Welcome Alumni!!

Welcome to the land of Rao Jodha! A vibrant land that is home to some of the most chivalrous clans of India, a land that showcases pageantry and splendor, a land that can boast of values of resilience, valor and warmth. Above all, a land that enconces an institute of national importance in this ebullient space- IIT Jodhpur! Happy Homecoming to the ‘Ranas’ of IIT Jodhpur.-

Growing with times and producing strong technical warriors to uplift and sustain India’s industries, technical education, science and society, the institute strives to work towards the enhancement of knowledge systems, which can be of service, both to the community and nation at large. Thus, keeping up with the WARRIOR tradition of Rajasthan, IITJ strives always to keep India abreast of the technological innovations, technically sound applications and new research initiatives.

Whether IITJ is an institute with a burgeoning research effort, that looks forward to shoulder greater responsibilities or a rich cultural cauldron for its Nukkad and Natak Mandali, it’s definitely a great feeling to be a WARRIOR OF IIT Jodhpur!

But there is much more to be done to help elevate the standing of IIT Jodhpur among institutes of higher learning and in the community we serve. A big part of that job is raising awareness of IIT Jodhpur and encouraging greater involvement among its alumni. Snowballing sustenance for IIT Jodhpur through its strong relations with the alumni helps in building the base for a better institution. One cannot build a powerful association without a strong base. At IITJ Alumni Association (IITJAO), everything we do is focused to reinforce the institute’s base.

For any organization to be accredited to be one of best educational employer; there is need for high alumni student interaction; there is need for an effective brand name which we have fortunately inherited, the IIT; effective leadership and a strong performance culture - all of these which we are sure that our alumni will carry forward, as torch bearers of the institute. Volunteering and Increasing IITJAO membership is the first step in this process that ultimately leads to enhancing the institute’s prestige. The more the alumni’s involvement, the stronger the institute is. So what, then, is the role of IITJAO in helping to strengthen our base? First, it will serve as a second home for WARRIORS all over the world.

Secondly, if you want to enjoy the technical show of IGNUS or wish to dash to the finish in the VARCHAS Marathon, this is the place to contribute to experience it. This is your chance; come back and visit us. It’s the one office on the institute campus you will always belong no matter how the campus has changed or how long it’s been since your last visit. It will be an office where the experiences, successes and sorrows of WARRIORS will be shared and remembered. It’s here we’ll always celebrate our collective triumphs and mourn our losses.

This is the space where we will uphold and honour our traditions, where our future is planned and prepared. A space where IITJAO has an opportunity to dream, and draw on alumni talents, education and experiences for ideas to help make IIT Jodhpur to stand strong on the sands of time.

This is what IITJAO will stand for - our alumni and their families in years to come.

Anand Krishnan Plapally
Chairman, Alumni Relations
Our new home...

The Campus of IIT Jodhpur will be a place where our value systems will help us create a real shift. The pursuit of opulence, maintained by ever-increasing resource consumption, will be replaced by the creation of abundance. Less shall do more. We will be symbiotic rather than , and aim for fulfillment rather than blind achievement. In this water starved area on the desert edge, we intend practicing organic and natural urban agriculture to provide seasonal, wholesome, nutritious, organic food. In the longer term, we shall be self-sufficient in water and energy. Plans are on to 1 recycle wastes to produce energy and high value nutrients. Organic farming and chemical oil free driven vehicles will be encouraged on campus. The use of natural, local building materials, that will enable to build in a fashion that naturally mitigates the heat, with courtyards, externally insulated walls, and buildings in contact with earth, is proposed. It will be a place without dust, noise or bugs, with adequate health care, sports and education facilities, which will be made available to other communities. With minimum use of energy consuming, processed materials like steel, cement or bricks, and intelligent use of glass, we hope to create sustainable structures. Adopting indigenous and wisdom and culture in building, agriculture, biodiversity management, horticulture, healing systems, water and energy management, generating local employment and upgrading ills, we look forward to a meaningful change that the world needs.

The Campus Master Plan of IIT Jodhpur conceptualizes the workings of all parts of the campus as an interlocking, integral network of complex dynamic systems, like the metabolism of a living organism. This meta-system is expected to be not only settlement but also a “Living Laboratory” that is studied and monitored online. This “Smart Intelligent Eco-campus” encompasses ideals of social, economic and environmental sustainability, and integrates aspects of landscape and biodiversity, food, water and waste, solid waste, mobility, energy and ICT to create an intricate life-like system of campus metabolism.

Key Features

**Approach:** Arresting erosion and desertification, building up soil moisture over time

**Plants:** Native plant species, soil stabilization, protection from dusty wind

**Movement:** Pedestrian oriented and bicycle dominant

Spaces: Multi-media enabled learning spaces with flexible, shared public spaces

Settlement: Dense desert settlement morphology, low height Construction: Low embodied energy materials with improved local and traditional methods

Buildings: GRIHA 4/5 star compliant buildings and GRIHA LD benchmark campus

Water: Rain water harvesting, water reduction and sewage recycling, greening site over time

Wastes: Segregated wastes and customized recycling

Energy: Carbon neutral campus harnessing renewable energy

Community: Extensive planned outreach and community-technology interfaces

Technology: Learning facilitated anywhere, anytime, with an ICT backbone

Above features together lead towards making a near-zero emission campus, planned to provide flexible and phased expansion of all the relevant services.
New Employees

<table>
<thead>
<tr>
<th>Name</th>
<th>Designation</th>
<th>Discipline/Area of work</th>
<th>Date of Joining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karunakar Kar</td>
<td>Assistant Professor</td>
<td>Biological Science &amp; Bioengineering</td>
<td>27.08.2013</td>
</tr>
<tr>
<td>Gaurav Bhatnagar</td>
<td>Assistant Professor</td>
<td>Mathematics</td>
<td>12.09.2013</td>
</tr>
<tr>
<td>Dinabandhu Pradhan</td>
<td>Assistant Professor</td>
<td>Mathematics</td>
<td>26.09.2013</td>
</tr>
<tr>
<td>Colonel P S Rathore</td>
<td>Associate Project Officer</td>
<td>Logistics Management</td>
<td>01.11.2013</td>
</tr>
<tr>
<td>T Varaha Chary</td>
<td>Technical Assistant</td>
<td>Office of Establishment</td>
<td>09.12.2013</td>
</tr>
</tbody>
</table>

Research Activities

New R&D Projects under SERB Young Scientist Grant, DST, Govt. of India

1. Role of Inflammasome associated proteins in glioma
   Sushmita Jha

2. Ultrafast charging cathode and anode nanomaterials for aqueous flexible lithium ion batteries
   S. Harinipriya

3. Dual scale simulations of surfactant, co-surfactant, water system
   Ananya Debnath

4. Bifurcation and Stability Assessment of a Highly Lightweight Rotor-Bearing System with Moving Platform
   Barun Pratiher

5. Development of Programmable Emulator for Photovoltaic plant to Facilitate Complex Testing Requirements
   Deepak M. Fulwani

6. Chemical Dynamics Simulations of Complex Organic Reactions: Mechanistic Insights and Microsolvation Effects
   P. Manikandan

   Rakesh K. Sharma

8. Developing Dielectric Semiconductor Combinations and Processes for Flexible Organic Electronics
   Shree Prakash Tiwari

Research Publications


**New Book on the Anvil...**

“Ecoambiguity, Community, and Development: Toward a politicized ecocriticism” edited by Scott Slovic, Swarnatha Rangarajan and Vidya Sarveswaran and published by Lexington Books, USA, takes stock of cultural and environmental contexts in many different regions of the world by exploring literature and film. The book is a collection of studies in the spirit of postcolonial ecocriticism, emphasizing on the impossibility of disentangling environmental and cultural problems.

**Workshops, Conferences & Short-term Courses**

- A 3-day *International Workshop on Socio Economic Network System* was organized in the institute from 25-27 October 2013. It was coordinated by Mainak Mazumdar and Debabrata Pal along with Dr. Sudipta Sarangi of University of Louisiana. The primary objective of the workshop was to provide a platform for scholars from diverse disciplines to promote discussion of ideas and explore new areas of research related to network theory to provide pragmatic solutions to the problems that exists specifically in developing countries.

- The *Centre for Systems Science* at IIT Jodhpur jointly organized and hosted the 37th *National Systems Conference*, the annual event of the Systems Society of India, from 05-07 December 2013. The event focused on some unique approaches that can pave the way for a meaningful and sustainable future adopting systems thinking. External invited and keynote speakers included Prof. Alexander Laszlo, President of the *International Society for the Systems Science*, Prof. Paul Fieguth, Dept. of Systems Design, University of Waterloo, Prof. Michael Karow from TU, Berlin to name a few.


- The 4th *National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics* was jointly organized by IIT Jodhpur & the Indian Unit for Pattern Recognition and Artificial Intelligence from 18-21 December 2013. The primary goal was to bring together researchers working in the broad areas of Computer Vision related fields to promote community-wide discussion of ideas that will influence and foster continued research in the field. The plenary speakers included Prof. Anil K. Jain from Michigan State University, Prof. Roberto Scopigno from Istituto di Scienza e Tecnologie dell’Informazione, Prof. B. S. Manjunath from University of California etc.
• International Meet on Quantum Correlations and Logic, Language and Set Theory was organized by IIT Jodhpur from 09-14 December 2013 and was convened by Subhashish Banerjee, Ashutosh Kumar Alok and Rakesh K. Sharma. The programme was held in two parts - the first 3 days being the school programme on Language, Logic and Reality and covering the areas like para consistent logic, Schrödinger logic etc. The next 3 days were followed by a seminar and addressed by Quantum field experts like Profs. Guruprasad Kar, Unnikrishnan, Roberto Giuntini, Mark Sideturis etc.

• A 4-day International Workshop on Design of Sub-Systems for Concentrated Solar Power Technologies was jointly organized by the International Centre for Application of Solar Energy Technologies, IIT Jodhpur and School of Solar Energy, Pandit Deendayal Petroleum University, Gandhinagar from 19-22 December 2013. Contributing speakers to this workshop were energy experts of national and international repute. Details are available at http://iitj.ac.in/csp.

**Extra Mural Lectures (EML)**

1. The institute started the Extra Mural Lecture series with Prof. M.S. Ananth’s (Former Director, IIT Madras & Visiting Professor, IISc Bangalore) thought provoking talk on "What is the life of an academic? How to get started on research work beyond the Ph.D. thesis work?" on 22 November, 2013. It was attended by many faculties. Prof. Ananth was pleased to answer some questions that the faculties asked him.

2. Second in the EML series was addressed by Prof. I.K. Bhat, Director of Malviya National Institute of Technology, Jaipur on 28 November, 2013 about “Academic Programmes in Technical Education: A new look”. He emphasized on the need for teachers to depart from the purpose of teaching for teaching to teaching for learning.

**Student Activities**

**Participation in International Conferences**

Two of our B.Tech. students Arun Balajee Vasudevan and Srikanth Muralidharan made us proud by attending the International Conference on Computer Vision at Sydney from 1-8 December 2013. They presented their research paper “Dynamic Scene Classification using Spatial and Temporal Cues”. They were guided by our ex-faculty Shanmuganathan Raman for developing this paper.

**Inter-IIT Sports Meet**

Sponsored by our banking partner State Bank of India, our students and staff actively took part in the Inter-IIT Sports Meet held at IIT Guwahati. While we opened our account with Kushagra Surana, first year B.Tech. student, winning a Bronze Medal in free style aquatics, our staff are yet to start the medal tally. We enthusiastically look forward to the 2014 meet to make our mark…!

**IITJ Wins at Moodi and Inter IIT Techfest!!**

Our students bagged prizes in the most popular “Mood Indigo” Annual Cultural Festival of IIT Bombay, which was held from 20-23 December 2013. Kirti Vardhan Rathore of B.Tech. II year won first prize worth Rs.15,000 for designing logo, visiting cards and letter heads for Campus Diaries. Kshitij Minocha of B.Tech. I year bagged the first prize worth Rs.4,500 creatively representing given statistics in a graphical way, calling it "Apple for A".

Our students also held our banner high by winning positions in the Inter IIT Tech Meet, a pan-IIT competition on science and technology held at IIT Bombay from 2-5 January, 2014. The team of Pratik Kalshetti, Vaibhav Gupta and Aswanth Thani secured 2nd position in the event “Social Impact” by designing a prototype of ‘Solar Water Desalination Plant’, and the team of Shreyas Srivastava, Ayush Raina, Rohil Surana and Priyanka Arya secured 3rd position in the competition “Messier Marathon” an amateur astronomy event, which was held at Giant Metrewave Radio Telescope utility, Pune.
IIT Jodhpur Anthem

भरत भूमि के सुमान सुमोहक, हैं सुरमित इस अंग में हम पंछी इस वसुधारा के, रत हैं जान के अर्जन में | 1 |

संस्कृति से धात्य धारा पर, तकनीकों के प्रारंभ अन्धकार अंजाम अंतर दिशा हों चित्रक ने | 2 |

राह रोक ले रचनिद्र नहीं वो साहस बाधा में अंकित कर दे मातृभूमि को, नव विकास की गाथा में | 3 |

नव प्रयोग हैं शिक्षा के, नई राह निर्माण की नई सोच में सुखद आवधन नूतन अनुसंधान की | 4 |

है उमंग उन्नात सभी में, बाधाओं से लड़ने का है संकल्प सभी के भीतर स्वस्थ राष्ट्र को गड़ने का | 5 |

मरुभूत में भी हरियाली है बासंती अभिनन्दन को बासंती अभिनन्दन को, वीरभूमि के चन्दन को | 6 |

बासंती अभिनन्दन को, वीरभूमि के चन्दन को | बासंती अभिनन्दन को, वीरभूमि के चन्दन को | | |