



REPORT ON

ANVESHAN - 2015

National Student Research Convention

ASSOCIATION OF INDIAN UNIVERSITIES (AIU), NEW DELHI

&

SARDAR PATEL UNIVERSITY, VALLABH VIDYANAGAR-388 120, GUJARAT

28th – 30th March, 2016

• Venue:- M. P. Patel Auditorium, SPU, Vallabh Vidyanagar

CONVENTION HIGHLIGHTS

• No. of delegates: 82 (Registered)

• Accompaning officials: 34

• Zonal Coordinators: 04

• Key-note address: 01

• No. of Projects: 62

• Other activities: Cultural Programme at M. P. Patel Auditorium,

SPU, Vallabh Vidyanagar

Aims/Objectives:

The broad objectives of ANVESHAN - 2015 was to identify the researchers with research aptitude and interest and to motivate and support them for taking up research as career. It aimed to identify fresh talents with unconventional and innovative ideas and thoughts and channelize them into a research activity so that this effort would contribute in creating a solid core of knowledge and skill research workers who can strive for solving the day to day problems of our society by finding dynamic and plausible solutions.

The Convention turned out to be a good gethering of talented and enthusiastic students from all over India from renowned universities. Research Students coming from five zones i.e. East, North, South, West and Central participated. The competition in the convention was mainly at two levels, first a poster session followed by podium presentation. All the posters which have been recommended/selected at Zonal Level were allowed to be displayed for an entire session of three and half hours after keeping the total confidentiality about the authors and their affiliations. A panel of judges reviewed and accessed the posters for each of the areas of (1) Agriculture, (2) Basic Sciences, (3) Engineering and Technology, (4) Health Sciences & Alllied Subjects and (5) Social Sciences, Humanities, Commerce and Law. The posters were accessed taking into various criteria i.e. Scientific Thoughts and Principles (20%), Creativity (20%), Throughness (10%), Skill (10%), Relevance (20%), Cost Effectiveness (10%) and Team work (10%). The Live Models were allowed to be exibited at the time of poster session wherever applicable. Another opportunity for all of the participants was given to present their project in the form of Podium Presentation in three parallel sessions. The presentation was restricted to seven minutes followed by three minutes of question-answer session. The Technical Program is shown as Annexure- I

Day 1 (28th March, 2016)

The inugural function started at 10.00 am with the University song followed by the Lamp Lightening. **Prof. Dr. S. K. Bhatt**, Co-cordinator, IQAC, SPU offered a warm welcome to the dignitaries and all the participants. He gave a brief introduction of the President of the Inaugural function, **Prof. Dr. Harish Padh** and **Dr. Amarendra Pani**, Dy. Director (Research), Association of Indian Universities (AIU), New Delhi. **Prof. Dr. N. V. Sastry**, Cordinator, IQAC,

SPU highlighted the idea of National Student Research Convention ANVESHAN – 2015. He has also given the brief about the convention, number of projects and especially enlisted the guidelines for the participants and also to the learned judges about the assessment process.

Dr. Amarendra Pani, Dy. Director (Research), Association of Indian Universities, New Delhi addressed the Convention by saying that 21st Century is the Knowledge Century and hence one should focus on gaining knowledge by three sources i.e. religious scriptures, electronic media and internet. He also emphasized on University research, research Ecosystem and its importance. In his speech, he stated that inadequate funding to the University, shortage of qualified faculties, academic surrogacy and methadological issues are the major constraints to be taken care of for quality research. He mentioned that origin of Anveshan was in 2007 from Avishkar, a student research convention started in the state of Maharashtra.

Hon. Vice Chancellor of SPU, **Prof. Harish Padh**, in his presidential remarks mentioned that he was pleased to see equal participation of female and male scientists in Anveshan. He shared his experience on research in science and mentioned that science is the solution of our problems. He said young minds who has interest in research are the real treasure of our Nation. He expressed his concern about the lack of adopting rational thinking/process guided by scientific thought. He in his thought provoking speech mentioned that process is more important than product of science. According to him one should develop curiosity to initiate and conduct good research. He also differentiated between science and non-science research. He eloborated that importance of assuring a balance between the research among science and social-science subjects. There should not be overemphasis on sicentific and technological research. He said in the fast changing environment, India has a plenty of opportunity to conduct good research. He wished the participants a great success.

At the end of the Inaugural function, **Shri N. K. Bhatt**, Registrar (In-charge), SPU, proposed Vote of Thanks wherein he thanked AIU for giving an opportunity to host the mega eventin SPU on the occasion of diamond jubilee here. He also has thanked the AIU officials, Dr. Amrendra Pani and Smt. Usha for all the guidance and help. He has also complemented the entire team at Sardar Patel University, especially IQAC officials for all their untiring hard work and commitment in arranging this mega event.

Inaugural function was followed by First round (Poster Display and Assessment) at M. B. Patel College of Education, SPU, wherein participants displayed 62 posters in individual/group. A cultural Programme was organized at M. P. Patel Auditorium, SPU at 7.45 p.m. on this occasion. It included "Lok Kasumbal Diaro" organized on the occasion of 125th Birth Anniversary of Dr. Babasaheb Ambedkar. All the participants enjoyed the programme.

Day 2 (29th March, 2016)

The second round of Podium (Oral) presentation was conducted in three parallel sessions which were arranged at following venues:

- 1. Auditorium, Department of Chemistry for participants in the field of Agriculture & Basic Sciences
- 2. M. P. Patel Auditorium for participants in the field of Engineering and Technology
- 3. Auditorium, Department of Materials Science for participants in the field of Health Sciences & Alllied Subjects and Social Sciences, Humanities, Commerce and Law.

The interested participants were guided for touring Amul Dairy, Anand and Sardar Patel Memorial at Karamsad, Anand.

Day 3 (30th March, 2016)

On the third day, based on the results of the podium presentation, a joint session was arranged for the winners of the first prize in each of the five catagories following the same stipulated timings. The judges from all subjects were present and adjudged the best among the five for the several criteria as mentioned above to choose the presentation for the award of **Prof S K Mukharjee Gold Medal Instituted by AIU, New Delhi**.

Towards the conclusion of the Anveshan – 2015, splendid Valedictory Function was organized which started with the University song. **Prof. Dr. N. V. Sastry,** Coordinator, IQAC, SPU, spoke at length on the activities during the Aveshan-2015 and described the deliberations. He introduced the Guest of Honour, **Dr. N. Sahoo** (Advisor and Member Secretary, GUJCOST) and the Chief Guest, **Prof. Dr. Furqan Qamar** (Secretary General, AIU) who graced the Valedictory Function. **Prof. Dr. N. Sahoo** first of all appreciated AIU, New Delhi for choosing Sardar Patel University as a Host Institute for the National Student Research Convention,

Anveshan – 2015. He elabored the efforts of GUJCOST a body funded by State Government of Gujarat and DST- New Delhi in inculcating the scientific values, popularization of science among school children to citizens. He has requested the audience to join the Government of India in making its Flagship programmes such as Make in India, Start Up and Swachh Bharat Abhiyan.

Prof. Dr. Furqan Qamar, Secretary General, AIU appreciated the young researchers for all their efforts to come to Anveshan-2015 and present their thoughts and project. He has emphasized to the young audience that we are in a era of challenges and the commitment and hard work are at test. He has also commented the hard work and cooperation from the Universities that hosted the Zonal Level Competition. Explaining the purpose of Anveshan programme of AIU, Prof Qamar stressed the need of nuturing and encouraging innovative and creative ideas. These ideas only come from a spirit of research enquiry and thought process. He has also elucidated the efforts made by AIU to plan and organize previous Anveshan programmes. The involvement of National Innovation Council that organizes festival of Innovations at Rashtrapati Bhavan and also incubation centers in such programmes would do a lot of good to the youngsters for translating their idea into a workable model. Prof. Qamar appreciated and felicitated the efforts of learned judges in choosing the prize and gold medal winner(s).

Some of the delegates also gave their feed back and expressed overall satisfaction. **Dr. Amarendra Pani** dealt with the Memento Presentation & Prize Distribution ceremony.

Following prizes were declared:

| Position | Individual/ Group | Name and Institute of the Participant | Title of the project |
|----------|----------------------|---|--|
| | | Area/Field: Agriculture | |
| First | Individual | Kanisht Batra Department of Animal Biotechnology CoVS, Lala Lajpat Rai University of Veterinary and Animal Science, Hisar | Novel approach of early pregnancy diagnosis in bovines |
| Second | Individual | Joshi Viral Prafulkumar College of Agaricultural Engg, Junagadh Agriculture University Junagardh | Development of Field scale microalgae cultivation system for bio-fuel production |

| Third | Group | Kunal Adhikary Amandeep Singh Lovely Professional University, Phagwara 144 411 (Punjab) | Sewage water management and agriwater utility |
|-----------------------|------------|--|--|
| Fourth Consolation | Individual | Ms Priyanka National Dairy Research Institute Karnal 132 001(Haryana) | Development of prototype of low cost milk processing system |
| | | Area/Field: Basic Science | |
| First | Individual | Sakshi Siriah PG Dept. of Biochemistry, RTM Nagpur University, Nagpur | Is Calcium and Vitamin D sufficient in Osteoporosis? |
| Second | Group | Aarathi Pradeep Vidhu Sara Vargis Vineeth Raj | Affordable lab —on-a —Chip point of Care Diagnostic Device for the Early Detection of Cancer |
| Third | Individual | Akshay Bisht National Institute of Food - Technology Entrepreneurships and Management, Kundli, Dist. Sonepat – 131028 | Fabrication of antimicrobial food packaging material from agro waste (non-wood) by modifying it by metal oxide nano, bulk particle and natural additives |
| | | Area/Field: Engineering and Tea | chnology |
| First | Group | Amritha A Divya Lakshmi Manikandan C School of Infrastructure, Department of Civil Engineering, B.S.Adbur Rahman University Vandalur, Chennai - 600048 | Performance Analysis and Evaluation of COB and Earthcrete Material. |
| Second | Individual | Akshay P. Raje Laxminarayan Institute of Technology, Nagpur | An Eco-friendly method to treat oil spills using human hair |
| Third | Group | Khalifa Anwar Ali Shahul Hameed A Sriram R Department of Civil Engineering, B.S.Adbur Rahman University Vandalur, Chennai - 600048 | Rehabilitation for Paralyzed based on Hand Gestures |
| | Area/Field | : Health Sciences and Allied Subjects, P | |
| First | Individual | Hridya H Vellore Institute of Technology Tamil Nadu 632014 | Inhibitory effect of Brazilein and Santalin on Tyrosinase: A Potentia Treatment to Hyperpigmentation |
| Second | Individual | Naveen Dhingra School of Pharmacy, Devi Ahilya University, Indore Madhya Pradesh | Molecular modeling (3D and 2D QSAR), Pharmacophore mapping and molecular docking of (E)-N-Aryl -2-Arylethene-sulfonamide |

| | | | Analogous as microtubule Targeted Agents in Chronic Myelogenous Leukemia |
|--------|------------|--|---|
| Third | Individual | Abhinandan R. Patil Nano-pharmacology, D Y Patil University, Kolhapur (MS) | Novel epitope fingerprint nanotheranostics for colorectal cancer |
| | Area | Field: Social Sciences, Humanities, Con | mmerce and Law |
| First | Individual | Suchika Siotia Indian Institute of Psychology and Research, Affiliated to Bangalore University, Bengaluru, Karnataka | Distance Reiki on Subjective Pain Experience on the Quality of Life of Cancer |
| Second | Individual | Ms Bulbul G Nagrale National Dairy Research Institute, Karnal – 132 001(Haryana) | A study on Regional Disparities in Dairy Development in Maharashtra |
| Third | Individual | Kiranjeet Kaur Panjab University Chandigarh – 160 014 | Effect of teaching biotechnology through science technology society approach on higher order thinking skills and entrepreneurial attitude of undergraduate science students |
| | | Prof. S. K. Mukherjee Gold Mo | <u>edal</u> |
| First | Individual | Hridya H Vellore Institute of Technology Tamil Nadu 632014 (Field/area: Health Sciences) | Inhibitory effect of Brazilein and Santalin on Tyrosinase: A Potential Treatment to Hyperpigmentation |

The winners were presented with Certificate of appreciation and a Memento. Ms. Hridya H. (Field/area: Health Sciences) from South Zone was awarded with Prof. S. K. Mukherjee Gold Medal for the best Research Project across all the five aforementioned fields, instituted by Association of Indian Universities, New Delhi in the memory of its former President, Late Prof. S. K. Mukherjee. The gold medal was presented by Prof. Dr. Furqan Qamar.

The Zonal Coordinator and the Judges were also honored with the Mementoes. The Convention ended with singing of National Anthem.

Dr. Pani, AIU at the end proposed Vote of Thanks and especially appreciated the efforts made by Sardar Patel University in oraganizing the Anveshan-2015. He has congratulated the winners and also other participants.

Co-ordinator

Internal Quality Asssurance Cell Sardar Patel University Vallabh Vidyanagar-388 120.