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FLIPSIDE

Profile	I
Achievement	6
Activities	8
Departments	15
Articles	47
Contact	53
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Institute of Science & Technology for Advanced Studies & Research (ISTAR)

Accredited with 'A' Grade by NAAC & KCG, Top 3rd Rank in GSIRF by KCG

VISION



To add significantly to our enduring civilizational tradition of pioneering excellence in learning, knowledge, enlightenment and self-realization, in a universally relevant context.

OBJECTIVES



01. To create and nourish a stimulating learning environment that ensures a globally relevant Education based on Eternal human valuers;

02. To forge and reward excellence in the curricular as well as the non-curricular sectors so as to ensure the scholars' global competitiveness;

03. To tap, nurture and unleash the innovative entrepreneurial abilities of scholars and thereby ensure lifelong socioeconomic, value addition;

04. To evoke and embellish the finest traits of human excellence that go on to dovetail into a sustainable career growth curve;

05. To affiliate, associate, liaise or otherwise synergize with any institution, body, entity, ethno cultural diaspora and the overall global fraternity in any form whatsoever, in support of the above;

06. To initiate, consolidate and extrapolate any objectives, functions and activities in support of





We dedicate ourselves to the perpetuation of our Founders' Vision of providing the infrastructure, facilities, operating conditions and overall environment conducive to the Education of young scholars, along with the desired physical, mental and character building inputs; we firmly renew our commitment to providing value added, globally relevant Education with an emphasis on the Techno Management domain, to ensure that our scholars fruitfully exercise their knowledge, skills and values in the global economy.



Dr. Niraj H. Patel Chairman's Message

I am glad to know that **ISTAR** is bringing out Third Issue of College Magazine **INSPIRE** at the onset of a new academic year. This is yet another milestone embodies curricular and co-curricular activities and praiseworthy achievements of the institute. I hope that **3rd Issue** will surely inculcate creative and hidden talents of students and faculty of the institute. I convey my **Warmest Wishes** to



students and staff of ISTAR for new academic year (2019-20).

Er. Shri Bhikhubhai B. Patel Chairman, CVM

ISTAR @ PROFILE

Our institute namely Institute of Science and Technology for Advanced Studies and Research (ISTAR) is a brainchild of Dr. C.L. Patel and was established in the year 1999 exclusively for postgraduate study and research in Chemical Sciences, Information Science, and Environment Science. ISTAR pioneered unique interdisciplinary courses like Master of Industrial Hygiene and Safety and Master of Valuation. Facility for Ph.D. study in six disciplines viz. Industrial Chemistry, Environmental Science, Botany, Biotechnology, Chemistry, and Computer Science is available at ISTAR. ISTAR is an approved professional institute by All India Council for Technical Education (AICTE) as well as UGC and affiliated to Gujarat Technological University (GTU) and Sardar Patel University (SPU). Institute recognizes importance and essentiality of extra-curricular and co-curricular activities. Students are encouraged to organize and participate in technical activities, cultural activities and sports activities for demonstrating their leadership skills and mark of worthy citizens. Institute is committed in shaping career of the students as per the aspirations of the world of tomorrow and has taken many initiatives in this regard. One of the major initiatives taken is Memorandum of Understanding signed by different departments of ISTAR with Institutes and Universities of global repute for providing opportunity for collaborative research, joint planning of seminars and exchange of students and faculties. We understand the importance of sponsored research programs and consultancy work and accomplishments of institute have generated recognition and faith among industries, recruiting agencies and aspirant students. Institute is regularly inviting expert faculties from academia, industries and R & D institute for achieving academic excellence and this has benefitted in placement of our students. Institute is conscious about the raising and maintaining quality standards of higher education, will certainly widen the horizon in the era of knowledge economy with enlightened management of CVM under patronage of Dr. C.L. Patel, and by the efforts of qualified and committed faculty members of ISTAR. Presently, Er. Shri Bhikhubhai Patel took over the charge of CVM as a Chairman. He is a visionary personality with a goal to enhance quality of education using recent technological advancements. At present, CVM operates 49 educational institutions providing pre-primary to post-graduation in all fields of learning.

SALIENT FEATURES

- ISTAR is one of the premiers Institute of the our country and managing 11 diverse postgraduate programmes under one umbrella with unique, exceptional and job oriented courses
- Secured top 3rd Rank among all colleges of Gujarat by KCG in GSIRF ranking
- M.Sc. Valuation and M.Sc. Hygiene & Safety are only of their kind in the whole nation
- M.Sc. Geoinformatics is a novel program for entire state started by ISTAR in 2016-17
- M.Sc. Surface Coating Technology and Instrumentation & Control are the only courses of its kind offered by ISTAR in the state of Gujarat
- Sophisticated Instrumentation Centre for Applied Research and Testing **(SICART)** facilities established jointly by CVM and DST and ISTAR are jointly conducting 3 days Sophisticated Instrumentation training for students of EST, IC, OC, PST and SCT departments
- Testing and Consultancy in the field of chemical sciences has earned good reputation

and faith of industries and Institute is providing Testing and Consultancy services to many industries including GNFC

- Specialized training programs for Industry & Institute sponsored candidates
- Add-on courses for curriculum enrichment and improved employability
- Remote Class room for IIRS-ISRO outreach and faculty development programs

Sr. No.	Program
1.	M.Sc. (Environmental Science & Technology)
2.	M.Sc. (Industrial Chemistry)
3.	M.Sc. (Surface Coating Technology)
4.	M.Sc. (Polymer Science & Technology)
5.	M.Sc. (Organic Chemistry)
6.	M.Sc. (Instrumentation & Control)
7.	M.Sc. (Real Estate Valuation)
8.	M.Sc. (Plant & Machinery Valuation)
9.	M.Sc. (Industrial Hygiene & Safety)
10.	M.Sc. (Geoinformatics)
11.	M.Sc. (Information Technology)

COURSES @ ISTAR

LEARNING LEVELS @ ISTAR

- Our departmental Teacher counselors keep evaluating the students by asking questions in classrooms, conducting weekly tests, giving them assignments and discussing results of internal tests.
- Open-House: Department Counselors discuss and provide improvement measures to students, and their parents regarding internal exam marks, attendance, regularity, sincerity, assignments, seminar presentations, remedial classes, and counseling to overcome the drop-out ratio.
- SC/ST/OBC/SEBC and minority students are given benefits of scholarships as per reservation policy.

STUDENT CENTRIC METHODS @ ISTAR

- Departments organize Weekly tests on every Saturday for Junior and Senior students, respectively.
- The focus of each department is always student centric, and they are informed about the courses available to them, examination system, counseling, sports, NSS and the future prospects and scope of each program.
- Course-wise topics are selected for the group seminars and discussion and the student groups are identified for different topics.
- Field studies, seminars, workshops, Study tours, industrial visits, Practical classes/Experiments provide platform for collaborative learning.
- Project assignments, seminar presentations, and preparation of reports enhance students' independent learning ability.

• Counseling meetings for groups of students to discuss and solve their problems are organized periodically

TEACHING-LEARNING @ ISTAR

- Departments arrange Subject Seminars, Expert Talks, Training Seminars, Project Seminars, and Industrial Visit etc.
- $\circ~$ Campus interview preparation related training programmes are arranged by all departments
- $\circ~$ 4 week in plant training is compulsory for IC, SCT and PST students after completion of 2^{nd} semester
- Students of the IT, GIS, Valuation, INC, EST department are assigned project work in last semester, and they are guided for review of literature, project work planning, and preparation of project reports.
- All departments offers project work to the last semester students which develops R
 & D related insight in the students and also gives them the exposure of the professional environment
- Additionally, above department are having Ph.D. students under guidance of faculties. The faculties carry out the research work and Ph.D. students are presented during internal seminars, which provide inspiration to the post-graduate students for creative thinking and joining for R & D work.

CONTINUOUS INTERNAL EVALUATION (CIE) @ ISTAR

- Syllabus, scheme of courses, question paper pattern along with marks distribution, pattern of theory examination and scheme of assessment for practical examination are informed to all the students well in advance.
- Subject seminars and assignment are the part of internal evaluation
- Department also conducts weekly test and internal test as per prescribed schedule.
- Open house is conducted every year where parents can see the answer books of their wards
- Summative assessment is done through weekly tests, internal tests, final university examination, and *viva-voce*. This ensures systematic, transparent, and unbiased assessment of learning outcome. Besides, preparation of Dissertation and Seminar presentation on project work provide important platform of evaluation of the students.
- Formative assessment is done through seminars presentations (Topics allotted), weekly tests, project assignments, mock interviews, attendance and Group discussion and this has resulted in better student – teacher interactions, learning process, personality development of students, improved knowledge application and employability.
- This mechanism ensures greater involvement of students in studies and also inspires them for self-learning study and helps the teachers to identify the slow learners who need more assistance/help.
- Results of any form of internal evaluation is declared in one week time

INNOVATION IN RESEARCH @ ISTAR

- The ISTAR is having a separate research committee looking after the scrutiny of research proposals before submitting it to the funding agency. Research committee arranges for presentation / evaluation of proposal and if required, suggestions / guidance is given to PI. Few departments excel in academics, research and consultancy. This has proved research and consultancy activities and analytical services to more clients by SCT and a coating policy document is prepared for GNFC, Bharuch. Research collaboration is done with AIST-Japan, and MST, Rolla, MO, USA and SVNIT Surat and industry sponsored research work is taken up by IC department.
- All departments are fully equipped with ICT facilities and institution support is provided for timely auditing and submission of utilization certificate to the funding authorities. Every teacher involved in research has to get his or her expenditure audited from a chartered accountant hired by the institution and submit the utilization certificate in time.
- Laboratory facilities, manpower, administrative and library support is made available for the smooth conduction of the research project. Investigators sincerely utilize the funds as per the budget allotment in the sanctioned proposal.
- $\circ\,$ Research is a significant activity of the institute for both research scholars and faculty members.
- Faculty members are encouraged to participate and present their research papers in National and International Conferences for which they are provided duty leave.
- Faculties of other institutes are invited as visiting fellows to interact with the faculty members and students for appraising about emerging research areas and opportunities.
- The Institute is having collaboration with various institutes at regional, national and international level.
- $\circ~$ The institute is having a recognition certificate of 12 (B) and 2 (f) Acts issued by UGC, New Delhi.
- Faculty members are encouraged to submit research projects for financial support to various national agencies.
- Almost all students of M.Sc. are given project work as a part of the university curriculum. The dissertation is assessed by the expert committee of S.P. University.
- $\circ~$ Some of the research works also have been published in journals of national and international reputation.

EXTENSION ACTIVITIES @ ISTAR

Various extension related activities organized by the NSS unit and various departments develops an insight related to social issues. NSS has organized Jan Dhan Account Opening Movement in nearby villages, health check up camps, drinking water check up camps, lectures on various topics addressing social awareness on various issues etc. Such things develop the sense of social responsibility in the students participating in such activities. Along with this NSS organizes Thalasamia talk and checkup camps, Eye checkup& free treatment, blood donation camps, crops and diseases control to farmers annual camps at villages etc. every year, which sensitizes various social qualities viz. Cooperation, harmony, helping nature, nationalism etc. among students.

MoUs & LINKAGES @ ISTAR

- The institution has collaborations with the following research institutes: Gujarat Institute of Desert Ecology (GUIDE), Gujarat Ecology Commission (GEC), Nandesari Industrial Association (NIA), Green Circle Inc. Group of Companies, Baroda for student short time research and project work.
- MoU with Gujarat Cleaner Production Centre **(GCPC)**, Estd. by Department of Industries & Mines, Government of Gujarat, Gandhinagar, for Green Audit Activities
- College also tie-up with international university departments like University of Cincinnati, and Missouri University of Science and Technology, Rolla, Missouri, USA, and Department of Environmental Management, AIST, Tsukuba, Japan, for student research and Ph.D. program.
- MoUs with Lupin Ltd., Zydus Cadilla Ltd. For training and placement
- MoU with VCCl for project work
- MoU with SVNIT for student exchange
- MoU with Red Hat India Pvt. Ltd.

Department	Functional MoUs with Industry
EST	Nandesari Industrial Association (NIA), Green Circle Group of Companies (Green Circle Inc.), Baroda Gujarat Cleaner Production Centre (GCPC), Estd. by Department of Industries & Mines, Government of Gujarat, Gandhinagar
IC	Lupin Ltd. Zydus Cadilla Ltd., Vedant Chlorochem Pvt. Ltd., SVNIT
SCT	ISSPA, Ahmedabad Region
PST	IPI Student Chapter
MIHS	Pramukh Swami Medical College, Karamsad

CAPABILITY ENHANCEMENT & DEVELOPMENT (CED) @ ISTAR

1. Guidance for Competitive Examinations: Every year more than 10,000 students apply for government job but somehow they couldn't make it because of lacking somewhere in preparation for the competition. Although there are ample of opportunities in private sectors but still most of them prefer for government jobs only because of its facility and permanent settlement till retirement. They want to establish their career in government sector as it is the hundred percent guarantee of lifetime security. Most of the candidates think of getting government job but they genuinely prepare for this. Cracking government competitive exam is not a cup of tea for everyone. For this students have to do really hard work. Today candidates get offer via open competitive examination based recruitment system. The reason behind failing in government competitive examination is unorganized strategy of study. Free coaching of NET EXAM is provided by EST Department to its various students every week (at least 1/period/week) in curriculum.

2. Career Counseling: At the time of admission during vacation, teachers counsel the students about courses available in the college and career prospectus about each course. Moreover, the college also has a unique policy of counseling. Group of students is allotted to one counselor. The counselor appointed is from the same department of the student. The counselor keeps track of the academic and general performance of the student. In case of need like attendance shortage and poor performance, parents are informed through letter or phone. Counselor also provides placement assistance. For each course, 1 period is allotted per week for the counselors to counsel.

3. Soft Skill Development: Personality Development Programme **(PDP)** is conducted in association with Globearena Technologies Ltd. Hyderabad. Total 24 hours sessions are organized every year and the topics covered are teamwork, corporate etiquette, aptitude, communication skills, attitude & skill mapping, letter writing, resume preparation and group discussion. Pre mock interview sessions and mock interview sessions are organized for the third semester students of all branches. Professionals, HR experts from industry, and experts from institute are invited to provide guidance.

4. Personal Counseling: All the students are counseled by their respective counselors about the above-mentioned facilities. The counselor also tries to solve academic and personal problems of the students. Parents are also informed about their wards' issues. They are also invited to attend Parent-Teachers meeting at least once in each semester.

5. Motivational Talks: Motivational talk is organized for students and faculty during the academic year. Best motivational speakers are invited outside the college.

6. Bridge courses: The courses offered in ISTAR are inter and multidisciplinary in nature, so students coming from different back grounds are given exposure to bridge classes at least for two or three weeks in most of the M.Sc. programs to make them understand and connect about main core subject.

INSTITUTIONAL ACHIEVEMENTS



GSIRF RATING BY KCG, GANDHINAGAR

ISTAR secured **Top 3rd Rank** among All Colleges of Gujarat in Gujarat State Institutional Rating Framework **(GSIRF)** by **KCG**, Awarded by Education Minister Shri Bhupendrasinh Chudasama on **27.02.2019**

GSIRF	GSIRF – COLLEGE RATINGS – SUMMARY				
The Executive Committee of the Knowledge Consortium of Guiarat. Benartment of	S. NO	INSTITUTION NAME	SCORE OBTAINED (out of 90)	CGPA (out of 5)	STAR RATINGS (out of 5)
Education, Government of Gujarat on the recommendation of the duly appointed agency, the Indian Centre for Academic Rankings and Excellence (ICARE) has rated	1	ST. XAVIER'S COLLEGE	69.46	4.06	5
Institute Of Science & Technology For Advanced Studies & Research (ISTAR)	2	ENTREPRENEURSHIP DEVELOPMENT INSTITUTE OF INDIA	62.53	3.66	4
	3	INSTITUTE OF SCIENCE & TECHNOLOGY FOR ADVANCED STUDIES & RESEARCH (ISTAR)	62.36	3.65	4
****	4	GOVERNMENT DENTAL COLLEGE AND HOSPITAL	60.7	3.55	4
as a 4 Star Institution with a CGPA of 3.65 out of 5 in the category of COLLECES' on the basis of comprehensive performance metrics as set out in the	5	DINSHA PATEL COLLEGE OF NURSING COLLEGE ROAD NADIAD	57.18	3.34	4
Gujarat State Institutional Ratings Framework (GSIRF) on the 28th February 2019.	6	N.V.PATEL COLLEGE OF PURE AND APPLIED SCIENCES	56.58	3.31	4
ликиетах так истанов таклатика и изслагаза 🛠 🛠 🛠 🛠	7	SHRI M.V. & SMT. N.V. VIRANI SCIENCE COLLEGE	55.86	3.27	4
	8	CHRIST COLLEGE ARTS, SCIENCE & COMMERCE, RAJKOT	55.18	3.23	4
	9	VITTHALBHAI PATEL & RAJRATNA P.T.PATEL SCIENCE COLLEGE	54.56	3.19	4
BY ORDER Area Semina 25 48 Galdery (K) data status Satus Sector Satus Area Semina 26 49 49 49 49 49 49 49 49 49 49 49 49	10	M.G. SCIENCE INSTITUTE	54.35	3.18	4
Capacitante de la Capacitante de Cap	11	S. M. PATEL COLLEGE OF HOME SCIENCE	54.1	3.16	4

GLIMPSES OF 20th ANNUAL DAY OF ISTAR





INSTITUTIONAL ACTIVITIES



5th International Yoga Day Celebration on 17-18/06/2019 by NSS Cell & Art of Living Organization, Anand Chapter

ISTAR @ PRESS

રાષ્ટ્રીય સેવા યોજના હેઠળ આઇસ્ટાર કોલેજે . લાંભવેલ ગામ ત્રણ વર્ષ માટે દત્તક લીધું



સહયોગી થઈને રાષ્ટ્રીય સેવા યોજના સેવાભાવી પ્રવૃત્તિઓ કરવા માટે છે. જાણકારી, યોજનાના પ્રોગ્રામ ઓફિસર ડૉ. મયંક

ચારૂતર વિદ્યામંડળ સંચાલિત અંતર્ગત વિવિધ કામો કરવા જેવા કે આ સમજૂતી કરારમાં બંને પક્ષકારો જેવા આઈસ્ટાર કોલેજે લાંભવેલ ગ્રામ સ્વચ્છતા અભિયાન, પર્યાવરણને કેગ્રામપંચાયતના સરપંચ મહેશ રાઠોડ, પંચાયતને ત્રણ વર્ષ માટે દત્તક લેવા લગતી સમસ્યા, ભારત સરકાર અને આઈસ્ટાર કોલેજના પ્રિન્સિપાલપ્રો. ડૉ. માટે સમજૂતી કરાર કરવામાં આવ્યો ગુજરાત રાજ્ય સરકારની વિવિધ નિર્મલ કુમાર અને રાષ્ટ્રીય સેવા

આણંદ, તા. ૧૧ છે. જેનો મુખ્ય ઉદ્દેશ લાંભવેલ ગામને યોજનાઓની ત્રણ વર્ષમાટે દત્તક લેવું અને તેમાં ગામવાસીઓમાં જાગૃતતા લાવવી અને પટેલના પ્રયત્નોથી કરવામાં આવ્યો હતો.

આઇસ્ટાર કોલેજની એનએસએસ શિબિરનો લાંભવેલ મુકામે આરંભ



આઈસ્ટાર કોલેજના એનએસએસ વિભાગ દ્વારા લાંભવેલ ગામ ત્રણ વર્ષ માટે દત્તક લેવામાં આવ્યું છે. જેના અંતર્ગત તા.૧૯ જાન્યુઆરીના રોજ લાંભવેલના પાટીદાર સમાજ ગૃહ ખાતે એનએસએસ શિબિરનું ઉદ્ઘાટન કરવામાં આવ્યું હતું. આ પ્રસંગે સરપંચ મહેશ રાઠોડ મહિલા અગ્રણી કાર્ચકેર દીપીકા પટેલ, માજી સરપંચ લીલા પટેલ, આચાર્ચ દિલીપ પટેલ, આઇસ્ટાર સંસ્થાના પ્રિન્સિપાલ પ્રો.ડો. નિર્મલ કુમાર, એનએસએસ ચુનિટના સંચાલક ડો. મચંક પટેલ, તેમજ ગામના આગેવાનો હાજર રહ્યાં હતા. કાર્ચક્રમની શરૂઆતમાં ડો. મચંક પટેલે લાંભવેલ ગામના રહેવાસીઓને રાષ્ટ્રિય સેવા ચોજનાનું મહત્વ સમજાવ્યું હતું. ત્યારબાદ આણંદના રત્રી રોગના નિષ્ણાત ડો. નિમેષ પટેલે ગામની મહિલાઓને સ્ત્રી રોગ તેના કારણો અને તેના નિવારણ વિષે માહિતી આપી હતી. જેમાં ગામની આશરે ૪૦ જેટલી મહિલાઓ હાજર રહી હતી. વધૂમાં આઈસ્ટાર સંસ્થાના વિદ્યાર્થીઓએ ગામવાસીઓને સ્વચ્છતા અભિચાન સ્વચ્છતાનું જીવનમાં મહત્વ અને વિવિધ પ્રકારના આરોગ્ચલક્ષી કાર્ચક્રમો વિષે સમજાવ્યું હતું. જેના ભાગરૂપે તેઓએ ગામમાંથી પ્લાસ્ટિકના ઘનકચરાનો નિકાલ કર્યો હતો. અને અન્ય ગ્રામ્ય વિસ્તારોમાંથી પ્રદુષણનો નિકાલ કર્યો હતો.





આણંદ, તા. ૨૨ ચારુતર વિદ્યામંડળ સંચાલિત સમાજ ગૃહ મુકામે રાખેલ છે. આઈસ્ટાર કોલેજના એનએસએસ વિભાગ દ્વારા લાંભવેલ ગામ ત્રણ વર્ષ આંખના પડદાની તપાસ, કાળા ધબ્બા માટે દત્તક લેવામાં આવ્યું છે. જેના પડવા, કીકીના જ્ઞાનતંતુ નબળા અંતર્ગત તા. ૧૯ થી ૨૫ જાન્યુઆરી પડવા, મોતિયો, આંખના પડદા પર સુધી એનએસએસ શિબિર યોજવામાં સોજો વગેરે જેવા વિવિધ નિરીક્ષણ આવેલ છે. જેના અનુસંધાનમાં તા. નિઃશુલ્ક કરી આપવામાં આવશે. ૨૩મી જાન્યુઆરીના રોજ લાંભવેલ વધુમાં આંખના નંબરની તપાસ અને મુકામે નિઃશુલ્ક ચક્ષુ નિદાન કેમ્પનું ફક્ત ૩૦ રૂપિયાના નજીવા દરે આયોજન કરેલ છે.

૨૦૧૯ના રોજ સવારે ૯:૦૦ થી આવશે.

૧:૦૦ કલાક દરમ્યાન પાટીદાર

આ શિબિરમાં આંખ અને જરૂરિયાતમંદને ચશ્મા પણ કાઢી આ શિબિરનું આયોજન આપવામાં આવશે. આંખને લગતી આઈસ્ટાર કોલેજ, લાયન્સ ક્લબ કોઈપણ પ્રકારની સારવારની જરૂર આણંદ અને શ્રી રવિશંકર મહારાજ જણાય તો નિઃશુલ્ક ચિકિત્સા આંખની હોસ્પિટલ ચિખોદરાના આર.એમ. આઈ. હોસ્પિટલ સહિયારા ઉપક્રમે તારીખ ૨૩-૦૧- ચિખોદરા ખાતે કરી આપવામાં

આઈસ્ટારના એનએસએસ વિભાગ દ્વારા લાંભવેલમાં નિઃશુલ્ક ચક્ષુ નિદાન કેમ્પ

આઈસ્ટાર કોલેજના એનએસએસ યુનિટ દ્વારા લાંભવેલ ગામ ત્રણ વર્ષ માટે દત્તક લેવામાં આવ્યું છે, જેના ભાગરૂપે તા. ૧૯થી ૨૫ જાન્યઆરી દરમિયાન રાષ્ટ્રીય સેવા યોજના શિબિરનં આયોજન કરેલ છે. આ એક સપ્તાહની શિબિરમાં વિવિધ કાર્યક્રમોં યોજવામાં આવ્યા હતા. તા. ૨૧મી ના રોજ હોમ સાયન્સ કોલેજના શિક્ષિકા મિનલબેન દ્વારા પોષણયુક્ત આહાર અને હાડકાની માવજત જેવા વિષયો પર ગામની મહિલાઓને અને વિદ્યાર્થીઓને રસપ્રદ માહિતી આપવામાં આવી હતી. આ કાર્યક્રમમાં ઘણા વ્યક્તિઓએ લાભ લીધો હતો. વધુમાં ગામના ખેડૂત મિત્રોને આશંદની ખેતીવાડી કોલેજની મુલાકાત કરાવી હતી. જેમાં ઔષધિય પાકોની અને જૈવિક ખાતર વિશેની વિસ્તૃત માહિતી અને માર્ગદર્શન પૂરું પાડવામાં આવ્યું હતું, તેમજ બેટાકા અને કેળ જેવા દૈનિક પાક વિશે પણ માહિતી પ્રદાન કરવામાં આવી હતી. આ ઉપરાંત તા. ૨૧ થી ૨૫ દરમ્યાન દૈનિક ધોરણે દરરોજ સવારમાં આશંદ પતંજલિ જિલ્લા અધ્યક્ષ કેતુલભાઈ ભટ્ટના માર્ગદર્શન હેઠળ લાંભવેલ ગામના રહેવાસીઓને યોગાસન અને વ્યાયામનું માર્ગદર્શન પણ પૂરું પાડવામાં આવે છે.

તા. ૨૧ મીના રોજ રવિશંકર મહારાજ આંખની હોસ્પિટલ ચિખોદરા, આઈસ્ટાર કોલેજના એનએસએસ યુનિટ અને લાયન્સ ક્લબ આણંદના સહિયારા ઉપક્રમે નિઃશુલ્ક ચક્ષુ નિદાન શિબિરનું આયોજન કરવામાં આવ્યું હતું. જેમાં આશેરે ૨૦૦ જેટલાં ગ્રામજનોએ નિઃશુલ્કસારવાર મેળવી હતી, તેમજ જરૂરિયાતમંદ ગ્રામજનોને નિઃશુલ્ક ચશ્માનું પણ વિતરણ કરાયું હતું. વધુમાં



મોતિયાને લગતા લગભગ ૪૦ જેટલા દર્દીઓને મફ્ત સારવાર આપવામાં આવી હતી.

આ શિબિરને અંતર્ગત તા. ૨૨ મીના રોજ આંગણવાડી અને ધોરણ ૧ થી ૪ ના આશરે ૮૦ જેટલા વિદ્યાર્થીઓની આંખની ચકાસણી કરવામાં આવી હતી. તા. ૨૩મીના રોજ યોજાયેલ યોગ શિબિર દરમિયાન નેતાજી સુભાષચંદ્ર બોઝની જન્મજયંતીની પશ ઉજવશી કરવામાં આવી હતી. જેમાં વિદ્યાર્થીઓ પ્રકાશભાઈ અને કેતુલભાઈએ નેતાજીના જીવન વિશે ગ્રામજનોને રસપ્રદ માહિતી પૂરી પાડી હતી. તા. ૨ ૩મીના રોજ હોમિયોપેથીક શિબિરનું આયોજન રામકૃષ્ણ સેવા મંડળ સંચાલિત આણંદ હોસ્પિટલની મદદથી થયું હતું. જેમાં ૩૨ જેટલા ગ્રામજનોને નિઃશુલ્ક લાભ તથા મફત દવાઓ પણ આપવામાં આવી હતી.





આણંદ, તા. ૨૮

આઈસ્ટાર સંસ્થાના એનએસએસ યુનિટ દ્વારા ત્રણ વર્ષ માટે દત્તક લીધેલા લાંભવેલ ગામમાં તાજેતરમાં આયુર્વેદિક શિબિર યોજાઈ હતી. આજના સ્વાસ્થ્યલક્ષી યુગમાં આયુર્વેદનું મહત્ત્વ અને રોજબરોજના જીવનમાં તેની ઉપયોગીતાની જાગૃતિ ફેલાવવાના આશયથી ચારૂતર વિદ્યામંડળ સંચાલિત આયુર્વેદિક કોલેજના સહયોગથી

આયુર્વેદિક શિબિરનું આયોજન તા. ૨૪ ચારુતર વિદ્યા મંડળ સંચાલિત મીના રોજ થયું હતું. જેમાં ૭૫ જેટલા ગ્રામજનોએ નિઃશુલ્ક સારવાર, માર્ગદર્શન અને દવાઓ મેળવી હતી. આ ઉપરાંત આયુર્વેદિક કોલેજના દાક્તરોએ દર્દીઓને રોજબરોજના ઘરેલું રોગો અને તેના ઉપચાર વિશે સમજણ આપી હતી. ઉપરોક્ત શિબિરને અંતે લાંભવેલ ગામના સરપંચ મહેશભાઈ રાઠોડે એનએસએસ યનિટના સૌ સભ્યોનો આભાર માન્યો હતો.



આઈસ્ટાર કોલેજના એનએસએસ ચુનિટ દ્વારા લાંભવેલ ગામ ખાતે સ્પેશિયલ શિબિરનું આયોજન કરવામાં આવ્યું હતું. જેની પૂર્ણાહૂતિ ૨૫ જાન્યુઆરીના રોજ કરવામાં આવી હતી. આ સમારંભમાં ગામના સરપંચ મહેશભાઈ રાઠોડ, ઉપસરપંચ રેવાબેન રાઠોડ, મહિલા આગેવાન દિપીકાબેન તેમજ નિકુંજભાઈ પટેલ હાજર રહ્યા હતા. મુખ્ય મહેમાન તરીકે મનૂભાઈ પટેલે હાજરી આપી હતી. કોલેજના પ્રિન્સિપાલ પ્રો. ડો. નિર્મલકુમાર અને એનએસએસ પ્રોગ્રામ ઓફિસર મનુભાઈ પટેલ મંચ પર હાજર રહ્યા હતા. આ કાર્ચક્રમમાં મનુભાઈ પટેલે પ્રાસંગિક પ્રવચન કરી વિદ્યાર્થીઓને તેમના જીવનમાં એનએસએસની પ્રવૃત્તિઓ અને તેનું યોગદાન વિશે માહિતી આપી હતી. તેમજ તેમને ગામના સરપંચ, ઉપસરપંચ અને અન્થ મહાનુભાવોની હાજરીમાં ભવિષ્યમાં કરવામાં આવનાર વિવિધ પ્રવૃત્તિઓ માટે જરૂરી સાથ સહકાર આપવાની ખાતરી આપેલ હતી.

આઇસ્ટાર કોલેજનો ૨૦મો વાર્ષિકોત્સવ

આણંદ, તા. ૮

ચારૂતર વિદ્યામંડળ સંચાલિત આઇસ્ટાર કોલેજનો ૨૦મો વાર્ષિકોત્સવ સીવીએમના અધ્યક્ષ ભીખુભાઇ પટેલના પ્રમુખપદે યોજાયો હતો.

આ પ્રસંગે મુખ્ય મહેમાનપદે આશંદ કૃષિ યુનિવર્સિટીના ઉપકુલપતિ ડૉ. એન.સી.પટેલ ઉપસ્થિત રહ્યા હતા. જેમાં સીવીએમના માનદ મંત્રી ડૉ. એસ.જી.પટેલ, કુલપતિ ડૉ. ભાવેશ પટેલ, ડાયરેક્ટર જનરલ ડો. નિખિલ ઝવેરી, તેમજ અન્ય કોલેજોના પ્રિન્સિપાલ અને ફેકલ્ટી પણ હાજર રહ્યા હતા. કાર્યક્રમની શરૂઆતમાં ફેકલ્ટી ડૉ. સુચિતા પટેલે સૌ આમંત્રિત મહેમાનોને આવકારીને ઉદબોધન કર્યુ હતું. ત્યારબાદ સંસ્થાના પ્રિન્સિપાલ પ્રો.ડૉ. નિર્મલકમારે સંસ્થાની વાર્ષિક પ્રવૃત્તિઓનો સવિસ્તાર અહેવાલ આપ્યો હતો.

વર્ષ દરમિયાન શૈક્ષણિક તેમજ ઈતર પ્રવૃત્તિઓમાં રાજ્ય કક્ષાએ વિશિષ્ટ પ્રદર્શન કરનાર તેમજ યુનિવર્સિટીમાં સુવર્શ ચંદ્રક પ્રાપ્ત કરનાર વિદ્યાર્થીઓનું બહુમાન કરવામાં આવ્યું હતું. જેનું સંચાલન મધ્યસ્થ સમિતિના વાઇસ પ્રેસિડન્ટ રૂપેશ શાહે કર્યુ હતું. વધુમાં જાપાન



પાડ્ય હતું.

સ્થિત એઆઇએસટી ઈન્સ્ટિટ્યૂટ અને પ્રવૃત્તિઓને બિરદાવીને વિદ્યાર્થીઓને ગુજરાતની ખ્યાતનામ ઔદ્યોગિક કંપનીઓ તેમની કારકિર્દી ઘડવા માટે માર્ગદર્શન પૂરું જેવી કે જીસીપીસી, મિશા, એસીઅન પેન્ટ્રસ, લ્યૂપિન વિગેરે દ્વારા ઉચ્ચ ક્રમાંક પ્રાપ્ત કરનાર વિદ્યાર્થીઓને શિષ્યવૃતિ તેમજ પ્રમાણપત્રો એનાયત કરવામાં આવ્યા હતા. આમંત્રિત મહેમાનોના વરદ હસ્તે સંસ્થાનું વાર્ષિક મેગેઝીન'આઈસ્ટાર ગેલેક્ષી-૨૦૧૯'નું વિમોચન કરવામાં આવ્યું હતું.

મુખ્ય મહેમાન ડૉ. એન.સી.પટેલે આઇસ્ટાર સંસ્થામાં હાલમાં ચાલી રહેલા વિવિધ પ્રકારના અજોડ અને બેજોડ પોસ્ટ ગ્રેજ્યુએટ અભ્યાસક્રમો તેમજ વિવિધ

આઇસ્ટાર સંસ્થાનું ઇન્સ્ટિટ્યૂશનલ રેટિંગ ક્રેમવર્કમાં રાજ્યકક્ષાએ ત્રીજુ સ્થાન



એમએચઆરડીના નેશનલ ઇન્સ્ટિટ્યુશનલ રેન્કિંગ ફ્રેમવર્કના ધારાધોરણોને આધારે ગુજરાત સરકાર અને શિક્ષણ વિભાગ દ્વારા ગુજરાત સ્ટેટ ઇન્સ્ટિટ્યૂશનલ રેટિંગ ફ્રેમવર્કનો પ્રારંભ કરાયો હતો. આ મૂલ્યાંકન પ્રક્રિયામાં રાજ્યની કુલ૨૧ યૂનિવર્સિટીઓ અને ૫૫ કોલેજોએ ભાગ લીધો હતો. એનઆઇઆરએફ,એમએચઆરડી અને જીએસઆઈઆરએફના સંચુક્ત ધારાધોરણો પ્રમાણે કુલ ૧૩ પ્રકારની કામગીરીના આધારે સીજીપીએ અને સ્ટાર નક્કી કરવામાં આવ્યા હતા. આ ઉપક્રમ અંતર્ગત રાજ્યના શિક્ષણમંત્રી ભૂપેન્દ્રસિંહ ચૂડાસમાએ આ રેટિંગની જાહેરાત કરી હતી. જેમાં વલ્લભ વિદ્યાનગર સ્થિત ચારૂતર વિદ્યામંડળ સંચાલિત આઈસ્ટાર સંસ્થાએ 3.૬૫ સીજીપીએ સાથે ચાર સ્ટાર મેળવીને ગૌરવ પ્રાપ્ત કર્યુ છે. આ સાથે આઈસ્ટાર કોલેજે સમગ્ર રાજ્યમાં શ્રીજા સ્થાને રહીને એક ગૌરવવંતી સિદ્ધિ હાંસલ કરી છે. આઈસ્ટાર સંસ્થાની આ અદ્ભુત સિદ્ધિ બદલ ચારૂતર વિદ્યા મંડળે અભિનંદન પાઠવ્યા હતા.



આણંદ ભાસ્કર | ચારુતર વિદ્યા મંડળ સંચાલિત આઈસ્ટાર કોલેજમાં તાજેતરમાં આર્ટ ઓક લિવિંગ સંસ્થના, આશંદ ચેપટરના સહયોગથી બે દિવસની યોગશિબિરનં આયોજન કરાયું હતું. જેમાં આઈસ્ટાર કોલેજના આશરે 30 જેટલા કર્મચારીઓએ ઉત્સાહપૂર્વક ભાગ લીધો હતો. યોગ શિક્ષક શશાંક દ્વારા યોગાભ્યાસ, પ્રાજ્ઞાયામ, સૂર્ય નમસ્કાર અને ધ્યાન વિષે તાલીમ મેળવી હતી. સંચાલક ડો. મયંક પટેલ અને શ્રી રવિશંકર હાજર રહ્યા હતા.

અમેરિકન ઇન્ડસ્ટ્રીચલ સેફ્ટી એન્ડ હાઈજીન પ્રેસિડેન્ટ આઇસ્ટારની મુલાકાતે



ઉક્લવળ ભવિષ્ય માટે આ પ્રકારના સફળ કાર્યક્રમોનં આયોજન થતું રહે તે બ્રેશ ચર્ એ, દુબઇના મેમ્બર વિરેન કરી હતી.

જે દરમિયાન સી વી ઉપક્રમે તાજે તરમાં અમદાવાદમાં છઠી એમના વાઇસ પ્રેસિડેન્ટ ડૉ. આંતરરાષ્ટ્રીય સેન્ટ્રલ નિર્મલ કુમાર, સી આઇ એચ

હાઇજીન

ોન્ડસ્ટ્રીયલ

આઇસ્ટાર કોલેજે ત્રણ વર્ષમાટે લાંભવેલ ગામ દત્તક લીધું આણંદ | ચારૂતર વિદ્યામંડળ સંચાલિત આઇસ્ટાર કોલેજે લાંભવેલ ગ્રામ પંચાયને ત્રણ વર્ષ માટે દત્તક લેવા માટે સમજૂતી કરાર કરવામાં આવ્યો છે. જેનો મુખ્ય ઉદ્દેશ લાંભવેલ ગામને ત્રણ વર્ષ માટે દત્તક લેવું અને તેમાં

સહયોગી થઇને રાષ્ટીય સેવા યોજના અંતર્ગત વિવિધ કામો

કરવા જેવા કે સ્વચ્છતા અભિયાન, પર્યાવરણને લગતી

સમસ્યા, ભારત સરકાર અને ગુજરાત રાજ્ય સરકારની

વિવિધ યોજનાઓની જાણકારી ગામવાસીઓમાં જાગૃતતા લાવવી અને સેવાભાવી પ્રવૃતિઓ કરવા માટે છે.



આણંદ | ચારૂતર વિદ્યામંડળ સંચાલિત ઇન્સ્ટીટ્યટ ઓંક સાયન્સ એન્ડ ટેકનોલોજી ફોર એડવાન્સ સ્ટડીઝ એન્ડ રીસર્ચ (આઈસ્ટાર)માં ભૂતપૂર્વ વિદ્યાર્થી સંમેલન તથા સન્માન સમારોહ યોજવામાં આવ્યો હતો. સમારોહમાં ભૂતપૂર્વ વિદ્યાર્થીઓં જોડાયા હતા. પ્રિન્સિપાલ પ્રો. ડો. નિર્મલકુમારે ભૂતપૂર્વ વિદ્યાર્થિઓંને તેમના વ્યવસાયમાં મેળવેલ સફળતા બદલ હાર્દિક અભિનંદન પાઠવ્યા હતા.



આઇસ્ટાર કોલેજમાં વિશ્વ પર્યાવરણ દિવસની ઉજવણી

આણંદ, તા. દ્

ચારુતર વિદ્યામંડળ વિદ્યાનગર, સંચાલિત આઈસ્ટાર કોલેજ ખાતે વિશ્વ પર્યાવરણ દિવસ ઉજવાયો હતો. જેમાં સીવીએમના વાઈસ પ્રેસિડન્ટ મનિષભાઈ પટેલ તથા અન્ય સભ્યોના હસ્તે પર્યાવરણને અનુકૂળ એવા વૃક્ષો જેવા કે લીમડો, ગુલમહોર, કેસુડો, પીપળો, કાસિદ, કાંચનાર, સરેશ વગેરેનું વૃક્ષારોપણ કરવામાં આવ્યું હતું. કોલેજના પ્રિન્સિપાલ પ્રો. ડૉ. નિર્મલ કુમાર તેમજ શૈક્ષણિક અને બિનશૈક્ષણિક કર્મચારીઓએ પણ પર્યાવરણલક્ષી વૃક્ષો વાવ્યા હતા. પ્લાસ્ટિકનું વધતું જતું પ્રદુષણ અટકાવવાના હેતુસર આઈસ્ટાર કોલેજ દ્વારા ઈકો ફ્રેન્ડલી બેગનું વિતરણ વિદ્યાનગરના મોટા બજારમાં કરવામાં આવ્યું હતું. કાર્યક્રમની સફળતા બદલ સીવીએમના ચેરમેન ભીખુભાઈ પટેલે તમામ કર્મચારીઓને અભિનંદન પાઠવ્યા હતા.



ACTIVITIES OF VARIOUS DEPARTMENTS OF ISTAR

M.SC. INDUSTRIAL CHEMISTRY (IC)

Unique Features

- ✓ The M.Sc. Industrial Chemistry course is a fine blend of chemical engineering and chemistry. The curriculum comprises of the core aspects of Chemical Engineering, Chemistry, and Industrial Management & Safety. In-plant training of six weeks after completion of second semester is a pre requisite for admission to the third semester of the course.
- ✓ Expert lectures by eminent people from industry & academics, Industrial visits to make the students updated with the latest trends are the unique features of this department.
- ✓ Personality Development Programmes for students are arranged throughout the year for improving the soft skills of the students.
- ✓ The department evaluates the students by continuous assessment through classroom test, quizzes, seminars, home assignments, and external examinations.
- ✓ MoU with Lupin Ltd. for Scholarship.
- ✓ MoU with Cadila Healthcare Ltd. for Training & Placement.
- ✓ MoU for research and academic activities is signed with SVNIT, Surat on 10th August, 2013.
- ✓ Mini research project is a part of the curriculum, which sows and nurture research methodology in the students and sharpens their analytical skills.
- ✓ 100 % university results with first class and distinctions every year.
- ✓ Web: <u>http://istar.edu.in/IC/index.htm</u>

Departmental Activities

Students Participation in Various Technical Activities	 17 students of 2nd semester and 16 students of 4th semester in "Medicinal Chemistry at the interface 21st Century: An Indian perspective" organized by V.P. & R.P.T.P. Science college on 28th January 2019 participated in poster and oral presentation. 8 students of 4th semester in SCIENCE MANTHAN 2019 organized by CHARUSAT on 5th January participated in poster presentation. Jagrat Sevak, Sem-4 in Youth Parliament, 24th January 2019. 02 Students in Science Meet – 2019, organized by Gujarat Science Academy (VVN Chapter) & A. N. Patel PG Inst. of Sci. & Res., Anand on 6th January, 2019. Jagrat Sevak, Sem-4 in Research paper presented on "Diversity in Business" at Regional Conference (west) on " Constructive Leadership and Institutional Capacity Path.
	on " Constructive Leadership and Institutional Capacity Building: The way Forward"
Students Achievement in	o Jagrat Sevek, Devendra Jadav, Sem4 1st Prize in Poster

Technical Activities	presentation at Science Manthan- 2019 on 5 th January, 2019.
	• Hemant Mali and Dyijendra Rathod. Sem4 2 nd position
	in poster presentation competition at "Medicinal
	Chemistry at the interface 21 st Century: An Indian
	perspective" on 28 th January 2019.
Sports Achievements	• Rushi Makati IC 4 th winner in Badminton (Doubles-Boys)
sports remevements	inter class
	\circ Jeimin Joshi IC 2 nd runners up in Badminton (Doubles-
	Boys) inter class
	\circ Sweta Chauhan IC 2 nd & Rushi Makati IC 4 th runners un
	in Badminton (Doubles-Boys) inter class
	\circ Jeimin Joshi IC 2 nd winner in Table Tennis (Singles)
	\circ Jeimin Joshi IC 2 nd & Harsh Patel IC 2 nd winner in Table
	Tennis (Doubles)
	\circ Harshit Ganatra IC 4 th runners un in Table Tennis
	(Doubles)
	\circ M.Sc. (IC) 4 th runners up in cricket.
	• Harshit Ganatra IC winners in Chess (Boys)
	• Sweta Chauhan & team won the Championship in
	Kabaddi in Khel Mahakumbh 2018 from Anand District.
	\circ Sweta Chauhan & team won the Championship in Senior
	state Kabaddi tournament, Khel Mahakumbh, all Gujarat
	State Invitation Kabaddi tournament during 2018-19 at
	state level.
	\circ IC 2 nd & 4 th semester 1 st position in Table Tennis team in
	Inter-Collegiate Tournaments, Organized by Sardar
	Patel University.
	o Mohammadanis Yusufmiya Malek, 2 nd semester 3 rd
	position Triple Jump (58 th Intercollegiate Athletics
	Championship 2018-19) in Inter-Collegiate
	Tournaments, Organized by Sardar Patel University.
	\circ Sweta Chauhan won CVM 'Gaurav Puraskar' for Kabbadi.
Scholarship awarded	\circ Lupin Scholarship of Rs. 30,000/- to Bhavesh Modi
	\circ MISA Scholarship of Rs. 20,000/- to Kartik Patel and
	Mahavirsinh Gohil.
	 CVM Scholarship to Sweta Chauhan
Gold Medal	\circ Ms. Simaran Kaur won university Gold Medal

IC 4th Sem. Runner's up in Interclass Cricket Tournament



Harshit R. Ganatra (IC 4th sem.) became champion in Interclass Chess Tournament





Mohammadanis Y. Malek Secured 3rd Position in Triple Jump in Intercollegiate Athleticss Championship Distance:11.74 Mts.

Glimpse of Buddies Meeting





GUJCOST Sponsored National Seminar on Medicinal Chemistry at the Interface of 21stCentury: An Indian Perspective on 28.1.19

IC @ PRESS

આઇસ્ટારમાં રિલાયન્સનો પ્લેસમેન્ટ કેમ્પ

વલ્લભવિદ્યાનગર : વિશ્વકક્ષાએ અગ્રીમ એવી રીલાયન્સ ઇન્ડ્રસ્ટીઝ લી. જામનગર તથા એમસી ઇન્ડ્રસ્ટ્રી કેમેસ્ટ્રી સીઆઇએસ વિભાગ, આઇસ્ટારના



સંયુક્ત ઉપક્રમે એમએસીના ૪થા સેમેસ્ટરના વિદ્યાર્થીઓ માટે કેમ્પસ પ્લેસમેન્ટ ડ્રાઇવનું સફળ આયોજન કરવામા આવ્યુ હતું. પ્લેસમેન્ટ ડ્રાઇવવમાં રીલાયન્સના રીફાઇનરી કોમ્પલેક્ષ, જામનગર માટે ફિલ્ડ ઓફિસરની નિમણુંક પ્રક્રિયા હાથ ધરવામા આવી હતી.

આઈસ્ટાર ઈન્ડસ્ટ્રીયલ કેમિસ્ટ્રીમાં ૧૦૦ ટકા પ્લેસમેન્ટ

આણંદ, તા. ૨૭ આઈસ્ટાર કોલેજના M.Sc ઈન્ડસ્ટ્રીઅલ કેમેસ્ટ્રી (I.C.) વિભાગમાં વર્ષ ર૦૧૮-૧૯ ના ચોથા સેમેસ્ટરના વિદ્યાર્થીઓનું ૧૦૦ ટકા પ્લેસમેન્ટ થયેલ છે. આ પરંપરા અંતર્ગત ચાલુ વર્ષે (૨૦૧૮-૧૯) માટે ગુજરાત તથા ભારતની ખ્યાતનામ કેમિકલ કંપનીઓ વિદ્યાર્થીઓએ ભાગ લીધો હતો.



લા. જામનગર તથા સમ. સા. ઇન્સ્ટ્રાયલ કનસ્ટ્રા (IC) વિભાગ, આઇસ્ટ્રારના સંયુક્ત ઉપક્રમે સેમે. સી. (M.Sc) ના 4થા સેમેસ્ટરના વિદ્યાર્થીઓ માટે કેમ્પસ પ્લેસમેન્ટ ડ્રાઇવનું આયોજન કરાયું હતું.

M.SC. SURFACE COATING TECHNOLOGY (SCT)

Unique Features

- ✓ MoU signed with Indian Small Scale Paint Association (ISSPA, Gujarat Region), Ahmedabad on 15th October, 2015.
- ✓ Only course available in Gujarat of its kind in the field of coating technology and unique in India that is available for science graduates.
- ✓ The course has been framed to cater highly skilled technocrats for the fast growing field of Surface Coating Technology which grows hand in hand with the growth of Construction Industry (Housing & Commercial buildings), Infrastructure development (Ports, Offshore structures, Pipelines, Bridges etc), Automotive Industry, Ship building Industry, Heavy Engineering Industry, Packaging industry (Printing Ink) etc to offer protection & aesthetics to these assets.
- ✓ The 2 years (4 Semester) curriculum includes the subjects related to the technology for the manufacturing & application of the Surface Coatings and analysis of their performance properties.
- ✓ 6 weeks in-plant training at various coating and allied industries at the end of Second Semester.
- ✓ Project work to be conducted during the 4th Semester on the topics related to the recent trends in surface coatings.
- ✓ 100% job placement through Campus Interview (National & International).
- ✓ Highest Salary Offered: Rs 42,500/- (AED 2500 + Bach. Accommodation + Transportation + Air Fair)
- ✓ M/S Asian Paints Charitable trust, Mumbai and Shri Umesh Pathak, Netherland have been kind enough to give scholarship to our M.Sc. (SCT) students.
- ✓ Strong Academic Industry interaction.
- ✓ Visit to various Coating Industries, National & International Seminars, Exhibitions, and Conferences.

- ✓ Arrangement of lectures of the professionals from the various fields of Coating Industry.
- ✓ Conducting Corporate Training for Civil Engineers like GNFC, Kribhco etc. and consulting for paint application.
- ✓ The students passing with the M.Sc. Degree in Surface Coating Technology are expected to have opportunities in:
- Paint & Resin Manufacturing Industry
- o Pigment & Additives Industry
- Engineering Industry (Paint Application)
- Paint Industry (Technical Sales Services)
- Printing Ink Industry
- Academic & Research, Testing and Consultancy Works Institutions
- ✓ Web: <u>http://istar.edu.in/SCT/index.htm</u>

Departmental Activities

PARTICIPATION OF 2ND SEMESTER SCT STUDENTS IN INTERNATIONAL CONFERENCE

24 students of M.Sc. Surface Coating Technology (2nd Semester) department of ISTAR participated in two days international conference organized by Surface Protective Coating Council (SSPC), Mumbai, CIDCO, on 11-12th March 2019. Three students have secured 1st, 2nd and 3rd prize in quiz competition and have won Rs. 3000, Rs. 2500 & Rs. 1000, respectively.



- Bureau of Indian Standards (BIS): Raw Materials for Paints, Varnishes and related Products Sectional Committee, CHD 21. The Committee further decided to Co-opt Dr. Kalpesh Patel and Dr. Parag S Karia as a Young Professional, Institute of Science and Technology for Advanced Studies and Research (ISTAR) in CHD 21 Committee)
- Campus Placement for the Year 2018-2019 : 92.00%
- Results of the Academic Year 2018-2019: 95.65%

SCT @ PRESS



M.SC. ORGANIC CHEMISTRY (OC)

Unique Features

- ✓ Teaching is delivered by highly experienced and qualified faculty.
- ✓ State-of-art well-equipped spacious laboratories, classrooms are well-ventilated and equipped with advanced multimedia facility.
- ✓ A seminar hall with modern multimedia technology and a capacity of around 100 is also furnished.
- ✓ Career counseling, mock interviews, resume writing seminars, and personality development program conducted during the academic year by experts.
- ✓ Placement by campus interviews.
- ✓ Industrial visit during program.
- ✓ Wi-Fi facility for students.
- ✓ Web: <u>http://istar.edu.in/OC/index.htm</u>

Departmental Activities



Ms. Dipti B. Upadhyay (4th Semester Student) secured 1st Rank at Sardar Patel University

M.SC. POLYMER SCIENCE & TECHNOLOGY (PST)

Unique Features

- ✓ Fine blend of Chemical Engineering, Polymer Chemistry, Polymer Technology, Pure and Applied Chemistry.
- ✓ Introducing Students Chapter in Association of Indian Plastics Institute, Vadodara Chapter in 2013.
- ✓ Compulsory in-plant training of six weeks after completion of second semester.
- ✓ Department is selected as runners up in category of 'Best Education Institution Contributing to Plastics' and awarded Plasticon Award 2009 in Award Ceremony Programme at Pragati Maidan, New Delhi.
- ✓ Expert lectures from eminent people from industry & academics.
- ✓ Strong Academic-Industrial Interaction.
- ✓ Industrial visits to make the students updated with the latest trends.
- ✓ 100% University results
- ✓ Research & Testing facility available. On hand training in at Sophisticated Instrumentation Centre for Applied Research & Testing (SICART).
- ✓ Students can pursue Ph.D., M.Tech. etc. programme after M.Sc.
- Project work on recent developments in the area of chemistry, polymer chemistry, polymer technology etc.
- ✓ 100% Placement achieved before M.Sc. degree.
- ✓ Web: <u>http://istar.edu.in/PST/index.htm</u>

Departmental Activities

- 1. Expert Talk by Dr. Nitin Bhate for Semester II & IV Students on 8/1/2019
- 2. Industrial Visit at Polycab, Halol and Crest Composites and Plastics at Kheda
- 3. Mr. Sagar Joshi awarded Ph.D. Degree in Chemistry under guidance of Dr. M.M. Raj



SICART Training from 20-22 February 2019

PST @ PRESS

આઇસ્ટારના પોલિમર સાયન્સ વિભાગમાં ૧૦૦ ટકા પ્લેસમેન્ટ

આણંદ, તા. ૦૧ આઇસ્ટાર કોલેજ એમ.એસ.સી. પોલિમર સાયન્સ એન્ડ ટેક્નોલોજી વિભાગમાં વર્ષ ૨૦૧૮-૧૯ ના ચોથા સેમેસ્ટરના વિદ્યાર્થીઓનું ૧૦૦ટકા પ્લેસમેન્ટ થયેલ છે. આ પરંપરા અંતર્ગત ચાલુ વર્ષે (૨૦૧૮૧૯) માટે ગુજરાત તથા ભારતની ખ્યાતનામ કંપનીઓ જેવી કે રિલાયન્સ, મેક્રો પોલિમર, ઘરડા કેમિક્લસ, જેવી ઈન્ડસ્ટ્રીઝ, ટોયો ઈકં જોલી કન્ટેનર જેવી ઈન્ડસ્ટ્રીઓએ એમ.એસ.સી. પોલિમર સાયન્સ એન્ડ ટેક્નોલોજીના વિદ્યાર્થીઓ માટે કેમ્પસ પ્લેસમેન્ટનું આયોજન કર્યુ હતું.

M.SC. ENVIRONMENTAL SCIENCE & TECHNOLOGY (EST)

Unique Features

- ✓ 100% University Results, More First Class & Distinction Every Year.
- ✓ Absolute Placement in Industry, consultancies, research labs, Academic Institutes for needy students.
- ✓ The course provides the knowledge, technical skills and solid background not only in Pollution Control Technologies, Ecology & Environmental Biology, Environmental Science and Technology, but also in Industrial Hygiene & Safety.
- ✓ Several Students are pursuing Ph.D. Program
- ✓ Academia-Industry Interface: Summer Training for deserving Students, Project Work, Expert Talks, Guest Lectures.
- ✓ LoI with Department of Environmental Management, AIST, Japan
- ✓ MoU with Missouri University of Science & Technology, Rolla, MO, USA, for Students Exchange Program / Project Work / Ph.D.
- ✓ Nandesari Industrial Association (NIA), Gujarat Ecology Commission (GEC), Gujarat Institute of Desert Ecology (GUIDE), Gujarat Council of Science & Technology (GUJCOST).
- ✓ Excellent Laboratory Facilities.
- ✓ Students mentored by Seminars, Workshops, Industrial Visits, Study Trips.
- ✓ Best Practices: Weekly Practice Test, Bridge Course, Competitive Exams Preparation for NET, SLET, etc., Field Sampling Techniques, On-hand Instrumentation Training at SICART.
- ✓ Many students from our department joined Foreign Universities for Higher Studies in Environmental Science / Technology / Management
- ✓ Web: <u>http://istar.edu.in/EST/index.htm</u>

Result of April 2019:

Second Semester:	100% (Distinction: 22, First Class: 17, Second Class: 05)
Fourth Semester:	100% (Distinction: 20, First Class: 18, Second Class: 03)
Placement:	100% to needy students

Departmental Activities



Expert Talk on 'Cleaner Production' by Mr. Abhi Patel, GCPC, Gandhinagar on 05/01/2019



6th International Conference on Industrial Hygiene & Safety, CIHA, Ahmedabad, attended by Prof. Dr. Nirmal Kumar, J.I. & Dr. Hiren B. Soni on 06/01/2019



Expert Talk on 'Legal Aspects of NIOSH' by Dr. Illis Feitshans, Director, American Public Health Association (APHA), D.C., USA, on 10/01/2019



Visit to Tobacco Processing Plant, Khambhat on 05/02/2019



Visited Sardar Patel Renewable Energy Research institute (SPRERI), V.V. Nagar on 16/02/2019



Campus Placement of 4th Semester Students of M.Sc. EST on 27/04/2019

International Scholarship

Freeship was given to Ms. Deepa Lalwani (PhD Student) to carry out research work at AIST, Tsukuba, Japan, including free-of-cost research facilities, fieldwork, analytical services, airfare, accommodation, and food for Two Years.



Donation by Organization

Analytical Instruments for Soil and Air Sampling worth **Rs. 3,00,000/-** for Field Sampling Techniques and Laboratory Analysis for PG and PhD Students donated by Dr. Nobuyoshi Yamashita, Chief senior Research Scientist, **AIST, JAPAN**.



EST @ PRESS



તાજેતરમાં ગુજરાત ક્લીનર પ્રોડક્શન સેન્ટર, ગાંધીનગર, ગુજરાત પોલ્યુશન કંટ્રોલ બોર્ડ, અને મિનિસ્ટ્રી ઓફ એન્વિરોન્મેન્ટ ફોરેસ્ટ એન્ડ ક્લાઇમેટ ચેન્જ, ન્યુ દિલ્હીના સંયુક્ત ઉપક્રમે પર્ચાવરણ વિષયમાં ઉત્તમ સંશોધન પ્રતિયોગિતા યોજાઇ હતી. જે અંતર્ગત અનુરનાતક અને પીએચડી કક્ષાએ સંશોધનકર્તાઓને બેસ્ટ થીસીસ એવોર્ડ એનાચત કરવામાં આવ્યા હતા. જેમાં અનુરનાતક કક્ષાએ ચારૂતર વિધા મંડળ સંચાલિત આઇસ્ટાર કોલેજના પર્ચાવરણ વિભાગની વિધાર્થિની કુ. મયૂરિકા રોહિતને બેસ્ટ થીસીસ એવોર્ડની પ્રતિસ્પર્ધામાં ઉત્તમ સંશોધન બદલ અને પીએચડી કેટેગરીમાં ફેકલ્ટી ડો. ધૃતિ પટેલને પ્રશંસનીચ સંશોધન બદલ પ્રમાણપત્ર અને કેશ પ્રાઈઝ પ્રાપ્ત થયા હતા. ઉપરોક્ત વિજેતાઓએ આઇસ્ટાર સંસ્થાના પ્રિન્સિપાલ પ્રો. ડો. નિર્મલકુમારના માર્ગદર્શન હેઠળ આ જવલંત સિધ્ધિ હાંસલ કરી હતી. આ ગૌરવભર્ચા પુરસ્કાર માટે સીવીએમના ચેરમેન ભીખુભાઇ પટેલે અને ઉપપ્રમુખ મનીષભાઇ પટેલે અભિનંદન પાઠવ્યા હતા.



Activities of EST Department from January to June, 2019

Date	Event	Details
5.1.19	Expert talk on Cleaner Technology by Abhi Patel, GCPC, Gandhinagar	Attended by 30 students of MSc 2 nd Semester, 8 students of MSc 4 th Semester, and TY BSc (ES) students of NVPAS
7.1.19	6 th International Conference on Industrial Hygiene & Safety, CIHA, Ahmedabad	Attended by Prof. Dr. Nirmal Kumar, J.I. and Dr. Hiren B. Soni
10.1.19	Expert Talk by Dr. Illis Feitshans, Director, American Public Health Association (APHA), D.C., USA, on "Legal Aspects of NIOSH"	Attended by 30 Students of M.Sc. EST (2nd Semester) and 15 Students of MIHS (2nd Semester)
15-19.1.19	5 Days Workshop on Wetland Monitoring, Training and Methodologies at Khijadiya Bird Sanctuary, organized by GEER Foundation, Gandhinagar	Attended by Sagar Sheikh (PhD Student) and Yukti Sharma (M.Sc. EST 4 th Sem Student)
18-19.1.19	National Symposium on Green Chemistry & Technology for Sustainable Development, GCET College	Prof. Dr. Nirmal Kumar, J.I., as a Chair Person in Oral Presentation
22.1.19	Counselling to the TYBsc, ES, NVPAS	Attended by 15 students
23.1.19	Counselling to TYBSc, Microbiology,	78 students were participated

	Botany, Zoology, from VP Science college	
23.1.19	Visit to Meteorological Department and Vermicompost Unit at AAU, Anand	Visited by 25 students of MSc EST 2 nd Semester Headed by Dr. Dhruti Patel
24.1.19	Counselling to TYBSc Microbiology, Biotechnology NVPAS	48 students were participated
2.2.19	Counselling to TYBSc Genetics, Bioinformatics	27 students were participated
5.2.19	Visit to Tobacco processing unit at Borsad	Attended by 28 students headed by Mr. Baiju Varghese
16.2.19	Counseling of TYBSc Students, Gujarat Science College, Ahmedabad	Participated by 28 Students of Zoology, by Dr. Hiren B. Soni
16.2.19	Visit to SPRERI Open House	Attended by 26 Students of 2 nd Sem
20.2.19	As Juge in Poster competion, held in GCET college	Dr. Dhruti Patel as Jury
27.2.19	Awarded with 4 stars and got 3 rd position in state,GSIRF by KCG	Prof. Dr. Nirmal Kumar, J.I. and Dr. Hiren B. Soni
28.2.19	Awarded Best Ph.D thesis by GCPC,Gandhinagar	Prof. Dr. Nirmal Kumar, J.I. and Dr. Dhruti Patel
3.3.19	Awarded with Guarav Pursakar by CVM on VV Nagar Day	Prof. Dr. Nirmal Kumar, J.I.
7.3.19	Counselling to TY BSc Food & Nutrition, Clothing & Textile, family planning, Child Development	69 students were participated
13.3.19	Counselling to TYBSc Botany Students of MSU, Baroda	Counseled by Prof. Dr. Nirmal Kumar, J.I., Accompanied by Dr. Hiren B. Soni
13-14.3.19	KIA Workshop: Domain Knowledge at ARIBAS, New V.V. Nagar	Attended by Prof. Dr. Nirmal Kumar, Dr. Hiren B. Soni and Dr. Dhruti S. Patel
27.4.19	Campus Placement for 4 th Semester Students	Attended by 17 students
4.6.19	World Environment Day Celebrations by Community Science Center, SPU, V.V. Nagar	Attended by Prof. Dr. Nirmal Kumar (Jury), and Dr. Hiren B. Soni

M.SC. INDUSTRIAL HYGIENE & SAFETY (MIHS)

Unique Features

- ✓ The programme M.Sc. Industrial Hygiene and Safety is India's first of its kind full time Post Graduate Programme offered at Sardar Patel University.
- ✓ Previously known as Master of Industrial Hygiene since inception in 1997 is the science that deals with Anticipation, Recognition, Evaluation, and Control of occupational health hazards.
- ✓ The portion of safety was added to the course in 2005 to get enhance knowledge about safe working conditions to be created in workplace.
- ✓ The students passing with the Master of Industrial Hygiene & Safety (MIHS) Degrees are expected to have opportunities at:

- ✓ Industrial Hygiene Consultancies
- ✓ Industrial Safety Consultancies
- ✓ Various Engineering, Refineries, Paints, Ports, Pharmaceuticals, Software Industries etc.
- \checkmark Work with Various National and Multinational Industries
- ✓ Go on to become Certified Industrial Hygienist and Certified Safety Professionals.
- ✓ Students may establish their own Industrial Hygiene and Safety firm.
- ✓ Good job opportunities abroad
- ✓ Web: <u>http://istar.edu.in/MIHS/index.htm</u>

Departmental Activities



Dr. Cynthia Ostroski, President (AIHA) visited ISTAR Library, 5.1.19



President, American Industrial Hygiene Association visiting the Department and ISTAR, 5.1.19



Alumni Get Together at Novotel, Ahmedabad



6th International Industrial Hygiene Conference, Novotel Hotel, Ahmedabad, 7-9.1.19



International Labour Law Expert Dr. Illse Freithans visited ISTAR and CVM Management, 10.1.19





Expert Talk on Refinery by Dhruvit Mehta, Mittal -HPCL Refinery, Bhatinda. 18.1.19

Expert Talk on TLV by Abhi Mishra, 22.1.19



Felicitation of NSS Student of MIHS, 30.1.19



Mourning observed by MIHS Student for Brave Soldiers of Pulwama Attack, 30.1.19

M.SC. (REAL ESTATE VALUATION) & M.SC. (PLANT & MACHINERY VALUATION)

Unique Features

- ✓ Master of Valuation (Real Estate) / M.Sc.(Real Estate Valuation) and Master of Valuation (Plant & Machinery) / M.Sc. (Plant & Machinery Valuation) are the two unique interdisciplinary courses run by ISTAR. The courses are affiliated to Sardar Patel University.
- ✓ These courses were first started by Charutar Vidya Mandal at BVM Engineering College, Vallabh Vidyanagar in the year 1994. Master of Valuation (Real Estate) was the first course of its kind in India and master of Valuation (Plant & Machinery) was first course of its kind in the whole world. The senior professionals in the field of valuation designed the courses, after extensive study and research of the valuation courses worldwide.
- ✓ Some of the key persons instrumental in starting these courses were Mr. Kirit P. Budhbhatti (ex-Hon. Advisor), Mr. D.N. Banerjee (ex-Chairman, Central Valuation Board, Kolkatta, West Bengal) and Mr. R. K. Gandhi (practicing valuer, Mumbai).Some eminent valuers from Kolkata, Mumbai and Surat were also part of the same team.
- ✓ As Charutar Vidya Mandal established ISTAR to bring post graduate programmes of Science, Engineering, and Interdisciplinary under one umbrella, these valuation courses were shifted to ISTAR in the year 1999.
- ✓ Nomenclature of these courses are changed to M.Sc. (Real Estate Valuation) & M.Sc. (Plant & Machinery Valuation) from Academic Year 2016-17 as per the UGC norms.
- ✓ Master of Valuation (Real Estate) first and only course of its kind in India
- ✓ Master of Valuation (Plant & Machinery) first and only course of its kind in the world
- ✓ As per the recent report of the Indian Banks' Association (IBA), only academically qualified valuers possessing Post Graduate Degree in Valuation shall be empanelled by banks from 1st January 2020.
- ✓ Being a multi-disciplinary course, students from variety of fields and with wide filed experience join the course glimpses of some of the students are mentioned below:
- ✓ More than 20 years experience in construction industry
- ✓ Chartered Accountant
- ✓ More than 15 years experience as a Civil Engineer and Real Estate Valuer
- ✓ About 10 years experience as a Mechanical Engineer and Plant & Machinery Valuer
- ✓ Electronics Engineer, shifted to valuation career and is working with a valuer's firm
- ✓ MBA, having own valuation firm at Delhi
- ✓ Civil Engineer, working with a valuer's firm
- ✓ Architect from Mumbai, Master's degree in Urban Planning from UK
- ✓ About 10 years experience as a Plant & Machinery Valuer
- ✓ Web: <u>http://istar.edu.in/valuation/index.htm</u>

Departmental Activities

Expert Lecture

- Dr. Shashikantkumar, head, Planning Dept., Bhaikaka Centre for Human Settlement, APIED, delivered expert lecture on "Effect of Development Control Regulations on Valuation" on February 7,8 2019.
- Dr. Sudhir Thakur, senior Town Planner delivered expert lecture on Town Planning and Valuation on 28 February 2019.

Extra-Curricular Activities

- Rudra Bhatt, first semester student of M.Sc. (Real Estate Valuation) participated in Rangoli competition on women's day and won second prize.
- Rushabh Shah, first semester student of M.Sc. (Real Estate Valuation) participated in Inter College Table Tennis tournament of Sardar Patel University as a team member of ISTAR and ISTAR won the championship in the tournament.
- Rushabh Shah, second semester student of M.Sc. (Real Estate Valuation) participated in Inter University Table Tennis tournament at Nanded, Maharashtra as a team member of Sardar Patel University. He was also the Runner's up in ISTAR interclass Table Tennis Tournament.

Participation of Faculty and Students in Seminar/Workshop

- 14 students of second semester, three students of fourth semester and one faculty member (Rupesh T. Shah) participated in a "National Valuation Symposium" organized jointly by IBBI and CVSRTA at Ahmedabad, Management Institute, Ahmedabad on 23rd February 2019.
- Mr. Rupesh T. Shah was also invited as a panelist in one of the panel discussion sessions in this symposium.

Expert Lecture delivered by Faculty

 Mr. Rupesh T. Shah delivered expert lecture on "Valuation and Career opportunities" on 4th February 2019 at SEMCOM, Vallabh Vidyanagar. About 50 students of final year B.Com., B.B.A. and M.Com. attended the same.





M. SC. INSTRUMENTATION & CONTROL (INC)

Unique Features

- ✓ Instrumentation & Control is interdisciplinary subject; it has roots in physics and mechanism in electrical and electronics. It has control through computers and the functional utility in different industrial and domestic spheres. The multidisciplinary aspect has led this discipline to translate the logical ideas into reality with reliable gadgets for effective utilization.
- ✓ The precision and sophistication thus provided by Instrumentation & Control has made it very important subject to study. ISTAR thus conducts Two Years (Four Semesters) post graduate course of M. Sc. Instrumentation & Control which bridges the gap between Science and Engineering concepts and to meet the requirements of high skill manpower for Instrumentation based Process and Control industries in our country as whole and industrial sectors of Gujarat in particular.
- ✓ Course provides know-how about various instruments, process control systems, and automation with technical skills.
- ✓ Well balanced structure between Science & Engineering.
- ✓ Course consists of theory, practicals and project work in each semester.
- ✓ For industrial exposure in-plant training during vacation period at different instrumentation related industries.
- ✓ Compulsory presentation of seminars by each student in all theory papers.
- ✓ Project / Industrial Training report evaluation through presentations & Viva-voce.
- ✓ Encouragement & guidance provided to participate in Seminars, workshops at State/ National level for poster/oral presentations.
- Experienced, skilled technical Professionals from Industries are invited for Expert Talks on advance Instrumentation.
- ✓ Results of University examinations are almost 100%.
- ✓ Prospective course for job in Instrumentation industries.
- ✓ Web: <u>http://istar.edu.in/Instrumentation/index.htm</u>

Departmental Activities

- Department organized State Level Seminar on Frontiers in Instrumentation jointly with V. P. Science College. About 100 participants from different colleges participated.
- Dr. H. N. Kapse delivered a talk on Sensors in Biomedical Instrumentation on 2-2-2019.

- Two students Dwji Oza and Rahul Suthar received first and second prize respectively in poster presentation.
- Dr. H. N. Kapse delivered talk on on Remote Sensing Concepts for Civil Engineering", at training programme in Civil Engineering Department, GCET, 4-1-2019.
- FDP: KIA Workshop on Domain Knowledge attended by Dr. H. N. Kapse & Ms. Feby Sam, 15 & 16 -3-2019.
- Dr. H. N. Kapse attended Seminar on Awareness of SIS-SIF-SIL organized by ISA Gujarat Section, Vadodara
- Poster presented in Symposium & Poster Competition by <u>Feby Sam</u> & H. N. Kapse on Ewaste Management a challenge for Public health organized by C. C. Patel Community Science Centre, SPU, Dept. of Chemistry, SPU, K. M. Patel Institute of Physiotherapy, Karmasad & Voluntary Nature Conservancy, 4-6-2019.
- Placement Interviews arranged:
- o Arteeflow control, Vadodara selected 1 student, 18-2-2019
- o H P Enterprise, TempHu Validation Services, Vadodara selected 1 student, 8-4-2019
- o Otica Meditronics, Vadodara selected 1 student, 18-4-2019
- Alumni talks arranged:
- Mr. Kaushal Chokshi on "Electromagnetic Flow Meter", KFlow Instruments, Vadodara, 4-1-2019.
- Mr. Chirag Patel on "Interview Skills" from Dhyey Career Academy, Anand, 16-2-2019.

State Level Seminar on Frontiers in Instrumentation jointly with V. P. Science College on 2-2-2019





Alumni Talk – Mr. Kaushal Chokshi - KFlow Instruments.

Alumni Talk – Mr. Chirag Patel –

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આઇસ્ટાર અને વી.પી. સાયન્સ કોલેજના સંયુક્ત ઉપક્રમે રાજ્યકક્ષાનો પરિસંવાદ



આઇસ્ટાર કોલેજના ઇન્સ્ટ્રુમેન્ટશન અને કંટ્રોલ વિભાગ તેમજ વી.પી. સાયન્સ કોલેજના ઇન્સ્ટ્રુમેન્ટશન વિભાગ દ્વારા એટલાન્ટા એલેક્ટ્રીકલ્સ પ્રાઇવેટ લિમિટેડ, વિક્રલ ઉદ્યોગનગર અને પાર્થમ ઓટોસ્વિચ, દહેગામ, જેવી ખ્યાતનામ કંપનીઓના સહયોગ "ફન્ટિચર્સ ઓફ ઇન્સ્ટ્રુમેન્ટશન" વિષય પર સંયુક્ત ઉપક્રમે રાજ્યકક્ષાનો સેમિનાર યોજાયો હતો. જેમાં મુખ્ય મહેમાન વરીકે વડોદરા સ્થિત નામાંકિત કંપની સર્વિલિંક સિસ્ટીમ્સના ડાયરેક્ટર ડો. જગદિશ શુક્લા ઉપસ્થિત રહ્યા હતા. સિવિએમના માનદ મંત્રી ડો. એસ.જી.પટેલ, આઇસ્ટાર સંસ્થાના પ્રિન્સિપાલ પ્રો.ડો. નિર્મલ કુમાર, વી.પી.સાયન્સ કોલેજના આચાર્ય ડો. ભાવેશ પટેલ મંચ પર ઉપસ્થિત રહ્યા હતા. સેમિનારમાં આશરે ૧૦૦ કરતા પણ વધુ વિદ્યાર્થીઓ અને શિક્ષકોએ ઉત્સાહપૂર્વક ભાગ લીધો હતો. જેમાં 30 થી વધુ વિદ્યાર્થીઓએ પોસ્ટર મેકિંગ પ્રતિયોગિતામાં ભાગ લીધો હતો. વિજેતાઓને પ્રમાણપત્ર અને પારિતોષિક એનાયત કરવામાં આવ્યા હતા.

આઇસ્ટારના વિદ્યાર્થીની કુવૈતમાં તાલીમ માટે પસંદગી

કંપનીઓમાં ટ્રેઇનીંગ માટે મોકલવામાં આવે છે. આ કાર્યક્રમ હેઠળ આ વર્ષે બીજા સેમેસ્ટરમાં ભણતા વિદ્યાર્થી શાહનવાઝ પઠાણની પસંદગી કુવૈતની કંપની અલ અફાઝ એન્જિનિયરીંગમાં થઇ. જેમાં એક મહિનો એનાલિટીકલ ઇન્સ્ટુમેન્ટસના મેન્યુફેકચરીંગ મેઇન્ટેનન્સનું જ્ઞાન આપવામાં આવ્યું હતું.

વિદ્યાર્થીએ આઇસ્ટાર તરફથી આંતરરાષ્ટ્રીય કક્ષાની ટ્રેઇનીંગ મળવા બદલ હેડ ડૉ. હિમાંશુ કાપસે, પ્રિ. નિર્મલકુમાર તથા ચારૂતર વિદ્યામંડળનો આભાર માન્યો હતો.



વિદ્યાનગર, તા. ૧૮ ઇન્સ્ટુમેન્ટેશન એન્ડ કંટ્રોલ ચારુતર વિદ્યામંડળ વિભાગમાં દર વર્ષે વિદ્યાર્થીઓ સંચાલિત આઇસ્ટાર કોલેજના જુદી જુદી ખ્યાતનામ

M.SC. GEOINFORMATICS (GIS)

Unique Features

- ✓ Unique PG course in Gujarat
- ✓ Upcoming opportunities under Digital India for Project Management & Implementation
- ✓ Linkages with ISRO-IIRS, C-DAC, MPCOST, Compusense Automation, Scanpoint Geomatics Ltd. etc.
- ✓ Technical support from Indian Society of Geomatics, Ahmedabad
- ✓ Blend of multidisciplinary aspects of Remote Sensing, Image Processing, GPS, Android, Geoinformatics, Geo WebServers etc.
- ✓ Application Areas: E- Governance, Environment & Climate change, Urban Infrastructure Development & Planning, Tourism, Irrigation, Forestry, Agriculture, Geosciences, Disaster Management, Crowd Sourcing, Database Management, WebGIS etc.
- ✓ Job Scopes:
- ✓ ISRO IIRS, NRSC, Govt. Ministries, Survey of India, R & D Organizations, Disaster Management Organization, NGOs, Academia, Municipal Corporations
- ✓ GEO-ICT Solutions / Services Private Companies.
- ✓ Web: <u>http://istar.edu.in/MSCGIS/index.htm</u>

Result of April 2019:

Second Semester:	100% (Distinction: 4, Second Class: 1)
Fourth Semester:	100% (Distinction: 9, First Class: 3, Second Class: 1)
Placement:	100%

Workshops/Outreach Programs Organized:

Event Name 43 IIRS outreach program (Advances in Forest Remote Sensing)		
Date	05 th March 2019 to 13 th March 2019	
Organized by	y Geoinformatics Department, ISTAR	
No. of Participants	03 students	
Event Name	e 42 IIRS outreach program (Principles of Polar metric SAR Remote Sensing and its Processing)	
Date	18 th February 2019 to 1 st March 2019	
Organized by	Geoinformatics Department, ISTAR	
No. of Participants	No. of 07 students Participants	
Event Name	41 IIRS outreach program (Hyperspectral remote sensing and its Applications)	
Inspire (ISTAR E-Newsletter – 2019) 2 (1): 39		

Date	21 st January to 1 st February, 2019
Organized by	Geoinformatics Department, ISTAR
No. of Participants	07 students
Event Name	One Day IIRS outreach work shop (Microwave Remote Sensing in Agriculture)
Date	28 th March 2019
Organized by	Geoinformatics Department, ISTAR
No. of Participants	02 Research Scholar + 08 Faculty



Event Name	One Day IIRS outreach work shop (Satellite data access from online data
	repositories and ISRO Bhuvan Geoportal)
Date	26 th June 2019
Organized by	Geoinformatics Department, ISTAR
No. of Participants	18 Students + 03 Faculties



Event Name	IIRS Academia Meet - 2019 Capacity Building in Geospatial:	
	Requirements, Challenges and Opportunities	
Date	14 th & 15 th March 2019	
Organized by	Indian institute of Remote sensing (ISRO), Dehradun	
No. of Participants	01 Student + 01 Faculty, Invited by ISRO, Dehradun	



Students Participation:

Event Name	One Day State Level Seminar
Date	2 nd February 2019
Organized by	Instrumentation & Control Department, ISTAR
No. of Participants	03 students



Students Achievement:

Students of GIS Department won 1st Prize in Kite Decoration Competition at ISTAR.



M.SC. INFORMATION TECHNOLOGY (IT)

Unique Features

M.Sc. (IT) program is recognized and affiliated to Sardar Patel University, Gujarat, India. Faculty of Information technology is a multi-disciplinary unit related to computer Sciences. Information Technology is the most captivating sector of the modern world. Every people and each of the organization are been fascinated by the technique of it.

M.Sc. (IT) gives career in Programming, Software project development, computer networks, information, and network security etc.

Departmental Activities

IT department had organized **"Technokhoj 2019"** on 10th January, 2019. This event provided the students with opportunities to explore and enhance their Technological and motivated them to execute their thoughts in this real world.



Technokhoj'19 was a grand success with total number of participants more than 82, more than 5 colleges students participated in this event. It comprised of total 8 events out of which 4 were Technical Events, 5 were Non-Technical Events.



SHORT TERM CERTIFICATE COURSE ON "PYTHON PROGRAMMING AND MACHINE LEARNING"

Information Technology department of ISTAR College had organized Short Term Certificate Course on "Python Programming and Machine Learning" for M.Sc. IT, IInd semester students. This Course was started from 15th December 2018 and finished 23rd February 2019, Completed this course within 30 hours. The Certification course had an aim to equip the participants with the knowledge and skill enhancement with respect to Python Programming and Machine Learning.



WEBINAR: ARTIFICIAL INTELLIGENCE VS. MACHINE LEARNING VS. DEEP LEARNING AND DATA SCIENCE

As a part of students learning activity, Information Technology department had organized Webinar on "Artificial Intelligence Vs. Machine Learning Vs. Deep Learning and Data Science" on 20th February, 2019 at ISTAR IT Lab. Anindita Das Bhattacharjee, Assistant Professor, Swami Vivekananda Institute of Science Technology conducted the session.



EXPERT TALK WITH HANDS ON SESSION ON "WEBSITE DESIGNING USING WORDPRESS"

Information Technology Department Of ISTAR College had Organized One Day Expert Talk On "Website designing using Wordpress" For Second Year Students on 4th February, 2019 For 4 Hours. It's probably the easiest and most powerful blogging and website content management system (Or CMS) in existence today.



STUDENTS ACHIEVEMENTS



Mr. Pranay Rawat (M.Sc. IT) Received First Prize in Rangoli Competition on Annual Day



Ms. Kesha Parikh & Ms. Mansi Modha (M.Sc. IT) Received First Prize in Best Out of Waste Competition on Annual Day

GROUP DAY CELEBRATION

Information Technology Department of ISTAR College had Organized Group Day on February, 2019.



RESULT

> 100% University Results, More First Class & Distinction Every Year.

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ચારૂતર વિધામંડળ સંચાલિત ઇન્ટિટટ્યૂટ એફ સાયન્સ એન્ડ ટેક્નોલોજી ફોર એડવાન્સ સ્ટડીઝ એન્ડ રીસર્ચ (આઇસ્ટાર) ખાતે પાયથોન પ્રોગ્રામીંગ એન્ડ મશીન લર્નિંગ વિષય ઉપર શોર્ટ ટર્મ ટ્રેનિંગ પ્રોગ્રામનું આયોજન એમ.એસ.સી. ઈન્ફોર્મેશન ટેક્નોલોજી ડિપાર્ટમેન્ટ દ્વારા કરવામાં આવ્યું હતું. સમગ્ર ટ્રેનિંગ પ્રોગ્રામનું આયોજન ડો. નીકી કે. જેન (કન્વેનર), ડો. સુચીતા બી. પટેલ (કો. કન્વેનર)ના માર્ગદર્શન હેઠળ કરવામાં આવેલ હતું. તા. રદ્ ફેબ્રુઆરી, ૨૦૧૯ના રોજ પ્રોગ્રામના સમાપન સમારોહમાં સંસ્થાના પ્રિન્સિપાલ ડો. નિર્મવકુમાર દ્વારા વિધાર્થીઓને ટ્રેનિંગ પ્રોગ્રામની સફળતા બદલ અભિનંદન પાઠવ્યા હતા.

Inspire (ISTAR E-Newsletter – 2019) 2 (1): 46

આઇસ્ટાર કોલેજ ખાતે ટેકનોલોજી-19નું આયોજન કરાયું

આણંદ | ચારૂતર વિદ્યામંડળ સંચાલિત ઇન્સ્ટીટ્યૂટ ઓફ સાયન્સ એન્ડ ટેકનોલોજી ફોર એડવાન્સ સ્ટડીઝ એન્ડ રીસર્ચ-(આઇસ્ટાર) ખાતે એક દિવસીય ટેકનીકલ સ્પર્ધા 'ટેકનોખોજ'નું આયોજન કરવામાં આવ્યું હતું. જેમાં મોટી સંખ્યામાં વિદ્યાર્થીઓએ વિવિધ સ્પર્ધાઓ જેવી કે બગ સ્પોટ, વેબ ડિઝાઇનીંગ, લોગો મોડીફીકેશન, મિનિટ ઇન વીન, જમ્પ એન્ડ સોલ્વ, બલુન ગેમ, ક્રેઝી મેઝ, અને એન.એફ.એસ મોસ્ટ વોન્ટેડ વગેરેમાં ઉત્સાહપૂર્વક ભાગ લીધો હતો. સમગ્ર કાર્યક્રમ સંસ્થાના આચાર્ય ડો. નિર્મલક્રુમારના માર્ગદર્શન હેઠળ યોજવામાં આવ્યો હતો.

PEN-DOWNS FROM FACULTY MEMBERS

RAFTING WITH SCIENCE

Himanshu N. Kapse

Assistant Professor, Department of Instrumentation & Control Institute of Science & Technology for Advanced Studies & Research (ISTAR) Vallabh Vidyanagar – 388 120 **E-Mail:** <u>himanshukapse@yahoo.com</u>

We do many times go for outing at hilly areas especially where river streams are beautiful in nature and with transparent flow of water. This type of flow is best suited for Rafting. Rafting is recreational outdoor activity, which use an inflatable raft to navigate a river. This is often done on white water or different degrees of rough water. Dealing with risk and the need for teamwork is often a part of the experience. The overall risk level on a rafting trip using proper precautions is low. Thousands of people safely enjoy rafting trips every year. Rafting in general has become safer over the years. Expertise in the sport has increased, and equipment has become more specialized and improved in quality. As a result, the difficulty rating of most river runs has changed. Depending on the area, safety regulations covering rafting, both for the general do-ityourself public, as well as commercial operators may exist in legislation. These range from the mandatory wearing of lifejackets, carrying certain equipment such as whistles and throw able flotation devices. Risks in white water rafting stem from both environmental dangers and from improper behaviour. Typical rafting injuries include trauma from striking an object, traumatic stress from the interaction of the paddler's positioning and equipment or the force of the water. It is generally advisable to discuss safety measures with a commercial rafting operator before enjoying it.

What is the science behind this sport activity?

We know Newton's 1st law: Every object continues in its state of rest, or of uniform velocity in a straight line, as long as no net force acts on it. The first law applies to the state of the water. 2nd law: The acceleration of an object is directly proportional to the net force acting on it, and is inversely proportional to its mass. The direction of the acceleration is in the direction of the net force acting on the object. The second Newton's laws apply to the raft by the fact that water is constantly in motion which applies force to the raft. 3rd law: Action and reaction are always equal and opposite. Whenever one object exerts a force on a second object, the second exerts an equal force in the opposite direction on the first. The third law applies because if you hit a rock with a certain force you bounce back because of the force applied, which is then where the elasticity of the raft is needed. The flow of water does play an important role. There are three basic states of flowing water: laminar, turbulent, and chaotic.

Laminar describes the smooth-flowing currents in an unobstructed river. Even these currents can be complicated, for their speeds vary. Surface water is slowed by wind, while deep currents are slowed by friction with the riverbed. Water in the middle, a few feet below the surface, usually runs the fastest. Turbulence occurs when obstacles, such as rocks or a sudden narrowing of the river channel, obstruct the current's flow. Obstacles force too much water into too little space, so the water runs faster and laminar sheets break into individual ribbons of current. Then things get really

complicated. If water runs into a stone, a turbulent zone is created where the water and rock collide. The current runs faster around the stone edges, but behind the rock, it forms an area of backward-flowing water called an eddy. Shear zones between the eddy and the fast water can be strong enough to keep a raft from reaching the calm water.

Water crashing over a submerged ledge or rock becomes chaotic and creates a hole. A hole creates a horizontal vortex underwater that actually rotates in an upstream direction. A rafter, who falls into a hole, is pushed back upstream against the ledge that created the hole, and then driven down underwater. Often the only way out of a vortex is to dive to the bottom of the river, where some of the water crashing into the hole flows under the vortex. A rafter who gets into that deep current can follow it out of the hole and then resurface. Another large part of fluid dynamics and rafting is Bernoulli's Principle. It states that where the velocity of a fluid is high, the pressure is low, and where the velocity is low, the pressure is high. Knowing the amount of water flowing in a river is important because the river's speed increases as more water flows through it. So it is dangerous in rainy season and Rafter must avoid in such times.

Balance is also a large part of rafting. If a raft is unbalanced it flips more easily, so equilibrium needs to be maintained. Buoyancy is a force exerted by water that opposes an object's weight. The magnitude of the force is proportional to the difference in the pressure between the top and the bottom, and is also equivalent to the weight of the water. If the object is either less dense than the water or is shaped appropriately like raft, the force can keep the object afloat. Archimedes's principle specifically applies to the raft. An object floats on water if its density is less than that of the water. Which is the reason why rafts though small in comparison to the load it can float and hence the rafters won't sink. Thus experience of rafting sport is fully exciting unsurprisingly involves lot of Physical Science to survive it.

ENVIRONMENTAL FORENSICS: A SOLUTION FOR CHEMICAL POLLUTION

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Background

Forensic science is the application of science to legal cases. Forensic science technicians help investigate crimes by collecting and analyzing physical evidence. Environmental forensic science applies scientific methods to the investigation of environmental crimes and contamination events. 'Environmental forensics' is a combination of analytical and environmental chemistry, which is useful in the courtroom context. It therefore involves field analytical studies and both data interpretation and modeling connected with the attribution of pollution events to their causes. Environmental forensics is defined as the systematic and scientific evaluation of physical, chemical, and historical information for the purpose of developing defensible scientific and legal conclusions regarding the source or age of a contaminant release into the environment.

Historical Perspective

Environmental forensics evolved in the 1980s as a result of the potential liability (as defined by laws in the United States) of parties who allegedly released a contaminant into the environment. Since this time, other countries, such as those in the European Union, have enacted similar laws requiring the same environmental tools provided by environmental forensics.

Functional Areas

Environmental forensics is the application of defensible scientific methods to address questions related to release histories and sources of contamination in the environment. Environmental forensics generally involves the reconstruction of past environmental events, such as the timing, types and amounts, and sources of chemical releases to the environment. Questions requiring environmental forensic applications usually relate to understanding the extent, duration, and responsibility for environmental contamination sites in a regulatory and/or legal context. These approaches are also integral to environmental due diligence for mergers and acquisitions and remediation cost recovery. Techniques such as chemical fingerprinting, chemical fate and transport modeling, hydro-geological investigation, and reconstructing operational histories, among others are at the heart of many investigations. These and newer techniques, such as multivariate receptor statistical modeling, continue to evolve and have become more sophisticated over time, as have the types of problems to which they are applied (Exponent, 2018).

Key Areas

Environmental forensics aims to cover some of the main techniques and areas to which environmental forensics are being applied. These are source identification issues, microbial techniques, metal contamination, methods of assigning liability, use of isotopes to determine sources and their applications, molecular biological methods, hydrocarbon fingerprinting techniques, oil chemistry and key compound identification, and emerging role of environmental forensics in groundwater pollution. Besides, environmental forensics also considers specific pollutants and long-lived pollutants of groundwater such as halocarbons, which have presented particular problems as well as the way in which chemical degradation processes can lead to compositional changes, which provide valuable information. It will be both of specialist use to those seeking expert insights into the field and its capabilities as well as of more general interest to those involved in both environmental analytical science and environmental law (Hester and Harrison, 2008).

Recent Development

Recent decades have seen a burgeoning of legislation designed to protect the environment and, as the costs of environmental damage and clean-up are considerable, not only are there prosecutions by regulatory agencies, but the courts are also used as a means of adjudication of civil damage claims relating to environmental causes or environmental degradation. The result is the increasing number of prosecutions of companies, who have breached regulations for environmental protection and in civil claims relating to harm caused by excessive pollutant releases to the environment. Such cases can become extremely protracted as expert witnesses provide their conflicting

interpretations of environmental measurement data and their meaning. It is in this context that environmental forensics is developing as a specialism, leading to greater formalization of investigative methods which should lead to more definitive findings and less scope for experts to disagree. Now a significant subject in its own right, at least one journal devoted to the field and a number of degree courses have sprung up.

Solution to Chemical Pollution

Environmental forensics is a rapidly growing area primarily directed towards determining those responsible for releasing contaminants into the environment (Mudge, 2009; Murphy and Morrison, 2007). There is a wide range of contaminants that are continually being released into a large number of environments. Not only will the nature of the product and environment determine what actually happens to the product but also they will play an important role in evaluating the time it may take for the environment to be cleansed, particularly if natural attenuation is the major means for remediating the environment. Therefore, in general, the majority of environmental issues require a number of basic questions to be addressed such as (a) What is the product? (b) Where did it come from? (c) How long has it been there? and (d) Is it degrading?

As illustrated in Figure 1, this can be a very complex problem since there may be multiple sources of the same product, comingling of the same product from different sources, mixing of degraded and non-degraded products and a multitude of other possibilities. Weathering aspects also need to be considered along with the length of time the spilled product has been in the environment. As noted below these investigations cannot depend upon the standard EPA (Environmental Protection Agency) monitoring methods but rather conventional techniques, such as Gas Chromatography (GC), Gas Chromatography-Mass Spectrometry (GCMS) and Gas Chromatography-Isotope Ratio Mass Spectrometry (GCIRMS), specifically tailored to the problem being investigated. No one of these techniques should be used individually but even so, it is still not always possible to provide precise answers to these questions. It is still important to use all of the data in an attempt to answer these questions which are basically directed towards finding the responsible parties who should ultimately be required to clean up and remediate the contaminated sites.



Fig. 1. The complexity of the problem faced by the environmental forensic scientist is illustrated in this diagram showing the potential for multiple sources as well as interference from background sources.

Looking into the above, environmental forensics is the systematic and scientific evaluation of physical, chemical, and historical information for developing defensible scientific and legal conclusions regarding the source or age of a contaminant released into the environment. As such, there is a multitude of forensic techniques available for contaminant age dating and source identification including, but not limited to aerial photo interpretation/photogrammetry, chemicals associated with discrete chemical processes, identification of the manufacturer of a particular product, chemical additives and/or impurities, chemical profiling, degradation modeling, corrosion models, contaminant transport modeling, surrogate chemical analysis, chronological changes in chemical processes resulting is diagnostic markers, compound specific isotopic analysis, polychlorinated biphenyl (PCB) congener analysis and degradation product ratio analysis. Given the range of available environmental forensic techniques, selected methods are presented to illustrate the applications of environmental forensics to identify the age and source of a contaminant release.

Applications

Applications of environmental forensic techniques include their use for identifying the responsibility for areas of known contamination, to allocate responsibility for remediation in areas of mixed waste streams from multiple parties, identification of historical property owners responsible for a contaminant release, developing the probability that chemical exposure caused manifest or latent injuries, distinguishing between anthropogenic and anthropomorphic contaminants, and for marine oil pollution, determining the spill source.

Scenarios in which environmental forensics have been applied have ranged from remote Arctic environments to urban sediments. In both extremes, the chemical condition of the environment – i.e., the background or baseline – is a central part of any

investigation. It is upon this background that additional contamination from one or several responsible parties is overlain. The types of problems to which environmental forensic techniques are commonly applied include (1) Identifying and quantifying contributions from various sources to contaminated sites (i.e., apportionment) (2) Distinguishing natural background and diffuse anthropogenic background from specific pollution sources (3) Differentiating specific sources of petroleum and natural gas (4) Delineating the time frames of releases (5) Reconstructing historical concentrations and pathways of releases for dose reconstruction in toxic torts, and (6) Conducting causal analysis to determine associations between observed conditions and potential sources.

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