

## *GTU INNOVATION COUNCIL*

### **A Report on the Progress of Udisha Clubs in Colleges all over the State**

GTU's Udisha Clubs have achieved significant progress during last week. Many Innovation clubs have attempted to build the capacity of students and faculties who will lead the Industrial Shodh Yatras during summer 2011. At these Shodh Yatras, students will map the industrial needs (Industry Defined Projects, IDPs) across the MSMEs and business sectors. GTU is the first university to establish more than 350 innovation clubs inside the university, consisting of faculties and students of Engineering, Pharmacy, Diploma, MCA and MBA.

Atmiya Institute of Technology & Science, Rajkot has organized the first meeting, of the **UDISHA Clubs at 'GTU Innovation Sankul – Rajkot- 1'** on Saturday, 30/04/2011, from 11:00 A.M. to 12:30 P.M. **Dr. J. V. Desai**, the Principal of Atmiya Institute of Technology & Science, welcomed the delegates from various GTU institutions and a vibrant discussion was held to explore the available possibilities and opportunities.



**Dr. J. V. Desai** (Principal, Atmiya Institute of Technology & Science, Rajkot), **Dr. T. R. Desai** (Principal, R.K. Group of Pharmacy, R.K. Group of Colleges), **Dr. M.V. Garach** (Principal, Government Engineering College, Rajkot), **Dr. Abhay Dharmasi** (Principal, Atmiya Institute of Pharmacy, Rajkot), Dr. Vikas Arora (Dean MBA/MCA, Atmiya Institute of Pharmacy, Rajkot), **Prof. D. D. Shukla** (I/C Principal, Atmiya Institute of Technology & Science for Diploma Studies, Rajkot.) and **Prof. A. M. Kothari** (Faculty coordinator UDISHA club, Atmiya Institute of Technology & Science, Rajkot.) took part in the discussion to develop a locally relevant framework for the Innovation Sankul.

Similarly **C. K. Pithawalla College of Engineering and Technology, Surat** arranged a meeting between 4:00 to 5:30 pm at the institute seminar room. **Dr. A. H. Gandhi** shared the necessary info and appreciated suggestions from pre final year students and their faculty members. They decided to keep

## GTU INNOVATION COUNCIL

each of the students in a direct loop of information networks on innovation. This will inspire them to be more innovative both in product and process designing.



**Dr. H N Shah**, Coordinator of UDISHA club at CSPIT, discussed about the aim and vision of innovation Sankuls and informed the participants about coordinator of each Sankuls as recently announced by GTU. The participant among student and faculty members appreciated the inclusion of industry defined projects and practical learning approach based on innovation into academic system.

**A meeting of UDISHA club executive committee** was conducted on 28 April 2011 in the presence of **Dr. Abhijeet Chatterjee** at **Dr. J. K. Patel Institute of Management** where all executive committee members along with faculty coordinator were present and took active participation at the institute. The most encouraging part of the meeting was all the members are quite confident on the initiative of University and support. Apart from the routine industry visit the member suggested that they could generate some additional leads with industry for Innovation.



## GTU INNOVATION COUNCIL

**Prof. Chintan Modi, UDISHA club coordinator**, GCET arranged a similar meeting on 29th April, 2011 at the college level.



GTU **Udisha club** at **GOVT ENGG COLLEGE, SURAT** arranged an interactive discussion session led by **Prof. Jayesh Patel** and udisha members.

**Dr. S. T. Rajan, Principal, Om Shanti Engineering College** and **Prof. A. K. Dhandhiya, co-ordinator Udisha club** organized an **Awareness Program** at the college on 30th April at 10:00 AM in conference Room.

**LDRP – ITR - Gandhinagar** organized first formal meet of **the Executive Committee of the UDISHA Club** of LDRP –ITR on 28th April – 09. **Prof. Keyur Shah** welcomed all those, present at the meeting. A decision was taken to inform the whole of the student community about the concept and action agenda of the GTU Innovation Council so that the optimum expertise of technical community can be harnessed in GTU. **Dr. Gargi Rajpara (Principal – LDRP ITR)** presented detailed guidelines of activities under UDISHA Club. As a part of future planning, initiative steps were decided like spread awareness about the club activities amongst the students; identify the industries of various engineering field during summer vacation, plan for industrial visits during the next semester etc.

**Mr V.P.Lunja Chairperson of the GTU Innovation Club** at **S.D.Patel Polytechnic-Gadha** arranged a meeting of the Club last week. **Mr. Akshay Kansara, Co-ordinator of this club** gave an oral presentation about the ‘Innovation Sankul’ to the members. All the members appreciated the innovative task initiated by GTU.

## GTU INNOVATION COUNCIL



**Dr. Gargi Rajpara (Principal – LDRP-ITR) and Prof. Keyur Shah (Coordinator-UDISHA Club)** are sharing their views with their Udisha Club members on the theme of GTU Innovation Council to bind industry-academia together.



**Mr. Pravesh Bhadviya (Director – Project and Corporate Affairs, Sabar Institute of Technology for Girls) and Mr. Rajesh Lavingia, Coordinator of Udisha club** arranged a meeting on 29th April, 2011. In this meeting, following decisions were taken:

- (1) To plan a 'Shodhyatra' in due course of time till 30th and to make it a regular practice from the upcoming semesters.
- (2) To affiliate the institute with 4-5 industries in the region within a short duration for regular Industrial visits & summer training etc.

## GTU INNOVATION COUNCIL

(3) To upload the presentation on the institute's website to make students and their parents aware about the initiatives taken by GTU and its affiliated Colleges

**Ms. Mansi Patel, Ms. Kruti Lavingia, Mr. Jigar Shah, Ms. Neelu Kanabar, Mr. Ajit Pujara and Ms. Atashi Ajmera** were the key faculty members who participated in the above brain storming session.

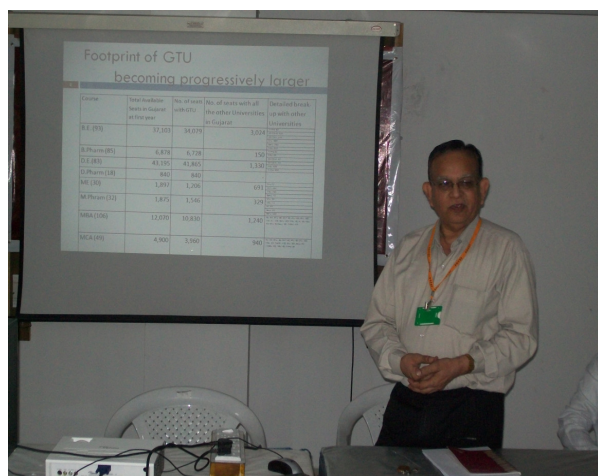


**Shantilal Shah Pharmacy College** has conducted the meeting and presentation to all pre final year students and faculty members on 30th April 2011 about GTU Innovation Council. **Dr.Pankaj H. Prajapati of Shri Sarvajani Pharmacy College, Mehsana** conducted a seminar-cum-presentation and shared his ideas on innovation-driven pharmacy education ecosystem.

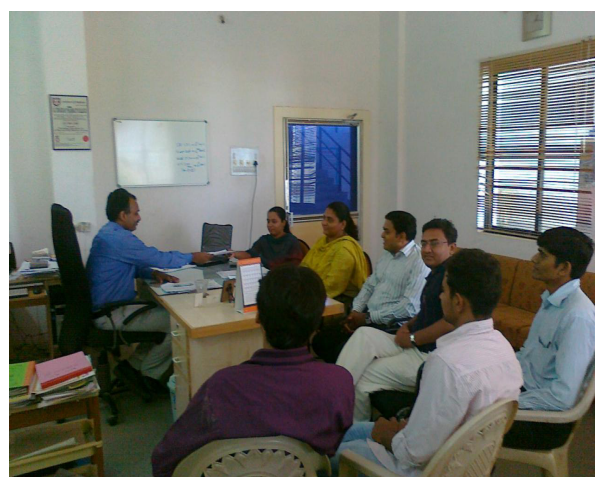


**Silver Oak College of Engg & Tech** arranged a conference chaired by **Principal Dr. P. K. Shah** on 29 April 2011 at 12.15pm. **Udisha Co-coordinator Prof. J .B.Sarvaiya , T & P Officer Mr. Jagat Shah, Faculty members Ms. Krupa Patel, Mr. Aashish Kacha, Mr. Amit Agrawal, Mr. Jagat Shah, Ms. Hasumati Patel** and student members were invited to share their thoughts and inputs.

## GTU INNOVATION COUNCIL



S. J. Thakkar Pharmacy College, Rajkot has organized the first meeting of 'Udisha Club', framed as per the direction of GTU, on 30th April, 2011, Saturday during 12:00 noon to 01:00 pm. Dr. Manish A. Rachchh, Mrs. Parula Patel, Mr. Pinakin Jadav, Mr. Mehul Rana and associate team participated in discussion on developing innovating innovation ecosystem in pharmacy education sphere. Dr. Manish A. Rachchh discussed about GTU policies regarding the final year student projects by identifying Industry defined problems (IDP) and to do so by arranging 'Industrial Shodh Yatras' during the upcoming summer. Dr. Manish A. Rachchh suggested approaching directly to different pharmacy SMEs and MSMEs by sending a letter highlighting our objectives for IDP as well as for 'Shodh Yatra' in the beginning stages. Faculty and student members were given responsibility to compile collect and co-ordinate with different pharmacy industrial clusters across Gujarat and specific faculty members were assigned for each pharmacy cluster of Gujarat.



## *GTU INNOVATION COUNCIL*

**Sankalchand Patel College of Engineering - UDISHA Club** has organized a meeting at “**Techsat Seminar Hall, S.K.Campus- Visnagar** on 27th April, 2011 during 4:00pm to 5:00pm. At the beginning of the meeting **Mr. Krunal K. Patel - Training and Placement Officer** gave a brief introduction regarding objectives of “**UDISHA CLUB**” set-up by GTU. **Dr. P.T. Kulkarni – Patron of the Udisha Club and Co-Chairman of GTU’s Mehasana Innovation Sankul**, gave an oral presentation about the ‘**Innovation Sankul**’. All the members of the club and students appreciate the new initiative introduced by the GTU. All Club Members including students jointly worked on an Action Plan to conduct Shodh Yatras, as proposed by GTU. The Training and Placement Cell has been given the responsibility to develop a full project report up on “**Shodh Yatras**” by 15th May, 2011. Finally it was decided to schedule such meetings on 15th of each month.



**Mr. Shailesh K. Patel (i/c Principal of SSPC) and Mr. Sanjay K. Soni (L.E.E. & Co-ordinator of UDISHA club)** arranged a meeting of the Club at SSPC College on April 29/04/11.

## GTU INNOVATION COUNCIL



**Dr. Jayeshkumar S. Patel, Principal, VADODARA INSTITUTE OF ENGINEERING, KOTAMBI & Patron – UDISHA Club** arranged a meeting of the Executive Committee of the Club and Professors and HODs on 30/04/2011 at the institute. **Prof. Praful P. Chudasama, Prof. A. S. Mandot, Prof. Pranav Bhagaonakar, Prof. Praful P. Chudasama & Prof. Amit Chuahan** shared their views on research ideas and the role of UDISHA members. **Prof. Pradip Rana, Prof. Spruha Lad and Prof. Ajaysinh Rathod** discussed the issues of innovative projects and models to the members. It was proposed to establish a research centre on a specified field in the college campus.



## GTU INNOVATION COUNCIL



G.P.Rajkot arranged a meeting chaired by **Shri K.R.KHATRI ( I/c Principal G.P.RAJKOT )** . **Shri K.V.Dave, Institute Co- ordinator –UDISHA Club, Shri V A Chikhalia, Shri K L Makwana, Shri N R Suchak, Shri N N Hansalia, Shri T P Chanpura, Shri J B Vala and Shri V N Kaila** were key participants in the discussion. **Shri K.V.Dave Institute Co- ordinator –UDISHA Club** explained the implementation of Shodh Yatra. The mechanism for sending the pre final year students during the summer to various industries of Rajkot zone and to start finding out prevailing technical problems in industries was which can be solved by Diploma Level students. At the same time it was decided to strengthen the Industry Institute Interaction of institute at staff level with integrated efforts of Training & Placement Cell and all Exe. Committee members.

Similarly the first meeting of **Udisha Club** was organized at **H.J.D. College** on 3rd May, 2011. **Dr.Ashok Kandya, the chairman of Udisha Club** addressed the members of executive committee. The concepts like Innovation Sankul, Industrial Shodh Yatra were discussed by the **Coordinator Ms. Maitry Vyas** .The meeting ended with question-answer session. The chairman appreciated this step of GTU and said that this type of activities will surely benefit students in their career.

## GTU INNOVATION COUNCIL



The first meeting of **UDISHA Club** of **N. G. PATEL POLYTECHNIC, ISROLI-AFWA** was held on 4th May, 2011, Wednesday during 12:45 pm to 2:00 pm. **Mr. J. B. Misty, Chairman of this Club** described the process of inception and actualization of 'UDISHA Club' policy framed by GTU. **Mr. M. B. Dhargar, coordinator of this club** gave the power point presentation about 'Innovation Sankuls" sent by GTU. All staffs and students showed their enthusiasm and discussed with Mr. M. B. Dhargar the guidelines given by Dr. Akshai Agrawal, at SCET, Surat where industrial persons were also present. Students were given the guidelines about the Industrial Defined Problem (IDP). Mr. M. B. Dhargar gave information about 'Techpedia.in' website and preparation of documentation.



**S.T.B.S.College of Diploma Engineering** organized the first meeting of 'UDISHA CLUB', under the Chairmanship of **Prof. Y.S. Choupare, Patron of UDISHA Club**. **Mr K.K. Joshi, Coordinator of UDISHA Club** gave an oral presentation about 'Innovation Sankul" .

## GTU INNOVATION COUNCIL



**Principal/ Patron of UDISH club NSIT, and all other branch wise Coordinators of UDISHA Club** arranged a meeting on 2nd of May. In this session participants discussed the future plan of the Club. As a part of Shodh Yatra they arranged one site visit for all 6th semester students of Electrical and Mechanical to Saradar Sarovar dam. The institute arranged one site visit for 4th semester civil students at Bopal site for Bakeri Infrastructure. A group of 4th semester civil engineering students is also working for one project "How to minimize the cost of energy of college building and reduce the temperature inside the building in summer", under the guidance of Prof Shakil Malek of NSIT.



A meeting of **UDISHA club of Government Engineering College, Rajkot** was held on 4 May 2011 at 11.30 a.m. in Seminar Hall of E.C. Department. **25 club members (faculties as well as students)** attended the

## GTU INNOVATION COUNCIL

meeting, chaired by **Prof. M.P.Jani, Institute UDISHA Coordinator**. The presentation on 'GTU Innovation Sankuls: Building a new Collaboration Model' was delivered by **Dr. S. S. Singh**. **Prof. A.J. Mankad** discussed the role of institute and students in UDISHA club. She also discussed the possible ways to achieve the objectives of the club. The members also discussed about future course of action regarding GTU innovation Sankuls, final year projects and Shodh Yatra.



The below points were appreciated as the unique features of GTU Innovation Council after interacting with around 5 dozen GTU's Udisha clubs (Innovation Clubs) and their members in last week.

### Unique features of GTU Innovation council

**1) Creating User Defined Innovation Eco-system-** To create value for the research work, that has already been done, and the research which is under process at GTU, a User defined innovation ecosystem has been designed. Students and faculties at GTU are now defining the user's (industry, society, and business) need via Industrial Shodh Yatras which will be converted as final year project /thesis in UG, PG, and PhD level at GTU from July 2011. Around 40,000 projects will be attempted based on real industry floor issues at GTU and even 1% success rate will deliver a few hundred solutions to MSMEs (Micro, Small & Medium Enterprises) of country every year.

**2) Mapping of Industrial Needs and Academic research-** All GTU research works in UG and PG level are now being scouted from all colleges and are being put together at [www.techpedia.in](http://www.techpedia.in). This will map the mind of 1 lac technical students every year and innovation quotient of the university will go up in a single stroke. By scouting the IDPs (industry defined projects) from floors of MSMEs (Micro, Small &

## *GTU INNOVATION COUNCIL*

Medium Enterprises) GTU students and faculties will map the industrial needs in 166 industry clusters of Gujarat from all engineering disciplines.

**3) Democratizing innovation management process-** To ensure the active participation of each student of GTU in various stages, GTU Innovation Council has devised 3 stage systems by creating GTU Sectorial Council, GTU Innovation Sankuls/Clusters and Udisha (Innovation) Clubs. 370 Innovation Clubs (Udisha) have already been established in GTU colleges by now and by April 2011, 495 innovation clubs will be institutionalized in the entire GTU system. An udisha club consists of students and faculties of each stream of engineering. Sectorial Council at University has all vertical industry association representatives, who will take care of specific branch of engineering and technology in innovation clusters/Sankuls.

**4) Industry-Academia cluster development involving GIDCs and GTU colleges-** Involving GTU colleges and MSME (Micro, small and medium enterprises) clusters, 25 GTU innovation Sankuls have been created in various parts of Gujarat. e.g.- Ahmedabad, Vatva, Gandhinagar, Naroda, Vadodara, Godhra, Vallabh Vidya Nagar, Surat, Vapi, Ankleshwer, Rajkot, Morbi, Bhavnagar, Jamnagar, Junagadh, Kuchchh, Surendranagar, Mehshana, Patan etc. The Innovation Sankuls will have 18-25 colleges of engineering / MBA / pharmacy / polytechnic / MCA and a thousand MSMEs. Some clusters /Sankuls have been created to address the need of specific sectorial industries in state.

**5) Creating sustainable motivation for students and researchers** - GTU will reward 2 credits in its academic system to define the real floor issues (Industry defined projects, IDPs) of MSMEs (Micro, small and medium enterprises) of the State. Best 1000 problem proposals which will be submitted to University in July after industrial Shodh Yatra in summer of 2011 will be supported by the university to drive the ideas to product format. Four academic credits will be rewarded for attempting to solve these IDPs (industry defined projects) in the final year of GTU students.

**6) Developing relay model of innovation and student entrepreneurship module development-** Techpedia and GTU will document the progress of all research works at GTU of each industry defined projects. For the very 1st time GTU will document the progress of its all research works in real time so that a few cycles of attempts of research in coming year will lead the raw IDPs (MSME industry problems) to products or solutions which can be absorbed by industries. GTU will support the best solutions to reach a product level conceptualization and then students will be encouraged to develop entrepreneurship at the UG level as it has been successfully done in experimental module in august – December 2010. This will foster innovation fueled student enterprise modules and a few dozen student startups can certainly be realized at the end of the academic year.

## *GTU INNOVATION COUNCIL*

**7) Emphasis on process innovation** – For the very 1st time GTU Innovation Council will not only focus on the desired production solution for industries but it is also emphasizing on documenting the best ways to succeed in specific type of research works and to note down the ways which increases the time cycle of developing solution in corresponding research areas. Multiple teams of students and faculties at multiple places will attempt similar industry problems to develop a model of collaborative research and product designing in innovative ways. This will reduce the time cycle of developing innovative products and processes for industries.

**8) Socializing Technologies-** GTU Innovation Council is not only addressing the floor issue of industries but also scouting and documenting the socio-technical issues of tribal people and the most backward districts of the State like Dang. Through Shodh Yatras GTU students are interacting with the rural and tribal people to map their socio-technical needs and converting them as research projects like designing low cost solar application for tribal areas and designing machines to process Chironji seeds in Dang districts.

**9) Protecting IPR, Intellectual property rights and bringing Saraswati and Laxmi together (promoting knowledge economy along with innovations.)**-GTU Innovation Council will help the best thesis/projects attempted by students and faculties to get promoted and the University will help them in protecting their intellectual property rights (IPR) so that research will lead to sustainable knowledge economy with proper credit protection with respect to the innovators. Awareness will be created among students and faculties about above issues to increase the efficiency of the system at each Sankul and Innovation Club level.

**10) Promoting Frugal/Gandhian Innovations-** In an attempt to promote the concept of Gandhian engineering at university level in the state, Techpedia.in, in association with

Gujarat Technological University (GTU) has initiated one of its kind of award to honour the best cost effective innovations at academic level that could benefit the masses. The categories for the awards have been instituted after the 32 engineering disciplines offered at GTU. Two awards will be given in each category of under-graduate, post-graduate and diploma courses. The award will encourage and support students and faculty to design cost-effective and eco-friendly products and services for the larger section of society. The innovators will be motivated to put their efforts together in socializing technologies. Students and researchers at GTU will not only innovate to create value for money but also to create value for many. The innovation clubs will streamline the attempts aimed at creating more from less for more and more.

**11) Harnessing the numerous months of efforts of research for productive innovation creation-** GTU students are putting some 10 months of effort in their final year in attempting to solve

## *GTU INNOVATION COUNCIL*

projects as a part of the curriculum. Around 1 lac students while putting 10 months of effort per year constitute nearly 1 million human months of efforts. Through this process GTU Innovation Council will effectively harness the students' inputs guided by some 15,000 faculties at GTU in a collaborative environment to create a sustainable knowledge ecosystem in a period of the coming 3 years with a "feel the difference approach".

**12) Exchanging mentors from industry and academia-** GTU innovation Sankuls will exchange floor engineers from various MSMEs (Micro, small and medium enterprises) with corresponding faculties of particular stream which will further lead to design a road map in academia for a need based evolution. Students will get a practical insight and feedbacks from industry floors will enable them in blending their thoughts with proper orientation to adapt innovative approaches in solving real life issues.

### **GTU Innovation Council will work**

- To inculcate among students and faculty a spirit of enquiry, confidence in their ability and innovation
- To encourage the students to work with industries and businesses and R&D institutions with the help of Techpedia and existing R&D infrastructures and ecosystem.
- To facilitate innovations by MSMEs (Micro, small and medium enterprises) by value addition through support by GTU students and faculties
- To create appropriate eco-systems and environment to foster innovation by identifying the problems, designing and developing the product or improving the business / industrial processes, mentoring students/researchers during the project and evaluation of the project.