

Amrita Vishwa Vidyapeetham

Amritapuri Campus

REPORT BY THE DEAN

Campus Day, April 22, 2010

I have the honor, pleasure and privilege of presenting the Annual Report covering all Schools on this campus during the past one year.

When one looks at the year gone by and reflects on the challenges, tasks, trials and tribulations that Amrita Vishwa Vidyapeetham as a University in general, and the Amritapuri campus of the University in particular, has gone through, we can definitely experience a sense of accomplishment, satisfaction and confidence. And above all a sense of gratitude for the immense grace and blessings of our Chancellor and guiding light Amma for having made all of this a reality.

There are four Schools functioning on the campus today: Amrita School of Arts & Sciences; Amrita School of Ayurveda; Amrita School of Biotechnology; and Amrita School of Engineering. Besides, there are MSW (Master of Social Work) and MBA (Master of Business Administration) programs also running on the campus, which are at present not attached to any of the Schools. With close to a total of 4000 students in all disciplines put together and about 250 faculty, this campus has already started to make its presence felt in the academic arena.

I shall first present an overview of the facts pertaining to the campus as a whole, covering all the Schools, and then walk you through some of the highlights and achievements of the individual Schools on the campus.

As we all know, a big feather in our cap, that all of us can be very proud of, is that in a report released by a High Power Panel appointed by the Ministry of Human Resources Development, Govt. of India, Amrita Vishwa Vidyapeetham was listed in category “A” along with 37 other premier institutions that were found fit in all aspects as per UGC guidelines. This is a remarkable achievement for our University, given that it is one of the youngest Universities, and the Amritapuri campus certainly contributed significantly to this achievement. What this means to our students is that it provides great credibility to their degrees awarded by Amrita in terms of recognition and global acceptance.

Throughout the academic year, the campus benefitted from a large number of Distinguished Lectures and Invited Talks from experts in the different fields of interest and specialization in the campus.

Similarly a large number of programs, far too many to list or mention individually, organised by Professional Bodies, Departmental Associations and Clubs in different focus areas in the campus, helped to maintain a vibrant and enthusiastic atmosphere in the campus.

We are fortunate, that as a campus we are very strong in terms of infrastructure and facilities. Plenty of built-up space, approximately 1,20,000 sq.m., well equipped laboratories and classrooms, and a major Department of ICTS that provides support in the form of networking of a large number (nearly 2300) of computers, 60 high-end servers, projection facilities, etc. We have satellite connectivity, (due in large part to the kind efforts of Dr. Madhavan Nair himself), that enables us to transmit and receive lectures, etc. to all the other campuses of Amrita, including live lectures delivered on a daily basis by our adjunct faculty, based in the US and Europe. This, I strongly believe is what gives our students at Amrita, a significant edge over their peers in the rest of the country.

We have a large Centre for Corporate and International Relations (CIR) that facilitates placement of our students. As part of this exercise, the Centre also arranges for Industrial Training, Industrial Visits, Soft Skill Training and the like. It also arranges technical, and sometimes even non-technical, lectures by external experts. Currently this Centre also plays a major part in the delivery of Cultural Education. All our undergraduate students take Cultural Education as a compulsory part of their curricula. In addition, we arrange for Yoga classes, IAM meditation technique and Spoken Sanskrit for all our students.

Significant research activities are also in place in the campus under different focus areas. For a young campus, a significant number of research grants, far too many to list individually, awarded to faculty members in all the schools in the campus, and international and national level research publications as well as presentations at national and international conferences, have begun to have an influence and an awareness on the creation of a vibrant research culture on campus.

We are positive about this outcome and eager to build on this momentum.

The Centre for Wireless Networks and Applications developed India's first Wireless Sensor Network System for landslide detection. This technological breakthrough was developed as part of the research project "WINSOC" (Wireless Sensor Network and Self Organisation Capabilities for Critical and Emergency Applications), which was co-funded by INFSO DG of European Commission. The project was a collective effort of 11 partners, 9 from Europe and 2 from India. Amrita University was the only Indian university that was part of this project.

Cisco Networking Academy at Amritapuri Campus received one of the Best Academies Award for the year 2008 among the 1200+ academies across 26 countries in Asia Pacific region. We made the fourth position with maximum student enrollment among the top fifteen academies ranked by Cisco. Three instructors from our Academy were recognized for being the first CCNP instructors in the SAARC Region. Our Academy was the first one to initiate CCNP classes in India. The Cisco Academy at Amritapuri Campus was honored with these awards during the Cisco SAARC Academy Meet 2009 on May 29th at Bangalore.

Awards to Students

Chakshuayan – Vertical Take-off and Landing Air Craft won first prize at national-level Tech Expo on Green Engineering held at Technopark, Trivandrum in August 2009. The students involved in the project were Sreyas Narsipur, Shibesh Dutta, Vandana Vikram and Raghu Menon. Guides: Dr Balakrishnan Shankar and Joshua Freeman. This project also won the second prize in the "Young Innovators" category in a National Innovation Fair, "India Innovation Initiative, (I3)" held at IIT Delhi on October 27, 2009.

Biotechnology - Students from the School of Biotechnology performed spectacularly with 26 students qualifying at the National level GATE exam, 4 of them being ranked among the top 100 in the country with 8 students qualifying for the national-level CSIR Research fellowship.

Ayurveda - National Reorientation Training Programs (RoTP) were conducted in the school with financial assistance from "AYUSH"; coordinated by National Ayurveda Academy, New Delhi. A number of community outreach activities, free medical camps, health awareness campaigns conducted by faculty and students of the Dchool of Ayurveda were greatly appreciated.

Funded Projects

➤ DIT Project : "Wireless Sensor Networks for Real-Time Landslide Monitoring"

This is a live project at the Wireless Center sponsored by the Dept. of Information Technology (DIT), Govt. of India. The centre has developed and deployed a landslide monitoring system which was instrumental in issuing an early warning of impending landslides during the last monsoon season. The system created an impact among the top geological, research and government agencies and the Center has received requests from many government organizations to deploy the system in more landslide-prone areas in India

Another significant development which has generated a lot of excitement on the Amritapuri campus is the initiation of the MHRD Sakshat projects.

Sakshat Talk-to-a-Teacher

PI: Mr. Kamal Bijlani

MHRD funded Talk-to-a-Teacher project focuses on delivering a comprehensive, state-of-the-art virtual class room environment. Amrita E-learning team partners with IIT-Bombay to customize the Amrita developed E-learning software. A full-scale deployment with comprehensive tech-support has been planned and scheduled as one of the deliverables under this national-level project. As part of the project some deployments have been completed and are being used for virtual classroom activities.

Sakshat Amrita Vocational Education

PI: Ms. Bhavani Bijlani

Viable employment opportunities in India remain out of reach for an alarming percentage of the population, as 25 percent of the country lives below the poverty line. Cutting cost of attendance and vocational training are taken as main priorities of this key MHRD funded Amrita project.

S.A.V.E. employs cutting-edge haptic and virtual technology, enriching the individual's learning experience by simulating real-life situations and providing a practical training environment where the user can develop precision in their skill.

Sakshat Amrita Virtual Labs

PI: Dr. Krishnashree Achuthan

Intelligent development of virtual laboratories with state-of-the-art computer simulation technology to create real world environments and problem handling capabilities is required to bridge the gap between institutions (or industries) that retain the physical laboratory and distantly placed economically challenged educational institutions. A pilot project of 1 year duration included development of a virtual neurophysiology lab, many physical and chemical sciences labs combining the power of simulation, interactive animation, experimentally pre-determined measurement data and haptics/remote trigger experimentation techniques. The full project that will continue in the next two years intends to develop over 30 labs covering the entire breadth of biotechnology and some key topics in engineering and physical sciences. Amrita University jointly participates with IIT Delhi, IIT Kanpur, IIT Bombay, IIT Madras, IIT Kharagpur, IIT Guwahati, IIT Roorkee, IIIT Hyderabad, College of Engineering-Pune and Dayalbagh University.

I could go on and on listing these developments on the Amritapuri campus—all that has happened in the past year. However, to put things in a nutshell===

We would like to believe that we are doing reasonably well. However, we realize that this is only in a relative sense. In relation to what we can realistically achieve, or in relation to similarly placed institutions, we are certainly doing well. We have to keep on striving to achieve those lofty ideals and goals which we hope to do, with Amma's grace and blessings. After all, Excellence is said to be a journey, and not a destination! Let us continue on this journey to the best of our ability with God's grace.