LEUMICAL INSTITUTE, ALIMED ABAD

R. C. TECHNICAL INSTITUTE, AHMEDABAD

(Directorate of Technical Education, Gujarat State)



June 2021

● Issue : 05

January 2020 - December 2020

Yearly Newsletter



It is a matter of immense pleasure for me to present the fifth consecutive newsletter of the Institute, "SAMVAAD". The institute is dedicated for overall development of the students and hence, doing various co-curricular and extra-curricular activities along with the regular academics. Here, it has been tried to provide glimpse of those activities carried out by the faculties and students of this institute.

We feel happy to share that the Textile

Processing Department is consistently showing their healthy relationship with esteemed professional organization of Textile Chemistry. We again signed an MoU for three years with Association of Chemical Technologist, India. To develop interest of students in basic science, this year we organized "National Science Day" on 28th February. Many students participated and enjoyed the event. "Aavishkaar-2020", the fifth consecutive annual technical festival was organized in the month of march wherein the students presented their innovative projects and models. The theme of the event was "Go Green". The students made many working models of vehicles and machines based on solar and electrical energy.

Since the end of March 2020, our country and whole world greatly affected with Covid-19 pandemic. We had to undergo complete lockdown for several days. The class room education suffered a major break and disturbed greatly. However, we found out the alternate way of virtual teaching using online platform MsTeams. Our faculties played a very nice role in work from home teaching and learning mode. Also, we conducted webinars on various technical subjects including creating awareness to prevent spread of Covid-19, and to prevent occurrence of cancer by healthy life style. I congratulate the faculties and students for making aforementioned events successful.

Finally, I would like to express my thanks to the team of "SAMVAAD" for putting their nice efforts in publishing the fifth issue of the newsletter.

INDEX

- Republic Day Celebration
- Tri-party Training Program Cum Workshop
- MoU between RCTI and ACTI
- Science Day Celebration 2020
- Gandhi Ashram Visit 2020
- Seminar on Application of Enzymes
- Charkha Mandal
- AAVISHKAAR 2020
- Ek Bharat Shreshtha Bharat Event
- Webinar Conducted by Institute
- Departmental Activities
- Industrial Visit
- Staff Achievements and
- Paper Publication
- Institute Toppers
 - Students' Achievements
 - Newsroom

1

Republic Day Celebration

At R C Technical Institute, We are always keen to celebrate the all national festivals with full glory and respect. A team of NCC cadet under the guidance of NCC Co-ordinator performs the



NCC parade with discipline and co-ordination. Students and faculties of all the departments make their presence to respect the great nation. Jay Hind. Jay Bharat.



2 Tri-party Training Program Cum Workshop



Tri-party training program cum workshop on "Validating Curse Outcomes, Program Outcomes, Program Educational Objectives and their mapping for Mechanical Engineering, Fabrication Technology, Metallurgy engineering, Chemical Engineering,



Automobile Engineering, Plastic Technology and allied branches" was organized by NITTTR, Bhopal at our institute. Dr. B B Soneji, Principal presided over the inaugural ceremony and delivered motivational speech.

3

MoU between RCTI and ACTI

Association of Chemical Technologists (India) is a nonprofit organization deals with numerous developmental activities for students of Chemical and allied Science and Technology. R. C. Technical Institute, Textile Processing Department has signed an MoU with Association of Chemical Technologist (India)





Science Day Celebration 2020

General Department of RCTI has organised "National Science Day Celebration" under leadership of Principal Dr. B B Soneji Sir and

with valued guidance of HOD Ms. Kshamaben Trivedi.









Gandhi Ashram Visit 2020

On the occasion of 150 years of celebration of Gandhiji, Rcti NSS team planned various activities to make this year memorable. Along with "Chalo Charkho Ramiye" event, NSS team

and some other students visited Gandhi Ashram and "Kalam Khush Factory". All visitors from RCTI learned great thoughts and principles of Gandhiji.





6

Seminar on Application of Enzymes

One Day Seminar under the aegis of Textile engineering Division Board, IEI in association with Textile Processing Technology department, R C Technical Institute Ahmedabad and ACTI, Ahmedabad India dated 3/3/2020 on Application of

Enzymes in Textile Wet Processing. Session delivered by Mr. R. D. Joshi in One Day Seminar held on 03/03/2020 at R C Technical Institute, Ahmedabad on Enzymes: Today & Tomorrow



7 Charkha Mandal

RCTI NSS team is proud to announce the opening of first ever Charkha Mandal among all Technical colleges. Our Dynamic Principal Dr. B B Soneji officially inaugurated the Charkha Mandal in the presence of Avani Varia, founder

of the "Chalo Charkho Ramiye Movement" on 6th March, 2020. Faculties and Students of all departments enjoyed applying hands on Charkha.









8 AAVISHKAAR 2020

Aavishkaar 2020 - the annual technical event was organized at R C Technical Institute on 6th and 7th of March, 2020 under the guidance of Dr B B Soneji and leadership of Gymkhana Coordinator Ms. Nishi Gupta. The theme of the event was "Go Green". Event was the

combination of Departmental Technical events and Central Technical Events.- This time, RCTI also introduced two Non Technical Events - "Charkha Activities " and " Pottery Activity "Students and faculties participated enthusiastically in the event.







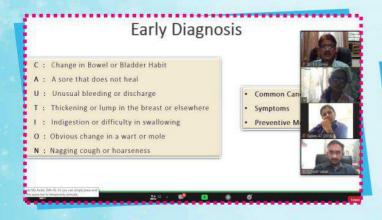
9 Ek Bharat Shreshtha Bharat Event



Ek Bharat Shreshtha Bharat programme aims to enhance interaction and promote mutual understanding between people of different states/UTs through the concept of state/UT pairing. In order to fulfill above aim, we have made a small effort by arranging a little performance of our students on our paired State Chhattisgarh's cultural dance at award ceremony of our techfest "Aavishkar-2020".

10 Webinar Conducted by Institute

Sr. No.	Title	Expert	Date
1	Effective presentation Skill	Mr. Vijaykumar Radadiya	19-05-2020
2	How to select good final year Project	Mr. A. M. Patel, Mr. J. B. Bhati, DR. P. A. Vaghela, Dr. H. I. Joshi	01-06-2020 02-06-2020
3	Web Designing	Mr. Rajesh Sardhar, Creart Solutions Pvt. LTD.	03-06-2020
4	Importance of fitness for immunity Boosting	Mr. Keyur Patel	04-06-2020
5	Fundamentals of arduino programming for engineering students	Mr. A. M. Patel, Dr. H. I. Joshi	12-06-2020
6	Cloud Computing	Ms. Nirali Chavda, Top Technologies Pvt. LTD.	01-08-2020
7	Creative Presentation Skills	Ms. Deepika Harwani	16-08-2020
8	Phthon	Mr. Rajesh Sardhar, Creart Solutions	28-08-2020
9	Skill based training programs and related job opportunities	Mr., N. G. Parmar, Mr. A. N. Mahajan	17-10-2020
10	Sanjeevani Life Beyond Cancer	Ms. Ruby Ahluwaliya	23-10-2020







Departmental Activities

Computer Department:

A workshop on Core PHP and Advance PHP is organized by department.

Two Seminar organized by department on Software Project Development and NET Technology.

Textile manufacturing Technology:

During AAVISHKAAR-2020 Treasure Hunt (Nontechnical Event) and Technical Quiz organized by department.

Textile Processing Technology:

Expert Lecture and campus (recruitment) interview organized on 9th January,2020 by Ahlstrom Munksjo, Mundra on Introduction to Nonwoven Technology. Another expert Lecture organized on 31st March, 2020 by Dr. Vrajesh Parikh on Advanced Filteration Technologies.

One Day Seminar organized under the aegis of Textile engineering Division Board, IEI in association with Textile Processing department, R C Technical Institute, Ahmedabad and ACTI, Ahmedabad India on 3rd March, 2020 on Application of Enzymes in Textile Wet Processing. One Session delivered by Mr. R. D. Joshi in One Day Seminar held on 3rd March, 2020 at R C Technicla Institute, Ahmedabad on Enzymes: Today & Tomorrow.

· Printing Technology:

Various competition like Logo Making Competition, Technical Paper Presentation and Technical Quiz orgainzed during Aavishkaar 2020

Mechanical Engineering:

An Expert lecture on Indoor Air Quality by Dr. Ahmed Alaa, Chris Muller, Dr.Lallu Joseph was organized by Mechanical Department. Another expert lecture organized on Electrical Vehicles by Mr. Shrikant Bidwal. An expert lecture organized by mechanical department on Significance of Energy Efficiency by Mr. Chirag Chauhan. An expert lecture organized by mechanical department on Maintenance of two wheelers at home by Prof Jayendra Vasani, LDCE Ahmedabad. An Expert lecture organized on Job V/s Entrepreneurship, an astute approach by mr. Prashant Joshi, managing partner, Technical Steel Eng. Dubai were organised for students

Civil Engineering:

Civil Engineering Department organized various competition like Quiz Competition, Tunbling Tower Competition and General Knowledge Quiz Competition during Aavishkaar 2020 and lots of students took part in the competition enthusictically.

12 Industrial Visits

Programme	No. of Visit	Expert	No. of Students	Date
Printing Technology	3	Bhavik Publication, Jalund, Gujarat Sandesh Press, Ahmedabad Times of India, Ahmedabad	28 26 31	04-01-2020 01-02-2020 29-02-2020
Mechanical Engineering	3	Heat Treat Enterprize, Ahmedabad Giriraj Industry, Ahmedabad CIPET, Vatva, Ahmedabd	70 76 77	02-01-2020 09-01-2020 06-02-2020
Civil Engineering	1	Saharsh Serenity, Gota, Ahmedabaf	35	18-02-2020

13 Staff Achievements and Paper Publication

Dr. C R Madhu published a paper on Swot analysis of Gujarat Textile Wet Processing and Apparel Industries in Textile Value Chain ISBN/ISSN No 2278-8972 in march 2020.

Smt. R D Pachauri presented paper in international Webinar on Covid-19 and the Environment on Effect on Environment due to Covid-19 lockdowns of Textile Industries in India in May 2020

Dr. P R Thanky published a paper on Critical Reading of 'The Flood' by Thakazhi Sivasankara Pillai in International Journal of Multidisciplinary Educational Research ISSN: 2277 – 7881in April 2020.

Dr. P R Thanky presented a paper on Impact of Social Network and Technology on English Language in Online International Conference on Innovative Trends in Language, Literature, Culture and Online Education organised by Parul University in July 2020.

Mr. H S Patel and Mr. V A Dabhi presented paper on Elastic Constants of TiBeO3: A First Principles Investigation A DFT Study for Structural and Electronic Properties of Brucite Mg(OH)2 in National Conference on STEM 978-93-5382-943-8

Mr. H S Patel and Mr. V A Dabhi presented papers on To investigate electronic properties of AlHO2 doped with trivalent impurities (Ga, In, TI) by using density functional theory and Elastic constants of beryllium oxide: A first-principles investigation in AIP Conference Proceedings 978-0-7354-1983-4 in May 2020.

Mr. H S Patel and Mr. V A Dabhi published a paper on To study the electronic properties of wurtzite BeO doped with group II-A (Mg, Ca, Sr, Ba) impurities by using Density Functional Theory in Journal of Science, Knowledge Consortium of Gujarat 2320-0006 in July 2020.

Mr. N P Patel published a paper on Numerical Solutions of Second Order Boundary Value Problems by Hermite Polynomial Methods in International Journal of Advance Engineering and Research Development, e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406 in April 2020.

Mr. N P Patel presented a paper on Numerical

solution for the flow of a conducting power-law fluid in a transverse magnetic field and with a pressure gradient using Hermite polynomial method in TEQUIP-III SPONSORED 2nd International Conference (Digital) Research and Innovations In Science, Engineering & Technology(ICRISET-2020) in Sep 2020.

Mr. D P Israni published a paper on An Efficient Image Fusion of Visible and Infrared Band Images using Integration of Anisotropic Diffusion and Discrete Wavelet Transform, in Journal of Communications Software and Systems, ISSN 1845-6421, in March 2020.

Mr. D P Israni published a paper on An Adaptive Approach to Eliminate Atmospheric Scintillation in Long Range Visible Sequence in International Journal on Information Technologies & Security, ISSN 1313-8251 in April 2020,

Shri D P Israni published a paper on Path Planning Optimization and Object Placement Through Visual Servoing Technique for Robotics Application in Journal of Automation, Mobile Robotics and Intelligent Systems, ISSN 1897-8649 (Print) / ISSN 2080-2145 (Online) in July 2020.

Mrs. PP Raval and Dr. HI Joshi published a paper on Speed Control of Three Phase Slip Ring Induction Motor Using Chopper, Volume 8 | Issue 2 | April 2020, (ISSN: 2321-9939)

Ms. K S Patel presented a paper on Performance Investigation of Grid-Connected DFIG using Integrated Shunt Active Filtering Capabilities, in International Conference on Design and Manufacturing aspects for Sustainable Energy (ICMED), in July 10-12, 2020.

Ms. K S Patel published a paper on Modified Grid Side Converter Control Technique for DFIG connected to nonlinear loads, in Taylor and Francis: Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, in August-2020.

Ms. K S. Patel presented a paper on Performance Investigation of Grid-Connected DFIG using Integrated Shunt Active Filtering Capabilities, in Web of conferences, Vol.184, pp.1-7, in August-2020.

Mr. S D Patel published a paper on Transient stability analysis of synchronous generator in Power system comparison of time domain method and direct method ISSN 2395 - 0056 Volume 7 ISSUE 6, in June

Dr. P A Vaghela published a paper on Integrated Symmetric and Asymmetric Involute Spur Gear Modelling and Manufacturing in Materialstoday proceedings, ISSN: 2214-7853 in Jan 2020

Ms. M B Acharya published a paper on The Effect of algae oil blend with diesel to investigate performance and emission analysis with various variable parameters — A review in International Journal of Engineering Science and Futuristic Technology, ISSN (Print):2454-1125 ISSN (Online):2454-1338 in April 2020.

Ms. D M Harwani presented a paper on Recent Advances in Mechanical Infrastructure at International conference at IITRAM in Aug 2020.

Mr. K P Jasodani published papers on SWAT Hydrological model for watershed management in Watrak river basin and Identifying water harvesting sites in watrak river basin using GIS Technologies and considering Equity Measures in Gedrag & Organisatie Review, 0921-5077 in April-June 2020.

Ms. K S Patel reviewed two papers IET Generation, Transmission & Distribution in Jan 2020 and March 2020

Dr. J N Mehta published an article on 'Gulzar ane Chand: Sambandh Copyright no' was published by Kodiyu magazine of Lokbharati, Sanosara.

Mr. J R Patel published an article on Printing Technology was published in famous national magazine Screen Print India.

Dr. Jay Mehta conducted a Webinar entitled 'English @ My Fingertips' organized by Bosamia Arts College, Jetpur

Dr. Jay Mehta delivered expert sessions (Via Google Meet) on the **short stories by Edgar Allan Poe** at the Department of English, Maharaja
Krishnakumarsinhji Bhavnagar University during
18-20 October 2020.

Dr. C R Madhu took online Webinar Series on Introduction to Textile Wet Processing in L D College of Engineering from 04/05/2020 to 08/05/2020.

'Ms. Deepika Harwani delivered expert lectures on Importance of Soft Skills in todays era organised by SVBIT College, Vasan on 11th March 2020 and on Super-plasticity in Non-Ferrous Metals" organised by PDPU, Gandhinagar on 15th July 2020.

Smt R D Pachauri participated in video making competition and won 1st Prize on "chhatrapati shivaji maharaj" organised by Yuva manthan Gujarat Rajya Board, Govt. of Gujarat in April 2020.

Shri Dippal Israni Completed Ph. D from Charusat University, Changa, Gujarat, India with title: "Occlusion Modelling and Multi Object Tracking with Identity Retention in Visual Sequences using Feature Descriptors"

Shri J.B.Patel was conferred the doctorate degree in Mechanical Engg.

Shri P.A.Vaghela was conferred the doctorate degree in Mechanical Engg.

Smt. M.B.Acharya completed the Masters Degree in Mechanical Engg

14 Institute Toppers

Sr.	Enrollment No.	Name of Candidates	CPI	CGPA	Programme
1	166400306040	Mehta Akshat Ashish	9.28	9.79	Civil Engineering
2	166400307100	Satani Rushi Sandipkumar	9.63	9.62	Computer Engineering
3	166400309605	Manthan Chokhandre	9.14	9.85	Electrical Engineering
4	166400316118	Patel Hil Nimesh	9.73	9.80	Information Technology
5	166400319026	Mevada Rohitkumar Ashokbhai	9.44	9.45	Mechanical Engineering
6	166400328001	Aman Sanghavi	9.28	9.15	Textile Processing Tech.
7	166400329058	Thakkar Ruturaj C.	9.36	9.61	Textile Mfg. Technology
8	166400358011	Patodiya Nakul Rajeshbhai	8.45	9.73	Printing Technology



Student's Achievements

Savaliya Vivek secured 1st rank and Patel Daksh, Patel Meet, Patel Om and Shah Deergh secured 2nd rank in Robo Race, Sparx of Instinct 2020 at Indus University.



Newsroom

SATURDAY, 14 March, 2020

Ahmedabad city

जीस्ट्राप राजागर

ટોની સ્ટાર્કના 'એડિથ' ગ્લાસની જેમ મેપિંગ અને ઇમરજન્સી એલર્ટ આપી શકે તેવી સ્માર્ટ હેલમેટ બનાવી

આર.સી. ટેકનિકલ ઇન્સ્ટિટ્યુટ ખાતે ગો ગ્રીન થીમ પર એન્યુઅલ ટેક્ફેસ્ટ 'આવિષ્કાર-૨૦૨૦' યોજાયો હતો, જેમાં ૫૦૦થી વધુ સ્ટુડન્ટ્રે પાર્ટીસિપેટ કર્યું હતું. સ્ટુડન્ટ્સે મોડેલ મેકિંગ કોમ્પિટિશન, ટેકનિકલ ક્વિઝ, કોડિંગ-ડિકોડિંગ, રોબો સોકર, રોબો રેસ, ટાઇ એન્ડ ડાય તેમજ ટ્રેઝર હેન્ટ, થમ્બલિંગ ટાવર જેવી ગેમ્સ રમ્યા અને સ્ટડન્ટસ વિવિધ સામાજિક સમસ્યા પર વર્કિંગ મોડેલ્સ બનાવ્યા હતા.



સ્માર્ટ હેલમેટ

અકરમાતોની સંખ્યા દિવસેને દિવસે વધતી જાય છે ત્યારે સ્માર્ટ હેલમેટ તૈયાર કરવામાં આવ્યું જે હેલમેટને મોબાઇલ સાથે કનેક્ટ કરી જીપીએસને વડે રસ્તાનો મેપ હેલમેટની આગળ રાખેલા ગ્લાસમાં જોઇ શકાય છે અને જ્યારે અકસ્માત થાય ત્યારે સ્વયંસંચાલિત એસએમએસ



આ ઇલેક્ટ્રીક રીક્ષામાં ૪૮ વોલ્ટ, ૯૦૦ વોટની બી,એલ.ડી.સી. મોટરનો ઉપયોગ કરવામાં આવ્યો છે. સિંગલ ચાર્જમાં ૪૦ કિ.મી સુધીનું અંતર કાપે છે. આ ઈલેક્ટ્રીક રીક્ષાની મહત્તમ સ્પીડ ૪૦ કિ.મી. પ્રતિ કલાક છે. બેટરી ચાર્જીંગ



પાવર વીડર

પર્યાવરણ અને ખેતીમાં વધુને વધુ ઉપયોગી થઇ શકે તેવા મોડેલ બનાવવાના વિચાર સાથે આ પાવર વીડર તૈયાર કરવામાં આવ્યું છે આ એક એવુ ઉપકરણ છે કે જેનાથી ખેડૂત સરળતાથી પાકમાં રહેલ નીંદજા દૂર કરવાના ઉપયોગમાં લઇ શકે છે અને આનાથી ખૂબ જ ઝડપથી અને મોટા પ્રમાણમાં નીંદજ દૂર કરી શકાશે.



કાગળ કાપવાનું મશીન

ઘણી વખત એવી સમસ્યા ઊભી થાય છે કે અમુક જ માપનું કાગળ કટ કરી શકાય છે એવુ ન થાય અને જે સાઇઝનું કાપવું હોય તેટલા સાઇઝમાં કાગળ કટ કરી શકાય તે માટે ઇચ્છિત માપમાં કાગળ કાપવાનું ખૂબજ ઉપયોગી મશીન તૈયાર કરવામાં આવ્યું.



ગ્રીન વ્હિકલ 🐣 રોબો સોકર ખાસ ગેમ્સ માટે અને રોબો વૉર કરી શકે તે

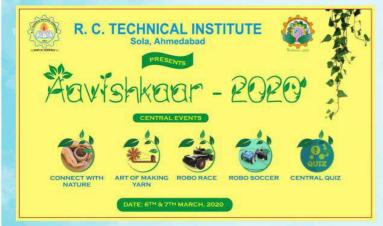
માટે વિદ્યાર્થીઓએ જુદા

જુદા પ્રકારના રોબોટ

જોડીમાં રોબો સોકર ગેમની કોમ્પિટીશન

તૈયાર કરીને બે- બેની

નો સમય બે કલાક રહે છે અને આ રીક્ષામાં ડાયવર જેનો ખર્ચ ૪૦ પૈસા પ્રતિ કિ.મી છે





RCTI Newsletter Team

Dr. P R Thanky Shri K P Jasodani Smt. S P Dayal

Shri S D Gohel

मुडतड

આજ કાંટાળી કગર પર ચાલવું ફાવી ગયું ने समय संकोगने पडडारवुं हावी गयुं કે ઊછળતા સાગરે એને ચલાવી છે અને, રેતમાં પણ નાવને હંકારવું ફાવી ગયું.

કો. બાલકૃષ્ણ સોનેજી - આચાર્ય