University, his internship at Indian Institute of Technology, and the Semester Abroad Program at Harvard Medical School laid down the foundations for his research career.

ALUMNI SPEAK

Kartik Mittal (Mechanical—2017)

Mechanical Engineer (GET)

ELGi Equipments Ltd, Coimbatore

"From a mechanical trainee sitting in a crowd of 4000 students in 1st year to mechanical engineer placed in solid core industry addressing a crowd of 4000 students says everything of my journey."



Ravikant Kamboj (2017)

Consultant at Sutherland Lumber Company

"The 4 years journey of Mechanical Engineering in SRM has transformed me. I learned to live in real world.

SRM gave me new platforms and opportunities to develop myself and my way of thinking."

Vighnesh Verma (2017)

King's College, London

Msc in Finance and Banking

"Don't not be complacent, Keep surpassing yourself now and then else you would resign yourself to mediocrity....!!!"



Rachit Shadra (SWE'14)

Growth Manger, Wunder Carpool, Hamburg

"Settling into a Global Team in a different country is always difficult. But the way SRM pushed me out of my comfort zone in terms of interaction and exposure to the immense diversity of people coming to study there definitely gave me an edge."

EVENTS



Four alumni addressed the freshers during Orientation Week on 19th July, 2017

Mr. Vijay Kishore – 2003 MBA – CEO, Pentagraph

Mr. Praveen Kumar – 2004 ECE – Cofounder, klenty.com

Ms. Pragnya Sahoo – 2008 CSE – Works at Amazon and has authored a book recently

Ms. Anu – 2009 ECE – Entrepreneur and Consultant

Chennai Alumni Talk 20th May, 2017

Mr. Arokia Inian, B.Tech. Mechanical 1991 – Entrepreneurship

Mr. Madhan Shanmugasundaram, B.Tech. Civil 1993 – Upcoming technologies in IT

Alumni Talk at Department of Biotechnology 11th July, 2017

Alumni from Department of Biotechnology came down to college to interact with current students. Mr. Vineeth Krishna (SRM'15) - University of Oxford

Mr. Jacob Antony (SRM'15) - University of Pennsylvania

Mr. K.S Viswanathan (SRM'15) - UPSC AIR 71

On Graduation - Ashutosh Kumar (2017 batch)

For ages, I have been running behind a bit of peace but my ambitions have always had the better of me. Now that I think I finally have some of it, my heart feels an unsettling unease. I know not the cause of the restlessness but I have a feeling that it might be the nostalgia. The memories that flood my sight, that numb my mind and paralyze my constantly oscillating state. The memories that I have snowballed up for the past 4 years with countless stories of weird encounters, amazing experiences, unexpected accidents and premeditated situations fuelled by brewing up of a powerful concoction of emotions, that I never knew I had inside me somewhere till college happened to me. I feel at unease, the reason for which is quite enigmatic, maybe because I have never been here before, maybe because I am no longer what I used to be, maybe because beyond college I will never be the same ever again, for college had grown on me like nothing else ever has and without the college around me, there can't exist that version of me, that had been incidental in all those stories and memories...maybe because I just graduated!

For now, when I look back, I find the most amazing years of my life behind me, years that have shaped all that I stand for today, quite skilfully though. These years are accountable for sculpting my ideologies and contriving my philosophies. The essence and aroma of all my college days still remain as an aftertaste on my tongue. It wasn't all good or all bad, but it was special, special enough to have left a mark. I can say that, because I know it was overwhelming enough to make us all cry the day we parted ways, the day we saw

all of us together, probably for one last time, before leaving with a bagful of stories and a tiny speck of hope of meeting each other soon somewhere, somehow, someday...

Engineering, probably one of the most clichéd courses of our times, where most of us have barely engineered anything more than solutions to our daily problems at college. Personally, I have always been associated with various aspects of engineering such as analyzing, modelling, replicating or simulating at various stages of my study. I have spent most of my classroom hours at the back benches 'analyzing' the context, just to fathom the right window to catch up on lost sleep or to banter with my buddies about numerous godforsaken things, completely unrelated to the field of our study. Exhaustively 'modeled' the most incredible of plans to help my friends succeed at their one-sided love endeavors. 'Replicated' assignments meticulously along with punctuations from the class-topper and presented them as my own. 'Simulated' many claim-to-fame moments during my back-bench dreaming sessions including various scenarios of accidental and flamboyant encounters with incredulous troubles, where I magnanimously emerge victorious, and have a tale to tell in the aftermath. Depending on decadent commodities for sustenance or more appropriately survival, we have partied at most extravagant places to celebrate birthdays, anniversaries, success, failures and sometimes just the randomness of life, because why not. Realizing that friends are the only essentials and rest all was just the peripheral and also that necessity is the mother of inventions. They say learning is a continuous process. Having crossed a significant milestone in my journey to learn to engineer, I have only realized one thing...sometimes the journey gives you way more happiness than the destination.

Graduation is the cause of my unsettling agony. It's the memories, the parting of ways, the separation that is causing me pain, and as always irony had to play its part in our lives in most incredulous of ways. After many circumnavigations, I concluded that it's these very memories that will act as a remedy for the wounds that they have inflicted. Once we bring ourselves to cherish these memories, honor them and learn from them the essence of life. A life that is behind us, that is always there for us to retrospect upon and for our conscience and mind to find answers from, in our darkest of hours in the future. It's these bonds that tether us to the path of success and satisfaction and drive in us the motivation to achieve things beyond our reach. It's these experiences that make us wise and ignite goodwill in our hearts to do the right thing always. Only when we carry these memories forward in our hearts, we'll know the real worth of our college days, for it was not only about the books but also about the bag of lessons that came along.

Time will always wipe clean the slate for us to write new stories upon. As for the stories that connected all us classmates, have for most cases, come to an end and life cannot carry forward without a new one. It takes strength to pack again and set out on yet another journey that might change us in multiple but significant ways again but it must be done for a life without great stories is no life at all. We are all but tiny rounded grains in the perpetually moving sands of time, that flows much like a river before coming to an abrupt end. Before it does, let's hoard as much as we can, to fill our stories with the brightest of colors. Colorful stories for the world to read and gaze upon in daze.

We invite contributions for articles/quotes/reminiscences/SRM quiz from alumni for the newsletter. Send to feedback.alumni@srmuniv.ac.in

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Alma Connect

Re-Connect With Your Alma Mater

Web: <https://srmuniv.almaconnect.com/>

Alma Connect is the private alumni network for connecting alumni, students & faculties of SRM University. The network is the official alumni network of SRM & is powered by AlmaConnect. It's a place to deepen your bonds with your community & connect with them in a meaningful way.

- Re-connect & catch up with batchmates, seniors & juniors
- Revive old memories
- Know about what's happening at the campus
- Help each other in careers by advising & referrals.
- Stay up to date with alumni achievements & important updates
- Give back to the Alma Mater & students

Face book Page : www.fb.com/srmuaa

LinkedIn : <http://bit.do/srmuaa>

Twitter : <https://twitter.com/srmuaa>



Fun corner

Color this: (Image reproduced from azcoloring.com)



Word Search-Months

S	P	H	T	U	C	I	E	E	A	M	B	E	B
U	M	U	Y	R	A	O	E	E	Y	I	A	O	E
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FEBRUARY
MARCH
APRIL
SEPTEMBER
MAY
AUGUST
DECEMBER
JANUARY
JUNE
JULY
OCTOBER
NOVEMBER